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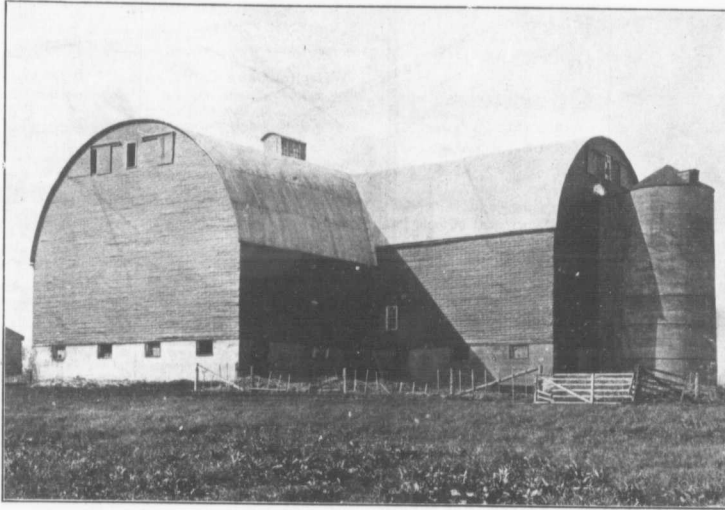
FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

DECEMBER 28

1911.



THE MANUFACTURING PLANT ON A WELL-MANAGED ONTARIO DAIRY FARM

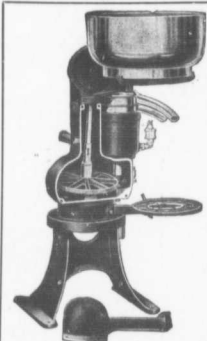
The farmer who sells the hay, grain and other raw products produced on his farm is neglecting the most profitable department of the well-managed farm.—the manufacturing end of the business. The progressive farmer is a manufacturer. He turns the raw materials that he grows in the fields into such manufactured products as milk, pork, beef and live stock. Hence he realizes two profits instead of one on his farming operations. The building here illustrated is the manufacturing establishment on the dairy farm of S. A. Freeman, Oxford Co., Ont. Mr. Freeman milks over 70 cows, and considers the manufacturing of feed into milk the most profitable end of dairy farming.

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BETTER FARMING AND
CANADIAN COUNTRY LIFE

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Every Separator is "Weighed in the Balance" and most of them are "found wanting."

Not so with the "Simplex" Lick Blade with the Self-Balancing Bowl.



The supply can is out of the way of the operator. The oil-drip-pan between base and body, catches all draining.

There are many pleasing features regarding the "Simplex." We have not space to mention them all, but will indicate one or two.

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Every dairyman of experience knows that the larger the hand Separator he can operate, the more profitable it is to him. What stood in the way of a wider use of the large capacity hand machine was the inability of any one to produce such machines that would be easy to operate.

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4TH ANNUAL MAGAZINE POULTRY NUMBER, FEB. 1st

What space shall we reserve in it for you? Better attend to this now. Drop us a line to-day

Adv. Dept. FARM AND DAIRY Peterboro, Ont.

Railway Co. to Teach Agriculture

A new departure in the way of agricultural education will probably take place in the Provinces of Ontario, Quebec and New Brunswick next spring and summer. The Canadian Pacific Railway is now negotiating with the governments of those provinces with a view to having special agricultural trains tour every part of the provinces in order that demonstrations and lectures may be given to farmers with a view to improving the productive capacity of the farms.

The system has been in operation in Western Canada for some years past and has proved so beneficial that the C. P. R. is now making the effort to extend the same benefits to the east. If the scheme is adopted special trains with lecture and demonstration cars, and with professors from the various agricultural colleges, will spend the spring and summer going over the provinces and stopping at all the principal towns for lectures and demonstrations, to attend which farmers will be granted reduced fares in all the various districts.

Dairy farming, fruit farming, stock raising and a good seed propaganda will all be treated from a scientific point of view, and in such a way as to afford the maximum of practical help and encouragement to the farmers in every locality.

Water for Dairy Cattle

E. F. Eaton, Colchester Co., N.S.

Over 80 per cent. of milk is water. A cow in good health and milking freely will drink 150 to 300 pounds of water daily. Water, therefore, in one sense, is the most important part of the cow's ration, and we dairymen should make provision to supply our cows with good, clean water given to them in a convenient manner. I believe that one of the best investments that can be made in the farm with individual basins. This enables the cow to get her water as she intervals—not her whole supply once or twice a day.

THE HOLE IN THE ICE

Most of the farmers in his county turn their cows out each day, rain or from a trough in a nearby creek or in the snow. The system was out of order recently our cows were watered in the same way, through a hole in the ice.

The first cows out, if they were aggressive, would get to the hole first and fill up on the ice cold water. The others standing around shivering their turn came, but the next day they would make up for it by taking a double amount of the cold water. Their whole systems would receive a shock in the effort of nature to warm up that water.

We would have to burn a lot of fuel to warm that much water from no degrees to the normal temperature of the animal at 98 degrees. And feed is the most expensive kind of fuel. Were the cows to get their water a little at a time from individual basins they would not be such a strain on their systems.

Two brothers in the Stewiacke Valley of Nova Scotia, who run a large dairy farm, found out several winters ago just how valuable their water system is. The system was out of order one day in the winter and the cows had to be turned out to the creek. When totalling up their milk records for each day of the month, Campbell Bros. found that there was 10 per cent. less milk on that day than on any other day of the month.

FARM'S SATISFACTION 100

It does us good when there is a blizzard outside to see my dairy cows taking a mouthful of hay and then occasionally a lap of water from the basins while I know that all around

me are cows shivering in the blizzard waiting for their turn at the water trough.

Of course, it is possible to abuse the water system. I believe that every fine day the cows should be let out. There is a tendency to neglect this unless it is necessary to get them out for water. That is our fault, however, and not the fault of the system.

Short Courses for Bee Keepers

The annual honey crop in Ontario is worth one and a half million dollars. Ten thousand persons from Point Pelee to the Cobalt regions, and further north, are engaged in the business of producing it, keeping 300,000 hives of bees for the purpose. Even then not one-quarter of the nectar secreted by Ontario flowers is ever utilized. And although honey prices are advancing every year, not one-tenth of the Provincial Antiarist in Ontario homes that our people are capable of eating.

In order to give the bee keepers a greater interest in this important industry, a short course on bees will be given at the Ontario Agricultural College, January 9th to 20th, 1912. This course will be conducted by Mr. Morley Pettit, Provincial Antiarist, and is free to all. There will be reduced rates on railroads. Bee keepers are urged to take advantage of the course.

Items of Interest

It is announced that a special division of the Dominion Department of Agriculture will be formed to promote the sheep interests of the country.

The members of the Canadian Forestry Association are reminded that the annual convention will be held in Ottawa, February 7 and 8, 1912. The most practical program of any yet offered has been prepared.

The bringing of the thousands of acres of farm lands in connection with the various Provincial institutions, not cultivated in a more or less haphazard and unscientific manner, under a central and directing head is being planned by the Ontario Government. The scheme is an important step towards bringing all the public institutions under government control self-sustaining.

The Niagara Fruit Growers have backed up the action of the Ontario Fruit Growers' Association by passing a resolution at St. Catharines on Dec. 20th, asking that the inspection of diseased and insect pests in peach orchards be taken under provincial control.

The eighth annual convention of the Canadian Seed Growers' Association will be held at Ottawa on February 28th and 9th, 1912. This convention will be addressed by several prominent men, and many matters of importance and interest will be discussed. As this meeting commences on the last day of the convention of the Forestry Association, those from a distance desiring to attend will be able to obtain special rates. Further particulars may be obtained from the Secretary, Canadian Seed Growers' Association, Canadian Building, Ottawa.

To cows that don't do well after calving we give them hypophosphite of soda in dessert spoonful doses three times a day in the feed, and continue for a week or two. This drug works against agalactia. It is a specific for that purpose. We have used this treatment for some years, and have recommended it to others. We never know it to fail.—R. W. Walker, Ontario, Ce., Ont.

I received my premium Yorkshire hog pig for securing six new subscribers to your paper, and am well pleased with him. He is a dandy and is growing fine.—Donald Snell, Oxford County, Ont.

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Each Week

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RURAL HOME

Only \$1.00
a Year

Vol. XXX.

FOR WEEK ENDING DECEMBER 28, 1911

No. 52

Here's Wishing You A Right Happy And Prosperous New Year

MANAGEMENT THAT HAS BROUGHT GOOD RESULTS ON AN EASTERN ONTARIO FARM

Attention to details a large factor in the success of this dairyman. Pure bred sires used for three generations. The farm of Mr. Wm Wightman, Glengarry Co., Ont., described by an editor of Farm and Dairy.

SPLENDID arrangement in all departments and neatness in workmanship are characteristic of the farm and farming practice of Mr. Wm. Wightman, of Glengarry Co., Ont. Every fence, on this the Fourth Prize Farm in District No. 2, of the Interprovincial Prize Farms Competition conducted by Farm and Dairy, is laid out as straight as the eye and tape measure can make it. Every furrow must be turned as neatly as Mr. Wightman, who has won many prizes as a plowman, can do it. There are no unsightly piles of rubbish or old machinery lying around the buildings or fields. This care in looking after the small details of management, so often neglected, was taken particular note of by the judges in the competition. Mr. Henry Glendinning and an editor of Farm and Dairy. The following brief description of the farm is from notes taken by our editor when he visited the farm in July.

GENERAL LAY OUT OF THE FARM

Mr. Wightman's farm consists of 200 acres of loamy soil a few miles from the village of Lancaster, which is their shipping point. His farm is one and one-quarter miles long, divided in two sections by the public road. In the centre of the farm is some rough pasture land and a maple bush of nine acres or 700 trees. Last spring Mr. Wightman harvested 153 gallons of syrup from this bush. The rest of the farm is laid out in smooth, easily worked fields.

On the part of the farm opposite the house are three fields fronting on the public highway. A well kept lane runs back through the centre of the farm from the buildings. The most serious criticism that can be made of this arrangement is that the fields are too small, making it necessary to grow the same crop on several fields in the one season. Did Mr. Wightman have his lane running up the side of the farm, the length of the furrows would be doubled and the expense of growing the crops reduced accordingly. The fields were all measured out, being exactly rectangular. The lane and fields were well fenced, making it easy to pasture any field as required by the rotation.

PURE BRED Sires FOR THREE GENERATIONS

Mr. Wightman's dairy herd consists of 26 milk cows and 20 head of young cattle. Many years ago, Mr. Wightman's grandfather started in to grade up this herd with pure bred Ayrshire sires. This grading has been continued consistently ever since, and, as a result, Mr. Wightman has to-day a herd of cattle that are to all intents and pur-

poses pure bred, of uniform conformation and coloring, and such producers of milk as would credit to any pure bred herd. The milk from each cow is weighed four times a month. Last year the average production from the 18 cows in milk was 5,443 1-3 lbs. of milk each. The young cattle are a promising looking lot as might be expected from their breeding.

Mr. Wightman keeps 10 head of horses, included in which were three colts, one yearling, and a thoroughbred mare. This mare is of the very best of breeding, and Mr. Wightman be-



Storms Never Bother This Farmer

Mr. Wm. Wightman, Glengarry Co., Ont., whose prize winning farm is described on this page, hardly knows when there is a storm raging, so thoroughly are his house and buildings protected by windbreaks. The windbreak here shown is 50 or 60 feet across, there being several rows of trees. In the foreground may be seen a fine field of alfalfa, with which crop Mr. Wightman is having good success.

—Photo by an editor of Farm and Dairy.

lieves that he will be able to sell her colts for several hundred dollars each.

MR. WIGHTMAN BELIEVES IN HOGS

Mr. Wightman still believes that there is profit to be made in hogs, and at the time the farms were judged was feeding 20 Yorkshires of good bacon type. He keeps three brood sows and a pure bred Yorkshire boar.

Alfalfa is not generally grown in the extreme eastern section of Ontario, but Mr. Wightman has tried it with good success. This year he had seven acres in alfalfa, and so well has it done that he plans to extend the acreage. Other crops consisted of: Grain 37 acres, corn 10 acres, roots one acre, potatoes one acre, hay 75 acres, and pasture 43 acres. Barley and mixed grains comprised the most of the 37 acres of grain. The sow thistle is the most serious weed with which Mr. Wightman has to contend in his grain fields.

The main hay barn of Mr. Wightman's farm is 117 by 40 feet. In one "L" is the cow stable, 60

by 32 feet, and in another "L" of the same size the horse stable and loose boxes for colts. Between the "L's" is a sheltered barnyard, where the cattle can enjoy themselves on sunny days. Conveniently situated for getting out the feed is an inside silo, 28 by 24 by 20 feet. The buildings are roofed with slate.

Some of the machinery of this farm has been in use for more than a generation. Mr. Wightman has a threshing and tread power and does his own threshing and silo filling; the threshing and tread power have been in use for 40 years. This fact bears strong testimony to the care that Mr. Wightman gives his machinery. All the machinery used on the farm is carefully housed, and the plan is to wear it out rather than let it rust out.

THE OLD LOG HOUSE REMODELLED

The farm home of Mr. and Mrs. Wightman is the old log house originally built on the farm. Its appearance has been improved by weather boarding and the addition of a neat veranda. The interior is fitted comfortably and attractively. The house is heated by hot air. A couple of daily papers, several weeklies and four leading farm journals keep the family in close touch with the world's news, and the latest and best in agriculture. Around the house are extensive lawns shaded by trees planted many years ago.

The Wightmans hardly know when there is a storm raging, so thoroughly protected are the buildings by wind breaks. These wind breaks were planted by Mr. Wightman's father, and have now attained a good size.

Mr. Wightman is an intelligent student of agricultural progress, and he is quick to apply new and better methods in his farm practice. His attention to details is wonderful, and might be copied with profit by others of our farmers. His success as a dairyman is due in no small degree to this care of details, looking after the small ends of the business as well as the bigger things.—F.E.E.

Patrons who are sending small quantities of milk to cheese factories are in poverty. They are not doing the things they ought to do by themselves, by their country or by their government. The man who possesses cows whose product sells for \$14 annually should be held up where he could see himself and where his neighbor could see him. There should be some way of taxing the slovenly fellow and driving him out of the business. We should either make him sell or build. He should not be allowed to cumber the ground. We surely are our brother's keeper, and we must get after these fellows who have these cows.—D. Derbyshire, Leeds Co., Ont.

Corn the King of Plants*

Prof. D. H. Otis, Madison, Wis.

According to Prof. Henry of Wisconsin, "Corn is the great energizing, heat-giving, fat-furnishing food for the animals of the farm. * * * No other grain that the farmer grows yields, on a given space and with a given expenditure of labor, so much animal food, both in grain and forage, as does the Indian corn plant."

Corn is particularly appetizing to all classes of animals. While a ration for a dairy cow can be made without using corn, it is seldom done where corn is obtainable. Corn, while such a valuable and indispensable feed, should not under ordinary conditions, constitute the entire grain ration. It is deficient in crude protein and ash, and should be fed in conjunction with other feeds rich in these ingredients. It will be noted that under the headings of digestibility and facility of digestion that corn stands out prominently as a feed easily digested and containing a large number of units of net available energy.

CORN FOR SILAGE

Corn silage and roots are examples of feeds that are greatly relished by our live stock. Of the various palatable feeds corn silage is doubtless the cheapest and most effective. Roots, while serving an excellent purpose, require about twice as much labor to produce.

Corn silage adds palatability and variety to the ration, is a cheap feed to produce and to store, and doubtless goes farther than any other feed to solve the problem of restricted pasture acreage or to tide over scant pastures during a drouth.

SILAGE ECONOMICAL TO PRODUCE

By converting the corn crop into silage, the farmer can handle his crop cheaper and with less waste than by any other method. Mr. C. L. Hill of Wisconsin reports that it costs him from 50 to 60 cents a ton to put his corn crop in the silo, or about \$7 an acre. The same acre of corn, he figures, would yield 150 baskets of corn that would cost him \$6 to husk, which, with the cost of cutting, stacking, shredding and grinding, would be about double what it costs to put the same crop in the silo.

Silage is greatly relished by the cows and causes a glossy appearance of the hair, similar to pasture grass. It is convenient to feed, and is available summer or winter.

SILAGE ECONOMICAL TO STORE

Corn silage is not only palatable and cheap to produce, but it is an economical feed to store for the production of total nutrients. This is shown as follows:

One ton of mixed hay occupies 400 cubic feet.

Eight tons of corn silage occupy 400 cubic feet.

One ton of mixed hay contains 1,724 pounds of dry matter.

Eight tons of corn silage contain 4,242 pounds of dry matter.

One ton of mixed hay contains 960 pounds of digestible dry matter.

Eight tons of corn silage contain 2,560 pounds of digestible dry matter.

It will be noticed that the farmer can store two and one-half times as much dry matter in the silo as he can in his hay mow.

Silage when kept in sufficient quantities is always ready to use when needed. The advantages of summer feeding of silage, particularly during periods of drouth, is fully appreciated by those who have tried it. During the latter part of last summer, when pasture was scarce or dry, corn silage was fed to the University dairy herd. The flow of milk from the herd was never maintained so well during this period of the year as it has been by the use of corn silage. The summer silo is sure to become a more important factor in successful dairying.

The economy of silage in beef production has not been as thoroughly established as for dairy production. It has, however, been tested by a number of experiment stations and by stockmen with excellent results. There is no question as to the value of corn silage for sheep. By careful handling it is also proving a valuable aid to the calf feeder, and recently silage has been fed to horses with very encouraging results. The fact that silage is so useful for these various classes of live stock ought to give additional incentive to the dairyman to provide for an ample supply of this most excellent feed.

Corn silage should be fed as a supplement to and not as an entire substitute for hay or grain. It should be borne in mind that silage is carbonaceous and should be balanced with proper protein feeds. It is also a loosening feed and should be used with a knowledge of its effects upon the bowels of the animals fed. This is especially true of calves and horses. Corn silage properly combined with other feeds in the hands of a judicious feeder will produce results that are most gratifying.

Pointers on Winter Milk Production

R. Walker, Ontario Co., Ont.

We calculate to have our cows to freshen every month of the year, as, by so doing, we get a



The Kind of Stock That Interests the Boys

Good, pure bred live stock is attractive to all, but particularly to the boys. A good team is a strong link between the boy and the farm. The fine Clydesdales here illustrated are owned by Mr. Albert Tumbly, Durham Co., Ont.

A uniform quantity of milk the year round. The profitable management of a dairy herd in winter depends on our ability to make every cow pay us for feed and care and more besides. It is necessary to watch closely each individual cow. We find that no two cows are exactly alike. We feed each one according to her capacity.

Before we feed them each time we have the mangers cleaned out, so that the fresh feed wont get mixed with any litter that might be left in the mangers from the previous feeding. We always endeavour to feed each cow just enough that she wont leave any in her manger to waste.

WHEN TO START FEEDING

In the fall, when a cold rain comes or frosty nights, we keep our cows in the stable and feed them any kind of feed we may have at hand, and turn them out to pasture after they are milked the next morning. Later in the fall we begin feeding ensilage and a little meal with it.

We usually feed a mixed meal of oatmeal, oats and bran. We feed meal according to the amount of milk the cow is giving, a pound of meal to every three or four pounds of milk. We also feed a few mangolds and plenty of salt every day. Water is in the basins in front of the cows.

The time of freshening is a critical one. If the cow goes wrong then and does not do well afterwards it mean a heavy loss in the milk flow; and sometimes the cow is ruined for life. A little watchful attention, with some assistance at the time when needed, will usually avoid trouble and loss afterwards.

With conditions favorable, winter dairying pays very well in ordinary seasons.

Cooperation Arises from Specialization

L. K. Shaw, Welland Co., Ont.

To-day is the day of specialization. We are coming to realize that it is much better to be master of one trade than a "Jack of all trades." This specialization is extending to agriculture. In a recent address, I see that our Deputy Minister of Agriculture, Mr. C. C. James, has been emphasizing the value of specialization. He urges the dairy farmer to extend his energies to dairying, the fruit farmer to fruit growing, and so forth.

In urging on us this specialized agriculture, Mr. James was only referring to the greater profits in the internal management of the farm, such as reduction in cost of production, the more intimate acquaintance that we would get with the requirements of our particular line and the production of a better quality of goods.

GREATEST BENEFIT OF ALL

I believe that a still greater benefit would result from specialized agriculture. I believe that it will result in a wider adoption of the principle of cooperation in buying and selling our products. Where is Canada making the greatest progress in cooperation at the present time? I have not definite figures, but I believe that it is in the specialized fruit sections. There, producing only one kind of produce, it is easier to get together in the marketing of it than in a general farming section where there is a little of everything for sale.

We dairy farmers have widely adopted cooperation in the manufacturing of our milk into butter or cheese. When it comes to the marketing end we are not doing so well. What we might be doing we can find out by studying Denmark. Danish butter is practically all marketed by the Danish farmers themselves through their cooperative societies and their pork through their cooperative pork packing establishments.

Under present conditions in Canada, cooperation on such a scale as this is impossible. We must first have greater specialization. When we have all of the farmers in one community depending altogether on dairying for their livelihood they will begin to take more interest in the cooperative marketing of their produce even as the fruit men are now doing. And they will make more money, too.

Good Training For the Boys

W. C. Shearer, Oxford Co., Ont.

Each year since commencing cow testing we have found one or more cows that were not paying enough for their board and lodging. We have increased the average production of our herd from 6,000 lbs. to nearly 7,000 lbs. of milk yearly.

Another great benefit that we have derived is that our boys have become more interested in the farm and in the cows. We pay our boys 40 cts. a month for each cow they milk well and properly. If they milk four cows, therefore, they will get \$1.60, five cows \$2, and so on. They thus earn their own spending money and swell their bank account—if they are inclined that way.

They weigh the milk and keep the milk records. I trust that this business training will ultimately make successful men and good useful citizens of every one of them whether they choose agriculture or some other profession as their life work.

Do not wait until spring to clean and grade your seed grain. Do it now, while you have plenty of grain at hand from which to select. The best 25 bushels of grain out of 100 bushels is worth much more for seed than is the grain that can be cleaned from a much smaller amount in the spring. The cost of this cleaning and grading the grain is very slight, and it enables one to have heavy, plump seed grain at very little outlay.—A. D. Wilson.

*Extract from an address before the American Dairy Farmers Association at Chicago recently.

Condition of the Swine Industry in Canada

A. C. Hallman, Waterloo, Ont.

What the future will bring the swine industry in Canada is hard to fathom. There is a feeling of unrest among the producers. In foretelling the future, however, we may be guided by lessons of the past.

Millions of wealth have been added to this country, directly and indirectly through the swine industry, in the short space of 20 years. It is a lamentable fact, nevertheless true, that after enjoying a wave of prosperity, with a reputation gained at home and abroad and an unlimited demand of high class article the product of our Canadian farms, skillfully prepared and marketed by our Canadian packers, catering after the tastes of the wealthy British consumers, that this industry has almost lost its prestige in the British market through the lack of Canadian producers.

WHAT WE OWE THE PACKERS

Without going into history, let us stop for a moment and see how this industry was built up. The average Canadian producer does not know that our profitable swine industry is the creation of the Canadian packer and the origination that of a single man, the late Mr. Davies of Toronto, to whom the Canadian farmer owes much for his pluck and industry. What would the Canadian farmer do to-day with his swine if it were not for the packer, and the British market?

Again, on the other hand, what will the packer do without the hearty cooperation of the Canadian farmer? What has brought about the up-building of this important business in such a short time in the past will be largely the remedy for deficiencies in the future.

A REVOLUTION IN HOG TYPES

The packer told the Canadian farmer that he must produce a certain type of hog, the bacon type (which is now familiar to everybody), for which there was an unlimited demand and for which packers were prepared to pay the highest market price, or both packer and farmer would have to go out of business. This was taken up by the farmers' institutes through the Department of Agriculture, the agricultural papers and press in general, till everybody was aroused. The farmers acted promptly, with the result that in a short space of time the whole swine industry was revolutionized and a very superior type of bacon hog was produced in almost unlimited quantities. The hogs were graded, fat, light fats, lighties and "prime singers," and from the consumers' standpoint the farmers were paid according to the actual value of the hogs produced.

The packing houses multiplied and with them the drovers, who nearly tumbled over each other in the scramble for hogs, with a result that the grading was all lost with the drovers, the packing houses are in a few hands, and the farmers are again resorting in many cases to old lines of breeding and feeding, the demand for Canadian bacon on the old country is in a demoralized condition and inroads have been made by other countries, which it will take years to restore.

HIGH PRICES OF GRAIN HAVE EFFECT

That the packer and drover are only at fault we are not saying. There are other natural causes. The low price of grain and other farm products, with a fair price for hogs, induced the farmer to market his grain in the finished bacon hog. The high price of grain during the last few years and the unsettled feeling in the hog business has induced the farmer rather to sell his grain than to take chances in feeding it to hogs, with a result that hundreds of brood sows were slaughtered and almost a famine created in hogs, till prices soared beyond legitimate to fabulous prices.

Right here is where I would like to sound a note of warning to my fellow farmers. Let us not rush into extremes, or we may reverse condi-

tions badly. Every farmer should raise as many hogs as he can nicely manage, without overdoing it or making it a burden to himself. He must also aim to raise only prime bacon hogs such as the best market demands. He must aim to feed more economically—less on grain and more on roughage, roots, clover etc.

PACKERS MUST PAY THE PRICE

The packer must cease buying and paying on a flat rate to farmers. The farmer will produce the goods if the packer pays the price, but he must discriminate to the farmer instead of to the drover. Cooperative packing houses such as they have in Denmark would be ideal, but this is hard to bring about in this country under present existing conditions.

The scheme of cooperation that should settle all disputes, difficulties and grievances in connection with our swine industry would be for the packer and farmer to cooperate. Let us come together. Let the Canadian Swine Breeders and the packers come together and gain such confidence in each other that each will do their fair share of the business without unreasonable ex-

How I Make Dairy Cows

Edgar Dennis, York Co., Ont.

In order to get the best results in the making of a dairy cow we must first see that the calf is by a good sire of good milking families. The dam also must be a good milker, and be in good shape while carrying the calf. We prefer to breed from cows with nice shaped udders and well placed teats.

When the calf is born we allow it to stay with its dam for three or four days until the milk is good for other purposes. This is Nature's way, and I think it good for both cow and calf. As we sell our milk as it comes from the cow we have no skim milk on which to raise our calves.

THE CALF FEEDS ITSELF

When the calf is four days old we put it on a cow or heifer that is giving four quarts of milk night and morning. Thus the calf milks the cow and does well on it. It will not get too fat on this ration, but will be as large at three months as lots of calves are at a year.

As soon as the calf will take clover hay we give



Scenes such as this are no longer common in Rural Canada

The establishment of big packing houses in Canada, handling hundreds of hogs daily, has reduced the expense of killing and dressing hogs to a minimum and has rendered farm butchering unprofitable. Farmers now prefer to ship their hogs alive rather than gather their neighbors together to butcher and prepare their swine for market, as was once the case. The scene here illustrated is from a photo taken on the farm of Mr. Jno. Timm, Huron Co., Ont.

actions on either side. This valuable industry must be fostered. Canada cannot afford to lose it, and the sooner we settle the question the better for our great commonwealth.

Suggestions on Breeds of Sheep

J. P. Kemp, Peel Co., Ont.

The long wool breeds, Leicesters, Cotswolds and Lincoln, originated in the rich level pasture sections of England. They are very heavy sheep, valuable principally for their mutton, and are not apt to succeed in the rough, hilly sections in Canada. On the majority of farms in Old Ontario, however, I believe they would be very adaptable, and a few of my friends are having excellent results from their flocks of border Leicesters. The Down breeds are better suited to rough conditions, such as we would find in Northern Ontario, parts of Quebec and in the Maratime provinces, but they do even better under conditions as we find them in Old Ontario.

In the rougher, colder sections, such as in the extreme north of Ontario, the northern part of Quebec and in Cape Breton Island, there is a breed of sheep called the Black Faced Highland which I have heard spoken of very highly by the mountain shepherds of Scotland. This breed is well worth experimenting with in some sections of Canada. So far I understand that the flock owned by the Nova Scotia Government is the only one in this country.

a little; also whole oats, bran and a little oil-cake put in a small box in the pen. The calf will soon learn to eat these, and, with the cow's milk, will grow like a weed. At three months we wean the calf off the milk and give water, clover hay, oats, bran and oilcake. We feed well the first winter and keep the calf away from the flies in summer.

A LONG FIRST MILKING PERIOD

We breed the heifer at 15 months of age. We feed well towards calving time. We allow her to milk six months before breeding again in order for her to grow and to form the habit of persistent milking. I prefer to have my calves dropped in the fall, as we then have lots of time to look after the calves in winter. When grass comes they are ready to go out.

Some will consider this an expensive way of raising calves, but I say to those dairymen, "Try it and you will be so tickled with the way the calf has done that you will say, 'bother on the expense.'"

We are relieved of considerable expense by the calf doing the milking and feeding itself. If given the run of a box stall it will not get too fat.

Milk is 87 per cent water. Is it not reasonable to argue then that the first principle of good feeding is good water?—Henry Glendinning, Ontario Co., Ont.

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The Feeders' Corner

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

Feeding Value of Skim Milk

What is the feeding value of skim milk when fed to hogs or calves along with grain or roughage?—W. Hyde, Norfolk Ont.

The value of skim milk for feeding purposes is usually stated at 20c a cwt., but the value varies widely depending upon the amount of feed and the age and kind of animal to which it is fed. This winter it is more than 20c on the average, as all other feeds are high in price.

Professor Henry of Wisconsin, as a result of experimental work, found that 3.27 lbs. of skim milk was equal to one pound of corn meal when two to three pounds of milk were fed to each pound of grain; when three to five pounds of milk to each pound of grain it took 4.46 lbs. of skim milk to equal one pound of grain in feeding value; 5.74 where five to seven pounds were fed, and 5.52 lbs. of milk to equal one pound of meal, where seven to nine pounds of milk were fed. An average of all experiments showed that 4.75 lbs. of skim milk equaled one pound of meal in feeding value. At present prices for corn this would give to skim milk an average value of about 30c a cwt. Hogs and calves will make about equal use of skim milk so far as gains in weight are concerned. Older animals will not make as economic use of the skim milk as younger ones.

Stating Henry's conclusions in another way, if corn is 50c a bushel, milk is worth 28c when fed in proportion of three to one; 16c when fed in the proportion of nine to one. If corn is worth 60c the relative values are 31c and 18c, and when corn is worth 84c the value in the first case is 36c and in the second 27c.

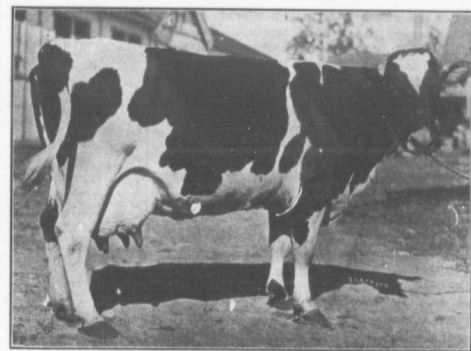
Live Stock Notes

The successful stockman must know what each of his animals is doing each day. With the dairy herd, it is comparatively easy to keep track of each cow's record, simply by weighing the milk each time the cows are milked. It requires but a fraction of a minute's time each milking, and enables one to know at once if for any reason one or more cows are falling off in their milk; and to remedy the cause before a serious loss has been sustained. Testing for butter fat need not be done often than once or twice a month; but the milk should be weighed at each milking.

It is not always the heaviest feeders who get the best results. Every animal requires certain nutrients, that enable it to perform its best work. If these nutrients are not supplied in the proper proportion, it means that the animal must consume and adjust larger amounts of some of the elements that it cannot use, in order to get enough of the others. Economical feeding requires that nutrients be supplied to animals in the proportion needed. As a rule, fat feeds are lacking in protein. This is especially true this year, when there is a scarcity of clover hay. If one is feeding cornstalks or wild hay, the farm grains need supplying to meet the animals' needs for best work. This is especially true of dairy cows and young stock. When this form of roughage must be fed, some such feed as bran, mangelings, or oil-meal must form a reasonable proportion of the grain ration, in order that the protein supply may be maintained.

Just as one enjoys eating an apple occasionally—especially during the winter, when less fruit and vegetables are used than during the summer—just so the live stock in the winter, when their rations consist largely of dry feed, need and appreciate some form of succulent food. There is very little added expense in supplying animals with a reasonable amount of succulent food, either in the form of roots or silage. For a herd of 12 or more cows, this succulent food is most cheaply supplied by the use of silage, but for the smaller herd, or for a man without a silo, roots afford an excellent substitute for silage.

By care in preparing the soil and growing the crop, from 15 to 25 tons of roots, like mangels, rutabagas, or stock carrots can be grown per acre. They can be stored under the feeding alley, or in a pit outside of the barn, at a very little expense. Twenty tons of roots will supply 10 cows 20 pounds a day each for 200 days, and can be grown and harvested at a cost of less than \$40. The nutrients contained in 20 tons of roots are worth \$30 when bran is worth \$20 a ton; so the feeding value of the roots is sufficient to



A Grand Good Cow and a Champion

Jemima Wayne Johnson, the cow here shown, was lat in her class and grand champion female at London Fair, 1911. She has an official record of 21.65 lbs. butter in 7 days, and 563.09 lbs. milk at 5 years old. She is now 7 years old and has given 15,076 lbs. milk in 10 months. She is owned by M. L. Haley, Springfield, P.O. Ont., who is consigning several Holsteins from his herd to the Southern Ontario Breeders' sale at Tillsonburg, next week. See gossip notes in this issue about his offering—Photo taken eight months after calving.

pay for the cost of production, beside the additional advantage of their supplying the succulence needed by the animal.

Based on the average farm price of feeds for the last 10 years, oats are worth on the farm \$19.37 per ton, and have a feeding value of \$21.10; barley is worth \$17.50 per ton, and has a feeding value of \$21.98; corn is worth \$13.63 per ton, and has a feeding value of \$22.66. In other words, at the average farm price, a dollar's worth of feed in oats costs 92 cts.; in barley, 80 cts.; and in corn, 65 cts. The feeding value is figured on the basis of bran at \$20 per ton. On the same basis, a dollar's worth of food nutrients could be supplied in clover hay for 40 cts.; in fodder corn 57 cts.; and in timothy hay for 60 cts.; in ensilage for 78 cts.

In view of the above facts, it is plain that a combination of corn and clover will make a most economical feed.

I received my pure bred Tamworth sow for securing six new subscribers to Farm and Dairy, and think she is real beauty. Please accept my thanks for same.—Mrs. Robt. Twist, Halton Co., Ont.

CITY MILK SUPPLY DEPARTMENT

Anent Homogenized Milk

Editor, Farm and Dairy.—I notice by two recent issues of Farm and Dairy some remarks, and doubts, in regard to the new process of homogenizing milk. Homogenizing appears to be making its "debut" to the farmers of Ontario. We have had a factory in our little county the last 18 months and I feel quite safe in saying it has passed the experimental stage.

Like all other new industries that have started for the benefit of mankind, we found lots of men to prophesy its downfall; indeed some take a special interest in spending all their idle moments in convincing their glib, audacious neighbors that it will not work.

The company is face to face with strong opposition in getting milk, as there is a pasteurizing plant shipping milk to Sydney's five cheese factories,



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hundreds of private dairies making butter and numerous farmers shipping milk and cream to the coal-mining towns. But the Hygienic Fresh Milk Co. is increasing its output, and raising its price to the farmers, importing feed and cows for the farmers and helping out in many other ways in the production of good, clean milk.

I am not writing this as one interested in the company. I am not one of its patrons, as I had a good market for my milk before they came.

ABOUT THE PLANT ITSELF
The plant is situated in a four-story brick building with a driveway right around the building. The machinery is the very finest and latest design, mostly all of it being imported from France, where the process had its origin. I am sorry I am unable to give you an account of the different parts of machinery that constitute the plant.

We are proud of this plant, the second, I believe, in Canada, and I hope the farmers, in justice to themselves, will do all in their power to boom it along by keeping good cows, giving the butcher the poor ones, weighing and testing the milk, feeding them well and providing comfortable stables and kind attendance and hence supplying more milk.—F.A.M., Antigonish, N.S.

FARM MANAGEMENT

Fertilizer for Corn Profitable

Corn fertilizer is used with profit on the corn crop at A., Dundas Co., Ont. The only records that we have of fertilizer experiments with corn are some that were conducted some time ago on swamp soils. These results are as follows:

YIELD PER ACRE OF CORN ON CORN			
Plot No. 1	Plot No. 2	Plot No. 3	
Lbs.	Lbs.	Lbs.	
Report 1	5,510	4,900	4,650
"	2,270	3,700	2,400
"	3,270	3,320	2,100
"	4,270	2,920	1,400

The plots were one-tenth acre in size and were fertilized as follows: Plot No. 1; 200 lbs. muriate of potash per acre; No. 2, 200 lbs. muriate of potash and 400 lbs. Thomas phosphate per acre; No. 3, no fertilizer.

We have had other experiments with corn on ordinary soils, of which the statement was made that where no mineral fertilizers were used the corn was poor; it grew well and gave a big stalk, but did not produce large ears of good quality. It is possible that there being a very high percentage of nubbins, whereas, where the mineral fertilizers were applied the ears were large and well filled.

THE CROPS THAT GIVE RETURNS

In addition to this, I might just state that no one can say that fertilizers cannot be used profitably on corn; in fact, I believe it is one of the crops on which these materials can be used with profit. It is on the heavy feeding, large growing crop that fertilizers will likely give their best results. It stands to reason that a crop like corn will take a large amount of constituents from the soil, and, naturally, if it is going to give the best returns, it must have a large amount of available food.

It is true that cultivation throughout the season is a large amount of plant food into an available condition, but even so, I believe that fertilizers can be used in Ontario with profit, on some soils. We cannot say that they will give good results on all soils, but whether or not these materials will prove profitable has got to be demonstrated by each man under his own conditions. It might be all right on one farm, and on the adjoining farm not give paying results.

Last year when I was on the Farmers' Institute train, in going through the country between Cayuga and Welland on the Michigan Central, I found that the farmers there were using fertilizers on corn freely. They were not able to sell wheat, the fertilizer contained, but they said they were satisfied on the point that they got good results from its use.—Prof. R. Harcourt, O.A.C., Guelph.

To Eradicate Canada Thistle

We have a field badly infested with thistles. From which we harvested this year a crop of oats. We plowed it this fall. Did we summer fallow this field next year, what crop would you recommend sowing to plow under before putting in fall wheat? Would it be well to work this field, put on a dressing of manure and plant to corn?—H. Hyde, Norfolk Co., Ont.

The chief safeguard against Canada thistle and all similar deep-rooted perennials is a rotation about rotation of crops with fall cultivation. A three-year rotation, including one crop of early red clover followed by deep fall plowing for two crops for clover cultivation, a third crop for the third year, will suppress the Canada thistle. We would suggest that you thoroughly work this field next spring, sow to corn or roots and keep clean by constant cultivation, using broad shares on the cultivator to cut

off the new stems. Follow the corn by spring grain seeded to clover, and fall plow the clover quite deeply and repeat the rotation.

In case you are going to use this field for fall wheat we would suggest that you cultivate frequently with a broad shared cultivator up to the middle of June and then sow to luck-wheat, plowing down in time to work again for fall wheat. Buckwheat is superior to any other crop for smothering thistles.

Cooperation for the Small Farmer

There are three important reasons why the small independent farmer can not get the best prices for his products.

In the first place, he has but a small amount of any one thing to sell, and it makes very little difference to the dealer whether he gets his small business or not.

In the second place, the dealer who buys his products must also buy from a number of other small farmers, with the result that what he gets in any community is, as a rule, not uniform and must sell as mixed stuff and at a low price; consequently, he cannot pay as much as in many instances the product of the individual farmer is worth.

The third condition is that, as a rule, the small farmer has his product at a town or terminal market where, if he does not sell, he is under considerable expense to hold his product or to get it back to the farm.

By cooperation farmers can produce uniform products. By cooperation in selling, they can offer for sale large quantities which will attract buyers; and by bringing the buyer to them, they can either sell their product for

what is offered, or hold it on their farms until a better price can be obtained.

What cooperation has done for the butter and cheese trade it can do for other products.

Our Legal Adviser

TAXES ON HOUSES—If a person rents a house and nothing is mentioned in the lease about taxes, is he supposed to pay taxes on the house?—H. S., Halton Co., Ont.

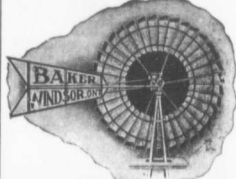
The owner of the house, and not the tenant, must pay the taxes where there is no mention of taxes in the lease.

BARN ON NEIGHBOR'S PROPERTY—When we built our barn we understood that one end of it was even with the boundary line of the farm. Our neighbor has recently had his farm surveyed and we find that the old line fence is in the wrong place and that 10 feet of our barn is on our neighbor's land. He insists on straightening the line, which would mean great expense to us in moving the barn. Have any redress?—E. K., Nipissing District, Ont.

Under the Law and Transfer of Property Act, Chapter 119, where you have made improvements by reason of a mistake through a survey, the real owner of the land is not entitled to same unless he compensates you the value of the improvements.

If your barn has been built for 10 years you need not worry in any respect whatever. The matter is a little too intricate to advise through a letter on the few facts that are before us, and it would be advisable to see a lawyer to whom you could explain all the circumstances.

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Running Mill Made. The wheel is built on a hub revolved on a long stationary steel spindle. As a result, there is less friction, and the hub will never become worn and cause the wheel to sag toward the lower.

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

The small sails develop the full power of the wind and enable "BAKER" mill to pump in the lightest breeze.

The engine is so constructed that the gears never wear out of mesh.

All working parts are covered with a cast iron shield, thus protecting same from ice and sleet.

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THE HELLER-ALLER CO. WINDSOR ONT.

Abe Lincoln said "I will study and get ready and maybe my chance will come. It will pay you to study during these winter evenings. Then you will be ready to take advantage of your chances. All Agricultural books are to be had at lowest prices through Farm & Dairy, Peterboro.

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It will cut squarely in two the cost of cleaning your stables, no matter what method you are now using. It will enable you to keep your stables in a cleaner and more sanitary condition, and with it you can have the manure placed on the field with as little, if not less, labor than is now required to place it in your yard only. By accomplishing these things, the BT LITTER CARRIER saves money and makes money sufficient to pay for itself in a very short time.

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A Litter Carrier is a permanent investment. Running, as it does, on a level overhead track, there is nothing whatever to go wrong with it. The BT CARRIER is a marvel of simplicity, and is built to last a lifetime. We show our great faith in it by guaranteeing it absolutely for five years. With no other litter carrier is such a guarantee given.



Our catalogue tells how the litter carrier should be erected, and gives some fine illustrations of outfits already installed. It also gives the special features of advantage which the BT LITTER CARRIER has over other makes. It will pay you to know these.

If you are interested, fill out this coupon, and we will send you free our complete catalogue.

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More BT LITTER CARRIERS are sold in Canada each year than all other makes combined. We stand the closest inspection, Ask anyone who is using a LITTER CARRIER. We don't want you to buy without looking into the BT LITTER CARRIER. We know that every BT LITTER CARRIER will stand up to its work and will please whoever gets it. Buy a LITTER CARRIER for your outfit, and certainly there is no time of the year that it will be of more use to you.

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I will need about..... feet of track.

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Good Seed Indifferent Seed
This cut shows imperfections not apparent to the naked eye. Which would you prefer to buy?

BEFORE YOU PURCHASE your seeds for the coming season secure our catalogue and send for our free samples.

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Don't take any chances on your seeds and seed grain. Inferior seed has been the ruination of many farms. Send for our free samples of Alfalfa Clover, Red and Alsike Clover, Timothy Seed.

Seeds will be higher next spring. I'll pay you to make your selection and to get in your stock early. Write us today about the seeds you'll want this coming season.

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Steel Trough & Machine Co., Tweed, Ont.

HORTICULTURE

Cooperation in Marketing Fruit

The appetite for fruit is universal. It characterizes all races and conditions of men. Of all foods, fruit is the most natural, wholesome and redolent. The appeal it makes is not alone to appetite, but to taste, smell and the sense of beauty as well. One would imagine, then, that fruit should be of all things the easiest to market, and therefore the most profitable to cultivate.

That the real conditions should otherwise be the reverse of this, accords one of the most striking illustrations of the fact that present methods of collecting and distributing the products of the soil are—except in a few instances of recent improvement—altogether askew and out of harmony with common sense.

No doubt the abnormal spread of our population, over an area six or eight times as large as that needed for the best development of social economies—thus vastly enhancing the difficulties of cooperation, transportation and distribution—is accountable in a great measure for the fact that, while in the centers of population fruit of all kinds commands enormous prices, millions of dollars' worth yearly perish on the farms where grown.

But that, by cooperative endeavor, all difficulties may be overcome, and fruit brought within the reach of consumers at prices which the multitude can afford, and yet high enough to yield good returns to the grower, is being demonstrated by the successes attending the operations of many growers' associations already organized. The success of our Canadian cooperative fruit packing establishments proves that they are meeting this need, at least on one side of it. They are making it easier for the fruit grower to market his fruit at an advanced price.

Small Fruits for Elgin County

What varieties of strawberries, raspberries and blackberries would answer best in a farmer's garden as early as the Elgin County? It is alfalfa seed, late spring and in a good state of cultivation. How and when should they be planted?—P.T.T., Elgin Co., Ont.

It is a rather difficult matter to select varieties for another section of country. I would suggest that you learn from others in your vicinity who have grown strawberries, raspberries and blackberries, the varieties they have found most satisfactory. I find that each section of country has its own peculiarities with respect to varieties which give the best results. In raspberries I would recommend you to try Michael's Early and Early Beauty for extra early; Splendid and Bedwood for second early; Sample, Irene, Pearson's Beauty and Williams for main crop. These are desirable commercial varieties. For home use you might add Senator Dunlop, a medium early variety of the very highest quality.

In raspberries, the earliest commercial variety is Marlboro, and when well fed this is a profitable variety. It is a week or more earlier in ripening than the commonly grown variety,

Cuthbert. Herbert is a comparatively new variety, a day or two ahead of Cuthbert in ripening, more productive but softer and not quite so good in quality. Cuthbert is the standard commercial variety and there is probably no better for general market or home use.

Black raspberries are not grown to any extent for market. If you care to try them for local market or for home use, I would suggest Hilburn, (Grogg and Smith) Giesse and Purple varieties, Columbia and Schaffer, are more productive, but do not usually sell well on the market. They are very desirable for home use or for export. Some markets have become familiar with them and will take them in fair quantity. Their unattractive color is against them.

In blackberries, Agawam, Snyder, Eldorado and Tattler are the most commonly grown commercial varieties.

All of these fruits should be planted on well prepared, rich ground, well

An Aggressive Farm Paper

Farm and Dairy is one of the most aggressive farm journals on record and should receive the patronage of every farmer who is determined to become a progressive and successful farmer.
—P. Bouchner, Norfolk Co., Ont.

drained and free from weeds. As a rule, strawberry growers prefer to give clean cultivation for one season before planting, but if you are not afraid of weeds, you might plant on ground plowed the year before. Strawberries are planted in rows four feet apart and the plants are set from two to two and a half feet in the row. Raspberries and blackberries are planted in rows seven or eight feet apart and the plants two or three feet apart in the row. Strawberry plants are set on the level. Raspberries and blackberries are usually set in the furrow.—Prof. J. H. Crow, O.A.C., Guelph.

A Chatty Letter From N. B.

G. E. Martin, Deer Island, N.B.
There are great possibilities for fruit growers in New Brunswick, especially in Charlotte Co. The climate in winter is mild, seldom going below zero. The salt water takes the severe frost from the air. The islands on the coast are very rocky around the shore, but possess rich and fertile valleys. Even close to the shore we see apple trees thriving well in the fishermen's yards without cultivation or pruning.

We have an orchard of 450 trees. The last few years we have begun to pay attention to the modern ways of fruit growing. We have used Bordeaux mixture with good success. As a result of its use very few apples were scaly or wormy. As we are surrounded by water we are less subject to disease on fruit trees, the oyster shell, or bark house, being our worst pest. We expect to spray early next spring with lime sulphur on trees which have lice.

We prune our trees in the fall and spring, but will pay more attention to that work in the future.

CULTIVATING GIVES BEST RESULTS
Cultivation seems to be of all things most important with us. The sod here grows very thick and heavy on gravel and clay loam. We plow in the fall and spring and have no difficulty with winter killing.

For fertilizer we use light dressing of refuse fish from the sardine factories, which is cheap and effective. In part of our orchard is a hen yard. A Lehigh man do her part in cultivating every time.

Our best varieties are King, Bethel, Baldwin, Fameuse and Summer fruits

such as Astrachan and Graevenstein. The last few years we have been doing some top grafting, which has been very successful and brought in a better class of fruit.

There is a poor quality for a good article, but a quick sale apple goes slow.

All kinds of small fruit thrive well here, such as strawberries, raspberries, cranberries.

Fully seven-eighths of the people on our island derive their living from the sea, and the main industry is fishing, as the coast is about these islands. Any industrious man who wishes to farm can make a good living here. Land ranges in price from \$10 to \$15 an acre.

About Purchasing Fertilizers

W. P. Gamble, B.S.A., Wellington Co., Ont.

It is usually far wiser and far more economical to purchase the fertilizing ingredients needed singly, and to do the mixing at home rather than to buy mixed fertilizers. It is also better to buy a high grade fertilizer than to get a low grade one, as the one saves the additional cost of packing, transportation, etc. It is more economical to purchase one ton of high grade fertilizer than three tons of low grade.

Remember further in purchasing that the finer ground and the drier the substance be, the greater its value. Thus, the value of ground lime, bone dust, or ground phosphate, is largely dependent on the fineness of the particles. The finer the particles the more available and readily soluble the matter. The greater the amount of moisture, the less the amount of fertilizing ingredients.

APICULTURE

Inspect for Foul Brood

It is simply impossible for the Ontario apary inspectors to visit all apiaries every spring, and five minutes to each colony every year would easily tell the owners if any very serious trouble is in evidence. Yet many beekeepers will not look into a brood nest from year to year, and the first thing they know their bees may have contracted foul brood badly; whereas a look over the comb a few months earlier might have saved a lot of trouble.

"Last summer I was sent to inspect an apiary," writes Wm. J. L. Hyer, York Co., Ont., in "Gleanings of Europe" on examination I found all the bees rotten with American foul brood. I learned that a few years ago they had been in the same condition and had all been treated. The trouble had not been entirely eradicated, and had gradually got so that the latter condition was more than half success. As owner seemed to know the disease all right; and when I questioned him as to why the yard was in such a condition, and asked why he had not examined them himself, he replied, 'Why, that is what you fellows are for; why didn't you come along and tend to your work?'

"I suppose the man never thought that such a thing as examining every apiary in Ontario each spring was an impossibility; yet his attitude was the same as that of many other men on this question. Let me say most emphatically that it is the duty of every man intending to keep bees should learn to know foul brood at sight. While there may be liability of making mistakes in diagnosing European foul brood there is not the slightest excuse for not being able to know American foul brood, as these are certain characteristics of this disease that are so simple that any intelligent person to know the malady at first sight."

Poultry Expert Leaving Canada

Canada is about to lose one of its best educationalists along poultry lines. Prof. F.C. Elford, of Macdonald College, who is well known to poultry men in Canada, and especially to our readers, as he at one time edited the poultry department of Farm and Dairy, is leaving his position at the College to conduct the educational bureau of an incubator company in Buffalo, New York State. He will take up his new duties about January 1st.

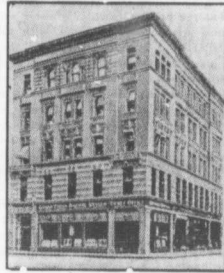
Professor Elford has for years been one of the foremost agricultural educational workers in Canada. Not only has he striven to create greater interest amongst farmers for more and better poultry, but he has also taken a foremost part in advocating the more general growing of alfalfa. In the last couple of years, Professor Elford has been devoting his abilities as an organizer and lecturer to the improvement of our methods of marketing poultry produce. He realizes that in the great propaganda for better methods of production along poultry lines that has been going on for years we have been inclined to lose sight of the importance of better marketing methods. And he has done much to draw attention to the need of better methods of getting poultry produce to the consumer.

It is unfortunate that Canada is to lose Professor Elford. The poultry industry in Canada is in need of the continued work of such men, and those of us who have the good of the poultry industry of Canada at heart will give Professor Elford a warm welcome does he ever decide to return to again take up his work in Canada.

Easily Made Money

How would you like to make, or rather how would you like to have other people make for you, \$200,000 in about a year and a half by practically doing nothing? That is what the Manufacturers' Life Insurance Company has done recently. About a year and a half ago, as reported in the Toronto daily papers, it purchased the building at the corner of King and Yonge streets, Toronto, for \$200,000. The property was then known as

the Lawlor Building. It occupies a space with a frontage of 60 feet on King street and 90 feet on Yonge street. Last week the Manufacturers' Life resold this building and property to the Dominion Bond Company for \$800,000. This means that in about a year and a half they have made a profit on this piece of property of \$200,000. During that time they did nothing to increase the value of the property, and practically nothing



The Lawlor Building, Toronto

to improve the building. This increase in value has been brought about solely by the increase in the population in Toronto, and by the increased demand for real estate there.

The sum of \$800,000 paid for this property is at the rate of \$6,400,000 an acre. The increase in its value on an acreage basis in a year and a half has been at the rate of \$2,832,000 an acre. What do you think of that for an easy way of making money?

It is time the farmers of Ontario began to consider this question very, very seriously. It is the productive work of the farmers of Ontario largely that causes this increase in the value of city property. Under our present system of taxation our farmers do not get any of this money back. It all goes into the pockets of the few people who are fortunate enough to hold this land. The remedy is direct

taxation of land values. Were this acre of land taxed according to its value, assuming the whole acre to be as valuable as the lot in question, it would pay as much taxation as 105,000 acres of farm land valued at \$160 an acre.

The farmers' deputation that went to Ottawa last December told the Dominion Government that the farmers were ready to submit to direct taxation of land values to make up the revenue the government might lose by taking off the duty on articles farmers might buy. In the light of such facts as these, do you not think that they were wise?

In the Western provinces where the farmers are organized and are talking these things over among themselves, (Concluded on page 15)

\$3 a Day Sure Send us your address and we will show you how to make \$3 a day. We guarantee it. If you don't believe it, send us your address and we will send you the business reply coupon on a guarantee a one month trial for \$3 a day every day. **ROYAL MANUFACTURING CO., Box 1115, WINDSOR, ONT.**

Fowl A Pair of Pure Breeds will be given you free in return for only four New Subscriptions to Farm and Dairy, each taken at only \$3 a year. Tell us what variety you would like. **FARM AND DAIRY, Peterboro, On.**

LIVE POULTRY

For best results ship your Live Poultry to us, also your Dressed Poultry, Butter and Eggs. Grates Supplied. Prompt Returns **The DAVIES Co. Ltd TORONTO**

FOR SALE AND WANT ADVERTISING

TWO CENTS A WORD, CASH WITH ORDER FOR SALE—Few black single comb cockerels, \$1.00 each.—Joe Hopps, Campbellford, Ont.

FOR SALE—Iron Pipe, Pulleys, Belting, Sails, Chain Wire Fencing, Iron Posts, etc., all sizes, very cheap. Send for list, stating what you want. **The Imperial Waste and Metal Co., Dept. F. D., Queen street, Montreal.**

AGENTS We will pay you well to hustle in your district for new subscriptions to this practical journal. **FARM AND DAIRY, Peterboro, Ont.**

Strength and Service

That's what you get in Peerless Gates—the strength and service that keep them swinging evenly on their hinges year after year. They won't warp or sag because the frames are made of heavy, steel tubing, electrically welded into one solid piece.

Peerless Farm and Ornamental Gates

We manufacture lawn, poultry and farm fences and gates. We build them so they will last long and give the most satisfactory service. Our standard of quality is high, and we stick to it firmly. You can always depend on Peerless goods. Write for full particulars.

THE DANWELL HOXIE WIRE FENCE CO., LTD.
Box 11, Windsor, Man., Hamilton, Ont.

Don't sit by the fire!

You can't work in the orchard these days, of course, but that is no reason why you should waste all the winter months. We can help you put them to good use.

It is easy to sell "Brown's trees" because everybody knows that "Brown's Trees are good trees." It is pleasant work selling "Brown's trees" because you get all around the county seeing old friends and making new ones. It is instructive work selling "Brown's trees" because it gives you a chance to exchange ideas with other good fruit growers. It is profitable work selling "Brown's trees" because you get liberal commissions on your orders.

Just cut out this ad., write your name and address on it, and mail it to us. We will do the rest.

Brown Bros. Co., Nurserymen, Ltd.

Brown's Nurseries County of Welland Ontario

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 St. Lawrence, Quebec, Dairymen's Associations, and of the Canadian Holstein, Friesian and Jersey Cattle Breeders' Associations.

2. **SUBSCRIPTION PRICE, \$10 a year, strictly in advance.** Single copies, \$1.25 a year. For all countries, except Canada and Great Britain add 50c for postage. A year's subscription free for each 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. Or all checks add 25c for exchange fee required at the bank.

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 received up to the Friday preceding the following Monday.

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

CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed 11,000. The actual circulation of each issue is 12,000 copies. The paper sent subscribers who are but slightly in arrears, and the circulation varies from 11,800 to 11,900 copies. No subscriptions are accepted at less than the full subscription rate. No mailing list does not contain any dead circulation.

Sworn details as to the actual circulation of the paper, showing its distribution by counties and provinces, will be mailed free on request.

OUR PROTECTIVE POLICY

We want the readers of Farm and Dairy to feel that they can deal with our advertisers with our assurance of our advertiser's reliability. We do not admit to our columns only the most reliable advertisements. Should any advertiser be found to be dissatisfied with the treatment he receives from any of our advertisers, we will investigate the matter. If we find that he is warranted, we will expose them through the columns of the paper. If we find that we do not only protect our readers, but our reputable advertisers as well. In order to maintain our protective policy, we will not only include in all letters to advertisers the words "I saw your advertisement in Farm and Dairy." Complaints must be made to Farm and Dairy within one month from the date of any unsatisfactory transaction, with proofs thereof, and within one month from the date that the advertisement appears, in order to take advantage of the guarantee. We do not undertake to adjust trifling differences between readers and responsible advertisers.

FARM AND DAIRY

PETERBORO, ONT.

WHAT ARE WE AIMING AT?

Aiming at nothing and hitting it. This expresses accurately the position of many of us in the journey of life. We start with the old homestead, the old methods, the old ideas, and we end just there; or even lower down in the scale. We have aimed at nothing. And we have hit it.

The man who gets on in the world, whatever his occupation may be, is the man who has some ideal, who is aiming at something and who is directing all his energies towards its consummation. Now at the end of the old year and the beginning of the new is a good time for introspection, for looking into ourselves and seeing if we have any clear and definite ideals; or have we been aiming at nothing and hitting it?

If we are not altogether satisfied with the results of our introspection, what are we going to do in the new year? Are we going to drift along in the same old manner, or are we go-

ing to set some higher ideal and strive with might and main to accomplish it?

It is not well to determine to change our methods completely at the new year. Such a resolution is apt to be forgotten by the second day of January. But let us take at least some one thing that we have not been doing but that we know it would be to our advantage to do, and aim to apply that improved practice to our farming during the year.

Those of us who have not adopted cow testing might determine that from the first of January next every cow in our herd has to prove that she can pay for her keep, a profit to her feeder and interest on capital invested or go to the butcher.

If we have not tried alfalfa we might pick out some field on our farm that we know is just suited to that crop and order the seed right away.

The man who has not a silo can make no better new year's resolution than to determine that before the 31st of December, 1912, he will have added this money-making structure to his farm buildings.

A resolution that many of us might make with great big financial results to ourselves would be that from now on we will break away from the old habit of believing that a cow is a cow and start right in for better stock through the use of pure bred and well bred sires.

And have we been making the most of life itself? Or have we gotten into a groove there also and got past the point where we can really enjoy ourselves? Those of us whose interests are bounded by the line fences in our own farms are worse than useless as citizens of the country and are not getting the satisfaction out of life that it was intended that we should.

Let us all determine on the eve of this new year to aim at something—and hit it.

WILL DR. RUTHERFORD REMAIN?

When Dr. J. G. Rutherford, Dominion Live Stock Commissioner and Veterinary Director General, assumed the duties of Chief Veterinary Inspector nine years ago, the veterinary sanitary service of the Dominion was of a decidedly rudimentary character. In fact it might almost be said that we in Canada had no properly conducted veterinary department. Dr. Rutherford immediately began to lay the foundations of what is now the Health of Animals Branch of the Department of Agriculture. In the perfection of quarantine regulations and in the establishment of an efficient veterinary sanitary service for the control of diseases already existing in Canada, Dr. Rutherford has done for the live stock interests of this country a service, the value of which it would be hard to estimate. In carrying out the internal inspection work, Dr. Rutherford was largely instrumental in formulating the provisions of the Animal Contagious Diseases Act.

The efficient work of Dr. Rutherford as Veterinary Director-General is only one portion of the valuable work that he has done in connection with the

Department of Agriculture. There is not in the Department of Agriculture a more valuable public servant than the Live Stock Commissioner.

It has been rumored for some months now that Dr. Rutherford was resigning owing to friction in the Department. With the promised reorganization of the Department of Agriculture under the new Conservative administration, it may be expected that the present Deputy Minister will sever his active connection with the Department of Agriculture, and that a man more thoroughly versed in agriculture will be given his position.

If under the changed conditions it is at all possible to retain the services of Dr. Rutherford, this should be done. The live stock interests of the country cannot afford to suffer the loss of such a valuable commissioner. Should Hon. Mr. Burrell succeed in retaining Dr. Rutherford's services, his action will be appreciated by the live stock men of the Dominion who understand the value of the services he has rendered.

ABOUT DEMONSTRATION FARMS

About a year ago the Farmers' Advocate, published at London, Ont., purchased a farm near that city, and are planning to run it, not as a model farm, but rather as a demonstration farm, to show the good results that can be obtained from a farm conducted on up-to-date business farming principles. This farm has not yet been in operation one year under the present management. Already it has produced interesting results. Our contemporary is quite optimistic as to the final financial success of the venture. Farm and Dairy congratulates the "Advocate" on the good work they are doing at "Weldwood." They are operating on the practical basis that governments have frequently been asked to attempt, but which they have always declined to undertake.

There is one respect in which, valuable as they will be, the results that will be obtained on the Farmers' Advocate demonstration farm cannot be obtained by farmers generally through the application of equally efficient methods. The Farmers' Advocate farm is on rich land. Most farmers are working land that is only of medium quality. Were the government to take over and operate a farm of only medium quality and attempt to run it under the conditions many farmers have to contend with as regards labor shortage, a mortgage indebtedness and similar drawbacks, we venture to say that the small margin of profit they would secure under even the best of management would be an eye-opener as to the small profits that are possible from farming under present conditions. Such an experiment would show more clearly than can be shown in any other way the necessity of a rearrangement of the economic laws that are rendering farming on our medium and poorer lands relatively unprofitable by depriving the farmer indirectly of much of the wealth that he creates.

A good farmer has just as much to be proud of as a senator.

Fat cattle, hogs and sheep are all selling at lower levels than at this date last year. Dairy cattle, however, are in keen de-

Milch Cows demand and at higher **Are High** prices. On December 1st, 1910, choice milch cows were quoted at \$50 to \$70 on the Toronto market. On December 1st, 1911, they were quoted at \$60 to \$90 on the same market. Our farmers are coming to realize that when feeds are high and scarce, the dairy cow will make better use of the raw products of the farm fed to her than will any other animal, and she alone will pay a good profit, and that feed. Dairy cattle are the most profitable to feed. They are now also the most profitable to raise for sale.

Several Ontario dairymen that Farm and Dairy has heard from are saying themselves and their neighbors money by buying feed in carload lots and thus saving the middleman's profit. The plan of

Buying Feed operation most commonly followed is for one farmer who buys considerable feed to go around among his neighbors and take their orders also, and thus be able to send away for a carload at a time. In one case of which we have heard, eight dollars a ton was saved on glen meal by purchasing it in this manner. This system of cooperative buying can be adopted with money-saving, and therefore money-making, results in many of the dairy sections of Ontario.

Have you ever noticed how a kindly word will light up the beclouded face and make the sun to shine in the home even if the clouds are straggling over in the sky? To many of us are very chary of expressing our appreciation of the help that we receive from our mothers, wives, daughters or sons. Many a boy who is wearing out his life in a city factory would be on the farm today had he received more words of appreciation from his parents at home. Words of appreciation and kindly sympathy do not cost much, but they may mean everything in making life worth while. Let us not be backward in expressing our appreciation of those who share our joys and sorrows.

Words of Appreciation outside? To many of us are very chary of expressing our appreciation of the help that we receive from our mothers, wives, daughters or sons. Many a boy who is wearing out his life in a city factory would be on the farm today had he received more words of appreciation from his parents at home. Words of appreciation and kindly sympathy do not cost much, but they may mean everything in making life worth while. Let us not be backward in expressing our appreciation of those who share our joys and sorrows.

At their last annual session in Toronto, the Ontario Fruit Growers requested that courses of instruction in

box packing of fruit be **Instruction** established in all the **Apple Packing** fruit growing districts of the province of Ontario. The adoption of this request would mean much for the furtherance of the fruit industry in Ontario. Ontario fruit growers have proven that they can produce a class of fruit that cannot be excelled. At present they are somewhat handicapped in some markets by not being able to offer the pack that sells in the very highest class market; that is, the fancy box pack. In Western Canada particularly, where people are acquainted with the box pack of fruit from the Pacific

coast, Ontario fruit men are at a great disadvantage in disposing of their high grade fruit. The establishment of such box packing courses throughout Ontario would lead to this style of packing being largely adopted for fancy and No. 1 fruit, which at present the most of our packers do not know how to put up. This would be a good line of work for the District Representatives in the fruit producing counties to interest themselves in.

Cooperation, City and Country
C. R. Barns, Minnesota College of Agriculture

Whatever advantages the city may claim over the country, either as a place of residence or as an arena for business enterprise, are mainly due to the fact that in the city the principle of cooperation has found a larger development.

The cooperation may be often involuntary, and in many cases the principle has been perverted to the enrichment of corporate and other

IX

What can be advertised successfully to the farmer?

Look up the index to the catalogue of mail order houses, such as EATON'S or SIMPSON'S!

You probably know what this would mean and you can therefore GRASP the EXTENT OF THE FARMERS' NEEDS.

A prominent mail order man has said:

"The house I represent attends to the needs of a farmer from the hour he is born to the hour of his death. He arises in the morning, disrobes his night dress supplied by our linen department. He washes his face from one of our handy combination wash-stands, he pokes the fire in one of our stoves, he slips his feet into boots from our shoe department and dons our xxx overalls. He goes forth to the barn, feeds his horses and cows, comes after feeding time once more to the barn, throws a set of our harness on his team, hitches them to a plow we sold him and makes a few rounds before breakfast. He is recalled from the barn by the sound of a bell rung by his wife and supplied by us.

He goes through each rotation of his daily duty and we are with him every moment in some manner.

"At night his children play games supplied by us, his wife sings from a song book to the accompaniment of our piano or organ and thus the day ends with contact with our bed, our pillows, our mattress and coverings.

"Every walk, every age of his life we furnish his needs, until at last his heirs order from our catalogue the stone which ultimately marks his resting place. This gentleman, is the possibility of the farm buying, and commerce cannot fail its utmost duty to itself unless it serves the farmer first and always."

The best possible customers are in the country. To reach them right you will need to use the farm papers.

TO GET THE DAIRY FARMERS OF Canada YOU MUST USE THEIR FARM PAPER.—FARM AND DAIRY.

Just at this season as you are about to enter on the New Year, THINK ABOUT this matter.

Resolve to GET THIS PROFITABLE TRADE, which is yours when you use space in Farm and Dairy,—this paper,—

"A Paper Farmers Swear By"

monopolies; but it nevertheless permeates all municipal life as to constitute the largest factor in the making of the city. The improved roadways and sidewalks, the water supply and sewer systems, gas and electric lighting and heating facilities, the trolley lines, telephone service, parks, libraries, picture galleries, hospitals, express deliveries, cheap amusements and superior school advantages—all are the fruits of a varied application of the "cooperative plan."

A SIMPLE DEFINITION

Cooperation is simply an agreement by a number of men to unite in doing or maintaining something which none of them, individually, would be able to do or maintain. The mere fact of a man's taking up his residence in a city makes him, however involuntarily, a cooperater in all its works of public service. Their maintenance is a part of the "cost of living" there.

The growth of cooperation has been more rapid in the cities because of the multiplied contracts among the number of people there brought together, which have practically forced men to join hands for the general advancement, along some lines; and along others, has made it easy for the corporate and monopolistic beneficiaries of cooperation to levy the tribute charged for the use of their several conveniences—conveniences which the multitude was not yet ready to install from its own resources.

WE HAVE IT TOO

But today similar cooperation—stimulated by the presence of the telephone, the trolley, the daily mails, and all that they imply—are as numerous in many a country district as they were in the city of "ye olden time" before the advent there of the agencies named. And the multiplication of contracts stirs the progressive spirit in the country as it has done in the city. And that spirit can find no outlet like that afforded by the development of cooperation.

How many are the avenues of beneficent endeavor which center at Cooperator's door! Yet how few of these avenues have we, until recently, tried to penetrate! We have made some beginnings with cooperative elevators and grain-selling, with creameries and egg-selling associations; with live stock shipping and stock-reeding associations; with fruit-growers' and market-gardeners' unions. But nine-tenths of the business in the several lines named is still handled on a non-cooperative basis; and this in the face of repeated demonstrations of the effectiveness of co-operation in securing larger returns to the farmer.

FIELDS FOR COOPERATION

The extension of cooperation along these lines may well engage a large share of the new spirit now kindling. So, also, may the "Good Roads" movement, than which few cooperative undertakings promise more. Such extension will make easier the application of the cooperative idea to the purchase and use of costly farm machinery; to the creation—where neighbors are sufficiently near—of a permanent supply of running water; to the common raising, for shipment by the carload, of a single kind of vegetable, a single breed of cattle or hogs, a single type of horse; to the establishment of social and civic centers at school houses or churches; to the beautifying of country roads with shade-trees and side-lawns; to the establishment of a free government news service, which shall enable the country daily to compete with the city sheet, and thus restore the independence and dignity of journalism; to the lightening of the burdens of the farmer's wife by the advent of the cooperative laundry. These are but a few of many avenues through which, by cooperation, our people may attain to higher and better living.



THE RIGHT OF WAY
IN THE BOWL OF THE

De Laval
CREAM SEPARATOR

No confusion occurs between the cream and skimming currents.

There is a guarded channel for each, and yet any dilatory fat particles have full opportunity to join the cream current without disturbance in any way. Each has its full right of way entrance into until discharged from the machine. That's why the skimming is so perfect.

GET A CATALOGUE

THE DE LAVAL SEPARATOR CO.
175-177 Williams St.
MONTREAL
WINNIPEG - - - VANCOUVER

Who Says Skates?

We have Skates for every boy and for every girl. They are good skates. They will delight you.

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

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

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

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

See one of your Father's neighbors right away. Get him to subscribe. Then write us, sending the Subscription, and we will send the skates to you. We will have the skates in a few days.

Which of These Two Kinds Do You Want?



(Spring Skates) 8 (Hockey Skates)

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

Farm and Dairy, Peterboro, Ont.

ONE GOOD FEATURE OF EVERY FEATURE GOOD



As long as a cream separator skims close, it is a good investment. But one good feature or a few good features do not make a separator that will skim close for any length of time.

A good separator is one in which the minor parts have been just as carefully designed and just as well made as the most important parts. A defect in a minor part will, by throwing the entire machine out of adjustment, offset all the perfection attained in any other part of the machine. In the

IHC Cream Harvesters

Dairymaid and Bluebell

one feature does not overtop all others because the same IHC standard of quality in design, material, and workmanship is maintained throughout. They are the only separators with dust-proof and milk-proof gears which are easily accessible. The frame is entirely protected from wear by phosphor bronze bushings. These separators have large shafts, bushings, and bearings; the flexible top-bearing is the strongest and most effective found in any separator. The patented dirt-arrester removes the finest particles of dirt from the milk before the milk is separated. IHC Cream Harvesters are made in two styles—Dairymaid, chain drive, and Bluebell, gear drive—each in four sizes.

The IHC local agent will be glad to let you examine one of these separators, or, write nearest branch house for catalogues and other information.

CANADIAN BRANCHES: International Harvester Company of America at
Brandon, Calgary, Edmonton, Hamilton, Lethbridge, London,
Montreal, North Battleford, Ottawa, Regina, Saskatoon,
St. John, Weyburn, Winnipeg, Yorkton.
International Harvester Company of America
Chicago (Incorporated) USA

IHC Service Bureau

The Bureau is a clearing house for Agricultural data. It aims to learn the best ways of doing things on the farm and then distribute the information. Letting individual experience may help others. Send your problems to the IHC Service Bureau.

Creamery Department

Butter makers are invited to send contributions to this department to help in making a more intelligent butter making and to suggest subjects for discussion. Address letters to Creamery Department.

Relations Between Maker and Patron

Joe Keachie, Dexter, Ia.

When I have to talk to a patron on the quality question, I find it all mine alone. I do not jump on him in a crowd. We must use a little judgment and suggest some method by which he may improve his milk or cream. If it is necessary, go to his home and give him all the assistance we can. Keep him all in a good humor and we will make friends for ourselves and the creamery.

I do not think it is a good plan to go out to a farm and lay down strict rules, tell the patron he must follow them, and then go to the creamery. We have to use good judgment when dealing with the farmer. If we see where he is falling down in some one particular, let us try and enlighten him on that subject. Sow a little seed right here and we will reap the harvest. As soon as he becomes enlightened on that subject, begin on another.

WHERE OUR INTEREST LIES

I sometimes think we, as butter-makers, are not as interested as we ought to be in the welfare of our patrons. Our interest is first of all among the patrons of our creamery. Charity begins at home. I am more interested in our creamery at Dexter than in any other, and as long as I stay here I am going to work to make as many dollars for my patrons as I can, because they pay me to do it. I think it is our duty to work particularly for wages and for sale, but also for the interest of our patrons and the dairy business.

The Quality Basis of Paying for Cream*

C. Marker, Dairy Commissioner for Alberta

When I use the term "grading" I do so in the sense of its being the act of sorting, arranging or classifying according to quality. I am not stating a truism when I say that the principle of grading is followed, consciously or unconsciously, wherever my goods are bought or sold in markets where the supply is at least equal to the demand. In markets where, and when, the supply of any one article or commodity is not sufficient to meet the current demand, when the competition is among the buyers, the principle of grading does not for the time being apply with the same force as in cases where and when the supply is equal to or greater than the current demand, where the sellers are brought into competition with one another.

It is good policy, however, on the part of the producer or seller to always anticipate the latter condition in the market, as in that case the quality article will find a ready demand and sell at a fair price where an inferior product may have to go begging for a buyer at any price. The grading principle and quality basis payment applies in all normal markets, and in a more or less clearly defined manner to many products, including those of the dairy.

INTRINSIC VALUE AND SELLING PRICE
The market value, or selling price, of butter is subject to great fluctuations. We find at any one time wide variation in the butter quotations in the same markets, and at the same time. Why?

*An address before the Dominion Dairy Conference held at Ottawa, Dec. 6 and 7.

Why do we find, for instance, that in some markets butter is selling at prices varying from 20 to 40¢ a lb.? The intrinsic, or actual food value, may be nearly or quite as high in one case as it is in the other. Why then the great difference in price? Simply this: There is something quite apart from the intrinsic, or food value, or with the circumstances, that the buyer is willing to pay an additional price, or premium.

This something is what we call quality, and apart from sentimental and local considerations, the quality of butter, or, for that matter, of any other product or commodity, may be measured by its suitability or adaptability to the needs and purse of the buyer. Butter of an uniform, or well made and tastefully put up, attracts the attention of the appreciative buyer and makes a favorable first impression upon him; it gives evidence of a high standard of the exercise of care and skill on the part of the producer. If the flavor of the butter is sweet and pleasant to the taste, the favorable first impression becomes reinforced by a desire to buy that particular package or lot. If on the other hand, the flavor does not please him he will look elsewhere or in other brands for the quality suited to his needs. This being true, and other conditions equal, we find that the flavor is the factor that determines the relative market value of butter.

THE PATRONS CONSULTED

When we first thought of instituting a system of cream grading the government creameries of Alberta we sent out letters to 1,500 patrons of those creameries explaining the system of payment we proposed to institute and asking for their opinions on the same. Considering that less than half a dozen letters containing objections and criticism were received from patrons in answer to the circular, we fully assume that the plan outlined appealed to the great majority of them as being fair and generally satisfactory.

The criticisms received may be grouped under the following heads, viz.:

- (1) The cream haulers are not competent to grade the cream.
- (2) Assuming that the grading of the cream is to be done at the creamery the patron living a considerable distance from the creamery will be placed at a disadvantage in that the quality of his cream will deteriorate in transit more than the cream furnished by the patrons who live but a short distance from the creamery.
- (3) It cannot be done.
- (4) The grading of the cream would drive patrons away from the creamery.

In answer to the first objection it has never been our intention that the cream haulers should do the grading. They merely take the samples and afterwards deliver them at the creamery. The buttermaker at the creamery should always do the grading. Objection No. 2 did not hold good as had been amply proved by the results of the preliminary grading work done during the season of 1909 at all the creameries, where the bulk of the cream and butter has received reasonable care in transit.

The third objection is as "old as the hills." It has been put forward to check every reform and improvement, but it is not convincing.

(Continued next week)

FOR SALE

Two creameries in Central Alberta, about half way between Calgary and Edmonton. Good dairy district and good paying business. Apply to
J. F. MILLAR, BENTLEY, ALTA.

THE DAIRYMEN'S ASSOCIATION OF WESTERN ONTARIO

Extend to you a very Cordial Invitation to attend
THE
45th ANNUAL CONVENTION
AND
WINTER DAIRY EXHIBITION
INGERSOLL
JANUARY 10 and 11, 1912

\$500 in PRIZES for Butter, Cheese and Dairy Herd
Competition with Silver and Bronze Medals

Cheese Buyers' Trophy, valued at \$150.00 for Sweepstakes Cheese

MANY SPECIAL PRIZES

EXCELLENT LIST OF SPEAKERS. THREE SESSIONS EACH DAY

Each of which is of interest to Milk Producers

WEDNESDAY AFTERNOON SESSION SPECIAL FOR FARMERS

EVERY PERSON MADE WELCOME. REDUCED RATES ON ALL RAILROADS

FOR PROGRAMS APPLY TO—

WM. WADDELL, Pres. FRANK HERN, Sec.-Treas.,
Merwood, Ont. London, Ont.

Cheese Department

Makers are invited to send contributions to this department to ask questions on matters relating to cheese making and to suggest subjects for articles. All communications to The Cheese Maker's Department.

Satisfied with the Test

Fred McKee, Peterboro Co., Ont. My opinion of the system of paying for milk by test at the cheese factory? In the first place, I think it is the fairest way. A man is paid for the quality of milk and not quantity. This is the proper basis for payment in any line of production.

Pay by test induces patrons to try to secure a letter standard of milk. This helps the cheesemaker to produce a more uniform quality of cheese. It means much more satisfactory business for the salesman when all the buyers are after your factory's cheese.

Our factory has paid by test for about 12 years. We find it away ahead of the old pooling system. We have found that it leads us up to the problem of better cows and a higher test.

While acting as auditor for our factory I compared two patrons' milk for a month. One man sent 1,132 pounds more milk in the month than the other and by having a lower test just had \$1.10 less money. Had he a right to any more?

The Pasteurization of Cheese Factory Whey.*

F. Hens, Chief Dairy Instructor, Western Ontario

Scientific investigations have shown that various diseases, especially tuberculosis, may be transmitted through raw factory whey. Practical experience in addition to similar investigations points out that many off-flavors (including yeasty, fruity, bitter and whey flavors) in cheese may be traced directly or indirectly to returning ordinary factory whey in the milk cans.

Some cheese factories return the whey, the tanks receive little or no attention and the cheese are usually accepted without much complaint, but this does not prove that the whey did not transmit disease. It does not alter the fact that losses have been occasioned through abnormal fermentations in milk due to the distribution

*An address before the Dominion Dairy Conference, Ottawa, Dec. 6th, and 7th.

FOR SALE AND WANT ADVERTISING

TWO CENTS A WORD, CASH WITH ORDER

SEVENTY-FIVE CHEESE FACTORY FOR SALE—Good dairy district. Cheese made for local use in city. All health reason for selling.—Box W, Farm and Dairy, Peterboro, Ont.

FOR SALE

A cheese and butter factory in Oxford County, making over 100 tons of cheese a season. Plant is new and factory is in the centre of an excellent dairy district. Write Box X.

FARM AND DAIRY, PETERBORO, ONT.

FOR SALE

Cheese factory in Western Ontario. Good dairy section and site. Good water and drainage. Excellent curing room and house. Owner going west.

Apply Box 500. FARM AND DAIRY, PETERBORO, ONT.

FOR SALE

Up-to-date cheese factory with dwelling, good well. One acre land, resided \$1.50 per 100 lbs. One man and 12 cows for manufacturing. 1/2 mile to school house for selling—accepted. Reason for selling—owner runs year round position. This factory runs year round and receives 5,000 to 7,000 lbs. milk per day in summer. Address: FRED B. HADLER, GREEN LEAF, WIS. R.R. 1, S.A. R. GREEN LEAF, WIS.

of undesirable organisms through the common whey tanks. From a sanitary standpoint and various other reasons, frequent cleaning of tanks is to be commended, but the method followed does not completely eliminate the risk of spreading organisms detrimental to the quality of the cheese and more especially disease germs likely to infect the calves and pigs to which the whey may be used.

STERILIZATION OF CANS UNCERTAIN

If all the patrons could be depended on to sterilize the milk cans, the risk of turning out defective cheese from returning the whey in the cans could be reduced to the vanishing point, but this would not prevent the transmission of disease. It is, however, well known that a certain percentage of patrons neglect this important detail of thorough can washing. In the absence of live steam, sterilizing the cans is an uncertain process. Under average farm conditions, boiling water must be depended on, and it often cooks before it reaches the can. When old, sour, ill-smelling whey is returned little inducement is offered to be particular. The patrons wanting to insist on having the whey returned (in Western Ontario about 95 per cent of the factories return the whey), and there appears to be no other general practical method of returning whey except in the milk cans. The pasteurization of milk for cheese making is not likely to be adopted for some years. Pasteurization of whey, therefore, has been generally advocated by bacteriologists and dairy experts as a means of diminishing the dangers from disease germs and the defects referred to in the cheese. Pasteurization is not strictly the proper term as this means heating and cooling, but cooling is not practical under factory conditions and so far as can be seen, is unnecessary.

OTHER DAIRY COUNTRIES' PASTEURIZE

Dairy countries, such as Denmark and portions of Germany, pasteurize factory by-products, and several states of the United States have compulsory pasteurization. New Zealand has also lately taken up the matter. At the last Dominion Dairy Conference, pasteurization of the whey was advocated, but no data seemed at hand dealing directly with the practical side of the question. Simply heating the whey does not entirely solve the problem.

The results and data obtained during four seasons' work have given some information. In 1907, in Western Ontario, out of 205 factories, five voluntarily began heating the whey; in 1908, 23; 1909, 58; 1910, 100; in 1911 about 55 per cent of the factories. In Eastern Ontario in 1910, out of 933 factories, 125 or 14 per cent practised heating.

KINDS OF WHEY MET WITH

The kinds of whey met with under factory conditions may be defined as follows:

1. Sweet or fresh whey as it comes from the vats, temperature 38 degrees, containing many classes of bacteria, about .18 per cent acidity, .21 per cent to 25 per cent of fat, .85 per cent of casein and albumen, 5.2 per cent of sugar, .1 per cent of ash and about 93 to 95 per cent of water.

2. Ordinary whey is No. 1 run into tanks usually containing a portion of the mixed whey many previous days, the whole rapidly becoming sour and fermented in proportion to the neglect of the tanks. Recently collected data shows this kind of whey may contain from 1 per cent to 1.5 per cent acidity—an average of 1.2 per cent fat in some cases as low as .03 per cent—average about .69 per cent (practically gravely skimmed), about four per cent of sugar (it is estimated that one per cent or over of sugar has been changed to lactic acid); quantities of water and dirt if the wash water is run into the whey

tanks as is a common practice at many cheese factories.

NOTE.—In many cases the fat rises, becomes rancid, the sour whey is drawn from under. Sometimes if the whey is "short" this greasy material may be run into the patron's cans at a temperature of 80 degrees or lower, making them difficult to clean. Under such conditions the tanks are also hard to clean, and if no provision is made for disposing of the surplus whey and wash water, this may overflow near the factory or into nearby water courses. Flies are then encouraged and sanitary conditions around the factory are then difficult to deal with. "A bad example is set the producer." (An effort has been made during the past years to clean most of these tanks often.)

3. Skimmed whey is similar to ordinary whey, but it contains little or no fat, for when drawn from the vats it is run through a cream separator before reaching the whey tank.

4. Casein whey is from the skim-milk (heated to about 120 degrees before coagulation), from which casein is made. It is much the same as skimmed whey, except that it may contain small quantities of sulphuric acid used for precipitating the casein.

5. Properly pasteurized sweet fresh whey is held in the whey tanks overnight, heated and kept at high enough temperature for a sufficient time to (1) preserve so far as possible the food constituents; (2) keep the fat evenly distributed; (3) partially or entirely free the whey from disease germs and other undesirable organisms; (4) return the whey to the farm in a condition nearly like that drawn from the vats.

(Continued next week)

Farm and Dairy is the best and most up-to-date farm paper in Canada. I wish it every success.—G. D. Mode, Procton Co., Ont.

HAND A SHARPLES

Tubular Cream Separator DOWN TO YOUR SON



Users have run their Sharple's Dairy Tubulars over a decade at total cost of fifty cents or less for repairs. One quart of oil has lasted Dairy Tubular over six years. Tubulars, after long service, are being handed down from father to son. The simple, easy-to-fixing, guaranteed-forver Dairy Tubular has no dials. Twice the obtaining form of others. Dairy Tubulars are faster and twice as clean as separators. Can you afford to be buying what others lose? Can you afford to be buying with any other? Write today for 1912 catalogue No. 7.

30 Yrs

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

CALVES RAISE THEM WITHOUT MILK
Booklet Free.
Teale, Briggs Seed Co., Ltd., Toronto, Ont.

15.95

AND UPWARD

AMERICAN SEPARATOR

SENT ON TRIAL, FULLY GUARANTEED. A new, well made, easy running separator for \$15.95. Shines hot or cold milk, heavy or light cream. Different from the others, which alloy materials of large capacity machine. The best is a money made promptly from ST. JOHN, N. B. Get the name of the dealer. Whether large or small, obtain our handsome free catalogue. Write today for 1912 catalogue No. 7.

Nos. 1279
AMERICAN SEPARATOR CO. DANBURG, N. Y.

CAMPBELL FORD!

WEDNESDAY, THURSDAY AND FRIDAY
January 3rd, 4th and 5th, 1912

This is to be the place and date of the

THIRTY-FIFTH ANNUAL CONVENTION

OF THE
Eastern Ontario Dairymen's Association

Be sure and come and hear some of the big men talk on subjects that mean real dollars and cents to the live dairyman and dairy farmer. Special railway rates are arranged for and a big crowd is expected. Don't miss the Convention this year!

Write to the Secretary for a copy of the programme

H. GLENDINNING
President
MANILLA, ONT.

T. A. THOMPSON
Secretary
ALMONT, ONT.



Do not waste a minute—not a second—in trying to demonstrate to others the merit of your own performance. If your work does not vindicate itself, you cannot vindicate it.

—Higginson

The Second Chance

(Copyrighted)

NELLIE L. McCLUNG

Author of "Sowing Seeds in Danny"

(Continued from last week)

Pearl, the oldest daughter of John Watson, a C.P.R. section man living in Millford, Mass., receives a large sum of money from the relatives of a young Englishman she had nursed when ill. She decides to educate herself and the rest of the family. The Watsons are joined by their Aunt Kate, who proves not as unkind as she is feared. Pearl proves an eminent and clever scholar and has dreams of being a school teacher. She sees that her small brothers are not as unkind as she is feared and gives up her ambition to be a school teacher and suggests moving the family onto a farm, to which John Watson agrees. We are introduced to the children at a country school. Tom Bloodman, a bull, in a game of shindy, intentionally strikes with his club Libby Anne Caves, for which he is thrashed by Bud Perkins. Libby Anne does not dare to say the blow was intentional, as her father owes Mr. Bloodman money. Bud Perkins is angry, but forgives her, as he understands the circumstances. In the meantime the Watsons are getting established on their farm. The Watson family begin to assist the country school. Mr. Burrell, the pastor, and asks him to conduct services in their school house. All attend the Pioneers' picnic.

MEANWHILE the boys had disposed of the bottles to the drug-store, receiving in payment a bountiful supply of gum, licorice, and drug-store candies, and a Union Jack for each one. There was quite a run on bottles before the Hogan twins cornered the market by slipping around to the alley at the back of the store and securing the bottles that stood in a box in the back shed. Then they came around to the front and sold them again, flags being the consideration every time, for the twins were loyal sons of the Dominion.

The drug-store man had bought his own bottles twice before he found out, but it is a proof of the twins' ability as financiers that they did not come back after he found it out. Lots of silly little boys would, but there is an advantage in being twins!

Down below the town, on the river-flat, the old timers were getting together. Under a grove of tall elms a group of the older men were recollecting the stirring scenes of the boom days, when flour was ten dollars a bag, and sugar twenty-five cents a pound; and the big flood of '89, when the Souris, the peaceful little murmuring stream, now glimmering through the trees below them, ran full from bank to bank and every log in Millford had a raft tied to its back door.

In the picnic grounds, which had been cleared out for this purpose years before, the women, faded and worn, most of them, with many long years on the prairie, but wonderfully brightened up by meeting old friends, spread their tablecovers on the lawn, brought tables, and brought out the contents of their baskets.

Mrs. Watson introduced her sister-in-law to all the old friends, who at once received her into the sisterhood, and in a few minutes Aunt Kate was exchanging opinions on lemon pies with the best of them.

Then, speaking of pies, some one recalled Grandma Lowry's vineaparties—that triumph of housewifery art, whereby a pie is made without

eggs or milk or fruit, and still is a "pie!"

"Wasn't she a wonder? Did you ever see the beat of old Grandma



Possibilities in Improving an Old House Exemplified

Who would believe that the attractive farm house here illustrated is an old house remodelled? This house, the home of Mr. Wm. Wightman, Glengary Co., Ont., has been made comfortable and attractive without great expense to the owner. Note the attractive planting kept lawn—large factors in making the country home beautiful.

Lowry?" they asked each other, looking up the hillside where they had laid her the year before, and hushed by their voices reverberating as if they were afraid that they might disturb her slumbers.

"I bought some of the vinegar pies to-day," Mrs. Slater said. "I thought it would be nice to remember her that way. She brought me over two of them the first Christmas we were in the country." I never will forget Grandma Lowry."

A little old woman in black stopped cutting the cake suddenly and looked up. Then she began to speak in a slow, monotonous voice. "She came to me," she said, "when my three boys were down with diphtheria in the dead of winter, and sat with my little Charlie the last night he was on earth. I says to her: 'Lie down, Mrs. Lowry.'—she'd been up two nights already—but she says: 'I'll never forget just the way she said it.'—she says: 'Mary, I helped little Charlie to come into the world, and

if it so be that he's goin' to leave it, who's got a better right than me to be with him?"

The shade of the elm trees was getting smaller and smaller as the sun rose higher, and some of the old timers were sitting in the sun before they noticed it, so interested were they in Mr. Slater's story of the survey party that crossed the Assenby that that fearful night in November, '79, when only five out of the eight got over.

Then the women announced, by beating on a dishpan, that dinner was ready, and every tree and bush gave answer—it was the old miracle of Roderick Dhu's men rising from corpse and heath and cairn. Gray-haired men came running like boys, catching at each other's coat-tails, tripping each other, laughing, carefree, for it was Pioneers' Picnic day, and that is the one day when gladness and good-fellowship have full sway, and all cares and years with their bitter memories of hail and frost fall from them like a garment. Hungry little boys fell down out of trees, asking where was the pie! Little girls in fluffy skirts stood shyly around until some motherly soul ushered them down the line where she said there was plenty of room and lots of good eating.

Demure young ladies, assisted by young fellows in white aprons, poured tea and coffee from huge white pitchers, making frequent journeys to the stove over among the trees, and sometimes forgetting to come back until some one had to go for them!

There were roast chicken and boiled ham set in beds of crisp lettuce and parsley. There were moulds of chicken jelly with sprigs of young celery stuck in the top. There were

tions to mingling with her fellow-men at picnics, and having persuaded her to come and see for herself if picnics were not a good thing, Pearl felt responsible for her enjoyment of it all.

Pearl had some anxious thoughts on the subject of a proper dress for Martha for the picnic, when she found that her best summer dress was a black tulle, which to Pearl seemed fit only for a funeral.

She wondered how to bring toward the subject without appearing rude, when Martha saved her from all further anxiety that day by coming over to ask her to help her to pick out a dress from the samples she had sent for. The magazine had begun to bear fruit.

They decided on a white muslin dress with a navy blue ribbon girdle with long ends, a hat like Camilla's, a blue silk parasol, and long blue gloves.

When Pearl saw Martha the day of the picnic, it just seemed too good to be true that Martha could look so nice. She had braided her hair the night before, and it was all fluffy and wavy, and under the broad brim of her blue hat it didn't look the colour of last year's hay at all Pearl thought. Martha herself seemed to feel that she was doing well, for when she had put on her dress, Mrs. Francis she ever did before. Mrs. Francis would have called it the "leaven of good clothes."

Pearl was wondering what she was going to do with Martha, now that she had got her there, when she saw Arthur Wemyss, the young Englishman.

"She took him aside and said: 'Arthur, you are so very fellow, you wish to see. I've got Martha Perkins with me to-day, and she's pretty shy, you know—never been to any of these picnics before—and I'm so busy looking after our young lads that I haven't time to go around with her. Now, I wonder if you would take her around and be nice to her. Martha's just a fine girl and young, too, if she only knew it, and she would be having a good time at picnics.'"

Arthur expressed his willingness to be useful. He would be glad, he said, to do his best to give Miss Martha a pleasant time.

And so it came about that Arthur, in his courteous way, escorted Martha through the throng of picnickers, found a seat for her at the table, and waited on her with such deftness that she seems to come so easy to the well-bred young Englishman.

Arthur was an open-hearted young fellow, and finding Martha very sympathetic, he told her about his plans. Thursa was coming to him in December to marry him, and he was going to have a house put up just as soon as the harvest was over. His father had sent him money, and so he was not dependent on his own harvest. He showed her the plan of the house and consulted her on the best position for the cellar door and the best sort of cistern. He showed her a new photo of Thursa that she had just received. She was a fluffy-haired little thing in a much befrilled dress, holding a fan coquettishly behind her head. Martha noticed how fondly he looked at it, and for a moment a shivering sense of disappointment smote her heart. But she resolutely put it from her and feasted her eyes on the loveliest in his, even though she knew it was the face of another woman that had kindled his heart.

Arthur was a wholesome-looking young man, with a beaming face of unaffected good-humour, and to Martha he seemed the greatest happiness just to be near him and hear his voice. She tried to forget everything save that he was here beside her, for this one dear sweet brother.

(To be continued)



Rev. Mr. Lord's Pets

How would you like to have a chipmunk and a squirrel so tame that they would come to you in the woods when you called them and not only eat out of your hand, but pull nuts out of your mouth, and run up and down your arms and shoulders? That is what Rev. Mr. Lord, the Church of England clergyman, at Apsley, a little village in the north country, 42 miles north of Peterboro, has.

Recently while an editor of Farm and Dairy was in Apsley, Rev. Mr. Lord invited him with a lady and gentleman friend, to accompany him to the woods in order that they might see his pets. On the way Mr. Lord explained that as it was the season of the year when the chipmunks were storing food for their winter supply, it sometimes required a little time to find them, as they frequently ranged over a considerable area for their food. On reaching a secluded spot in the woods, our editor and his friends waited behind while Mr. Lord advanced calling "Chippy," "Chippy," "Chippy."

In the course of a few minutes we saw a chipmunk racing through the bushes and along a fallen log towards where Mr. Lord was standing. On finding that his pet was near, Mr. Lord sat down with his back to a stump. He placed a peanut in each ear, and one in his mouth. In a moment or two we saw the chipmunk jump over a fallen log to the stump, run across it, and jump on to Mr. Lord's shoulder. He seemed to know



Good Friends

By dint of much perseverance Rev. O. Lord, a minister in Peterboro Co., Ont. has cultivated the friendship of some of the wild creatures of his neighborhood. In the illustration he has in his hands one of his wild friends, a chipmunk. Kindness attracts every time.

just where to look for his feast for in an instant he pulled one of the peanuts out of Mr. Lord's ear, sat up on his shoulder and commenced to eat it. This finished, he ran and helped himself to the peanut that was held between Mr. Lord's lips. This he put in one of his pockets, which in the case of the chipmunks is the loose skin on each side of their mouths. He then took the other peanut and stored it away on the other side of his mouth and darted off towards his

Much Joy is Wish'd: These Two, Soon to be United



Mr. W. F. Stephen.

The wedding is announced for Dec. 30th, 1911, of Miss Laura Rose, Guelph, Ont., to Mr. W. F. Stephen, Huntingdon, Que. The ceremony will take place at the residence of the bride's mother in Guelph.

These two people are among the best known figures in the dairy world in Canada.

Miss Rosa as Instructor in Home Dairying at the Ontario Agricultural College, and an Institute Lecturer, and primarily for her work in connection with the Traveling Dairy in several provinces, and more latterly through her new book, "Farm Dairying" which is meeting with a wide sale, has made friends of thousands in Canada and many in other countries who have benefited from her work.

Mr. Stephen through his work as an institute speaker, Secretary of the Canadian Dryshire Breeders' Association, Secretary of the Montreal Milk Shippers' Association, as an expert judge at important exhibitions throughout Canada and in the United States, and as a contributor to the agricultural press and as associate editor of the old Canadian Dairyman—now Farm and Dairy, has come in close touch with and has rendered a large service to thousands of Canadians interested in Dairying.

All will join in heartiest congratulations to Mr. Stephen and in wishing Mr. and Mrs. Stephen (soon to be) God speed and much joy. Shortly after the New Year they will return to Huntingdon, Que., where they will occupy a new house, that is reported to be a model in convenience and safety to say their many friends will always find the latch string out.

home in the ground, where he stored them.

Soon he was seen racing back again. This time Mr. Lord held the peanut in his hands. His little pet not finding them in their customary place, soon discovered where they were located, and this time helped himself to three. Two of these he stored in the pouches in his mouth, and the other he carried between his teeth. Thus loaded with three large peanuts he raced away again to his nest.

NOT AFRAID OF VISITORS

When Mr. Lord asserted that the chipmunk was so tame that he would not be frightened by us, each of us left hand and ear nuts side by side. Mr. Lord and enjoyed the novel experience of having "Chippy" pick the peanuts out of our hands. Our young lady companion was so frightened that she uttered a little exclamation of fright, which startled "Chippy" so much that he raced off in alarm, but soon returned for another nut.

Mr. Lord told us that he and "Chippy" had been friends in this way for about six years. At one time there were three chipmunks, one of whom he used to enter his study and sit on his left hand and eat nuts while Mr. Lord was busy writing with the other hand. Two of the chipmunks disappeared, however, and he feared some cat or weasel must have caught them. While we were talking Mr. Lord told us that he had taught a red squirrel to eat out of his hand also, but he too had disappeared. Just then, to our delight, we saw the red squirrel rushing through the bushes towards Mr. Lord. He refused, however, to approach nearer than about 15 feet to where Mr. Lord was standing.

Mr. Lord placed some peanuts on the stump, which his friend, the squirrel, helped himself to. Unlike "Chippy," however, he did not have pockets in his mouth and, therefore, was unable to take more than one at a time, which he rushed off with to store in his nest. When he returned Mr. Lord was standing quite a little nearer to the stump, and chattered and scolded at Mr. Lord, but finally came and took a nut and raced away to his nest with it. Time did not permit us to wait until Mr. Lord entirely regained the confidence of his friend, but Mr. Lord told us that in another hour he could have the squirrel



Miss Laura Rose.

rel eating out of his hand just as squirrel. Sometimes the squirrel and the chipmunk, he said would eat out of his hand at the same time.

This story shows how easy it is to gain the confidence of these wild creatures, when kindness and patience is used. If any of the little boys and girls readers of Farm and Dairy have any tame squirrels or chipmunks like this, that run wild in the wood, will you not write and tell us about them?

What You May Do Profitably

Women folk often do not have much to say about the kind of stock kept on the farm, but it is plainly evident that they often think a lot and wonder why it is that the men are unable to more greatly prosper. The cause often rests with the live stock. If this is so in your case you may apply the remedy. Farm and Dairy offers in return for new subscribers pure bred animals of many class of farm stock as well as a varied list of valuable premiums most useful in household.

Our circulation department will lend every possible assistance to those of our readers who will try for new subscribers. The girls and the boys could get out after new subscribers as other girls and boys have done most successfully and for their own splendid prizes. All interested readers are requested to communicate with our circulation department and to get busy right now after the new subscribers.

Easily Made Money

(Concluded from page 9)
they are wide awake to the importance of this question. It is about time the farmers of Ontario organized, as have their brother farmers in the west, in order that they may secure the reforms that will never be obtained through either political party as long as our farmers are unorganized as they are now.

While the piece of land here referred to is possibly the most valuable in the Dominion, it serves to give an idea of how certain classes of the community are preparing for themselves wealth that farmers mostly create but never see. Put on your thinking cap, brother farmers, and decide what we had better do.

It pays to advertise. Try it.

GRAND TRUNK RAILWAY SYSTEM
THROUGH TRAIN SERVICE AND PULLMAN SLEEPERS
Between TORONTO and PORCUPINE

NORTHBOUND—First train leaves Toronto at 8.30 p.m. Dec. 2nd, arriving South Porcupine 4.30 p.m. following afternoon.
SOUTHBOUND—First train leaves South Porcupine 12.30 p.m. Dec. 3rd arriving Toronto 7.30 a.m. following morning.

The Attractive Route to WINNIPEG AND WESTERN CANADA

IS VIA GRAND TRUNK AND CHICAGO
Steamship tickets on sale via all lines. Make your reservations early.

Full particulars from Grand Trunk Agents.

Well DRILLING MACHINES

Over 70 sizes and styles, for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on skids. Will drill 100 feet or more. Strong, simple and durable. Any mechanic can operate them easily. Send for catalog. WILLIAMS BROS., THEDA, N.Y.

OLD COUNTRY DOMESTICS

Capable Scotch, English and Irish maids; also Danish girls. Parties arriving twice a month. Apply now. The Gull'd, 71 Drummond Street, Montreal, 47 Pembroke St., Toronto, or 227 Bank St., Ottawa

WOMEN CAN EARN MONEY or secure useful articles of household furniture, clocks, dishes, kitchen utensils, books, etc., by sending their friends and neighbors and getting them to subscribe to this paper. Cash commissions allowed on new subscribers. Get us 25 new subscribers and we will give you a year and we will pay you \$15.00 cash.

FARM & DAIRY, Peterboro, Ont.

SYNOPSIS OF CANADIAN NORTH-WEST AND REGULATIONS

ANY PERSON who is the sole head of a family, or of any man over 18 years old, may homestead a quarter section of available Dominion land in Manitoba, Saskatchewan, Alberta. The applicant must appear in person at the Dominion Lands Office for Saskatchewan, or at the same office by proxy may be made at any agency, on certain conditions, by father, mother, son, daughter, brother or sister of intending homesteader.

Duties—Six months' residence upon and cultivation of the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 80 acres solely owned and occupied by him or by his father, mother, son, daughter, brother or sister.

In certain districts a homesteader in good standing may pre-empt a quarter-section alongside his homestead. Price \$5.00 per acre. Duties—Must reside upon the homestead or pre-emption six months in each of three years from date of homestead entry (including the time required to earn homestead) and cultivate fifty acres extra.

A homesteader who has exhausted his homestead rights and cannot obtain a pre-emption, may enter for a purchased section alongside his homestead. Price \$10.00 per acre. Duties—Must reside six months in each of three years, cultivate fifty acres and erect a house worth \$500.00.

W. W. COBY,
Deputy of the Minister of the Interior.
No. 1, Parliament Buildings, Ottawa. If this advertisement will not be paid for.

Household Suggestions

Cold weather is upon us, and with it the time for putting on storm-windows and doors.

Remember to have at least one storm-window in each room, hung on hinges so that it may be opened to admit fresh air.

Beds, bedding and sleeping rooms should be aired each day during the winter months, as well as during the warmer weather.

Opening opposite windows in the living room occasionally, during the day, will change the air of the room and be a benefit especially to those

who must remain indoors most of the time.

Don't forget to have the windows in the kitchen easily adjustable. A goodly supply of fresh air is necessary to the comfort and efficiency of the persons working in the "laboratory" so closely connected with the welfare of the home.

Sprinkle a soft cloth with coal oil and rub the window glass with this. Allow it to remain on a short time then wipe the glass with another cloth, and finally polish with either another cloth or a piece of soft paper.

Glass preserve jars are perhaps the best and most convenient of all con-

tainers for small quantities of almost any food material.

Many household utensils as well as tools will rust if exposed to damp air or if kept near salt. This may be prevented by applying to the article a paste made by melting a pound of tallow to which is added half a pound of graphite and two ounces of camphor gum. Remove all dust from the article with kerosene and wipe perfectly dry. Then apply the paste and allow it to remain for twenty-four hours or longer. Wipe dry, and though no trace of the preparation may remain, its effect is such that the article will be

free from rust for several months, unless it should lie on the ground or be exposed to the weather. A very thin coating is all that is necessary.

Put a teaspoonful of mustard in the dish in which fish has been cooked, partly fill with warm water, and let stand for a few minutes. Scrape and rinse, and no odor will remain. If the hands are first rinsed in a little mustard water, and then washed, the disagreeable odor that remains from washing dishes in which fish have been cooked will at once entirely disappear.

Renew your subscription to-d-y.

THE "PATRICIA" LACE WAIST

NEW YORK PRICE \$5.50

OUR PRICE \$2.95

From the Back
Page of our NEW MID-
WINTER SALE CATALOGUE

THERE are 87 other equally interesting pages in this new catalogue, and every page should mean DOLLARS OF SAVING to the average family.

Here is low-priced clothing for men, women and children, as well as household supplies, Jewelry and Novelties that Santa Claus may have forgotten.

Every Price quoted means cost of goods at your very door—at any rate at your nearest station or Post Office, because all charges are prepaid to destination.

Order the "Patricia" waist to-day, or send your address on a card, and this new catalogue will be forwarded at once.

Read This Description Carefully

(Order Number GW-95381)

The ground-work of this waist is fine Malines net, beautifully embroidered with exceedingly heavy mercerized floss. It is daintily yet serviceably lined with Jap silk. Note the kimono style short sleeves: finished at neck and sleeves with fine pure Guipure antique lace. The back is as elaborate as the front. Sizes 32 to 42 bust. Colors, pure white, ecru or all black. Midwinter Sale Price **2.95**

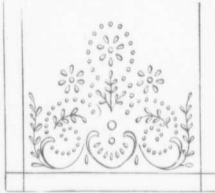
THE ROBERT SIMPSON COMPANY LIMITED
TORONTO

Embroidery Designs

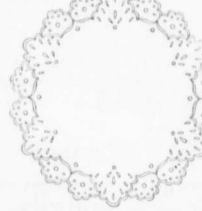
Designs illustrated in this column will be furnished for 10 cents each. Readers desiring any special pattern will confer a favor by writing Household Editor, asking for same. They will be published as soon as possible after request is received.



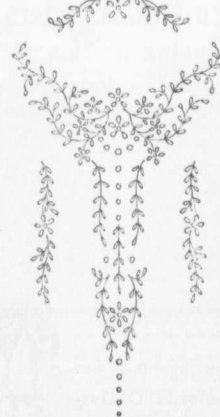
608 A Design for Embroidered Wreaths. Transfers for one wreath nine inches in depth and for two wreaths six inches in depth are given.



610 A Design for an Embroidered Table or Dresser Scarf. Two ends fourteen inches wide are given.



615 Design for an Embroidered Center Cloth Twenty-Two Inches in Diameter.



616 Design for Embroidering an Infant's Robe Dress. Transfer Patterns for Yoke, Front, Sleeves and Neck are given.

Farm Well Water

Prof. R. Harcourt, O. A. C., Guelph.
The water of shallow wells will be pure or impure as the soil around them is pure or contaminated. This is not true of water from wells drilled into the rock, provided the well is properly cased to prevent the surface water getting into it; but it is absolutely true of the shallow dug well. An ordinary well is but a hole in the ground, and, naturally, it collects the seepage water from the surrounding soil. Consequently if this soil is saturated with foul and polluted matters, the water that passes through it will be contaminated.

The earth is naturally a good purifying agent, consequently a well may be dug close to a water closet, cess-pool, barnyard or the alops from the house may be thrown on the ground near the well, and provided none of it runs directly into the well, the water may not be contaminated. But such a condition cannot last long. The pollution doubtless makes its way into the well, but the soil through which it soaked absorbed the impurities and the water passed on pure. It must follow, however, as time goes on, that the polluted matters get nearer and nearer to the well, until finally the soil is so overloaded with impurities that it loses its power of filtering and purifying the water and some of the impure matters find their way into the well. In such a well there may be a good spring of pure water if but how can the water remain pure in all manner of filth is carried into the well in the seepage water? It is because this is prevented in the bored and cased wells that purer water is obtained from them than from the shallow dug wells.

EFFECT OF CLEANING WELL.

Sometimes when we have been compelled to report that the results of our analysis of a water lead us to believe that the water is unfit for use, correspondents have asked if they thoroughly clean the well will the water not be all right. It is evident that cleaning the well is a good thing, and that it should be done frequently, but if the water is contaminated from the soil through which it passes in getting into the well, it is apparent that cleaning the well alone will not purify the water. Recently we received a sample of water from a well dug close to the barnyard. The water at one time was considered a good article, but it had become impure. The barns and barnyard were removed to another location, the well was thoroughly cleaned and it was hoped that the water would be better. Analysis showed that the water was loaded with decaying organic matter. The well had been cleaned, the barnyard moved, but the soil was still loaded with the impurities which the seepage from the barnyard had been building up for years, and it will probably take years to cleanse the soil again.

WATER BADLY CONTAMINATED.

During the past summer we have been asked to analyze more samples of water from farm wells than usual. We have not found all the water pure, but the results show that a very large proportion of it was badly contaminated with decaying organic matter. Comparatively few show any sewerage contamination and still fewer give results that indicate that the organic matter is directly of animal origin. In most cases the impurities are, apparently, from a vegetable source. Such a water is not necessarily unfit for use, but it contains materials needful for the development of disease and other forms of organisms, and when we realize how easily this water may be contaminated with disease germs, we very rightly look upon such water with suspicion.

In most of the European countries the sanitary officers have long ago insisted on all ground water being taken

from lower levels in such a way as to prevent any seepage water from the surface soil getting into it. We are gradually coming in the same direction, our cities and towns are going to great expense to get pure water, and in the country we find every year an increasing number of wells being drilled into the rock. We must get away from the shallow wells if we are going to have the good, pure water we require and which nature has so abundantly supplied for us. These wells may furnish pure water in a new country that is sparsely settled, but in the older districts, if we are going to have wells near our buildings, they must be arranged on the lower strata and in such a manner that it is not contaminated with the seepage water from the surface soil. —O. A. C. Report.

The Truest and Best Girl—A great writer has said: "The truest, the loveliest and sweetest type of girl today does not come from the home of wealth, she steps out from the house where is comfort rather than luxury. She belongs to the great middle class best without a doubt, she gives us the girl that class which has given helpmates to the foremost men of our time; which teaches its daughters the true meaning of love; which teaches the manners of the drawing room and the practical life of the kitchen as well as teaches the girls the responsibilities of wifehood and the greatness of motherhood."

THE COOK'S CORNER

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

SPECIALLY CRANBERRIES

One pint of berries, one cup of sugar, one-half cup of water, one-half cup of raisins, one-half teaspoon cinnamon, one-fourth teaspoon cloves, two teaspoons vinegar. Cook slowly and when nearly done add one-half cup of chopped walnuts. A splendid relish for meats.

WHITE COOKIES

One heaping cup of sugar, one heaping cup of butter creamed with sugar, one egg well beaten, half a cup of sour milk, a small half teaspoonful of saleratus, flour to make a dough that can be rolled. Roll thin and cut into cookies.

LIVER CROQUETTES

Wash carefully half a pound of liver and cut it into thin slices. Cover with boiling water and simmer gently for twenty minutes, then drain and chop fine. Rub together until smooth one tablespoonful of butter and two of flour, and stir it into a cupful of hot milk. Cook for three minutes stirring constantly and add the liver with a teaspoonful of minced onion, a teaspoonful of salt and a beaten egg. Cook five minutes, add egg, then in mold into balls, dip into flour, bread crumbs, and fry for a minute in hot fat. Serve garnished with parsley.

CANDIED CRANBERRIES

This is one of the most delicious and prettiest ways of using the cranberry and especially good to serve with fowl. Take one quart of berries and select baking pan that will hold and then evenly on the bottom so that each other. Cover with ten cups of sugar and water enough to come about one and third the height of the berry and bake slowly until the berries are tender, and they must retain their shape. Pile on a glass dish. They should look like candied cherries, with a small amount of thick syrup, and should be a scarlet color.

The Sewing Room

Patterns 10 cents each. Order by number and size. If for children, give age; for adults, give measurements for waists and waist measure for shirts. Address orders to the Pattern Department.

CHILD'S DRESS WITH BLOOMERS, 7251



This pattern is cut in sizes for girls of 4, 5 and 8 years of age.

FOUR-PIECE SKIRT, 7252



This pattern is cut in sizes for a 22, 24, 26, 28 and 30 inch waist measure.

GIRL'S YOKE APRON, 7253

WITH HIGH OR SQUARE NECK, WITH OR WITHOUT SLEEVES



FANCY PEASANT BLOUSE, 7250



This pattern is cut in sizes for a 34, 36, 38, 40 and 42 inch bust.

OUR FARMERS' CLUB

Correspondence Invited

PRINCE EDWARD ISLAND

PRINCE CO., P.E.I.

Richmond, Dec. 15.—Fine weather and good roads are being taken advantage of by the farmers in disposing of their products. Large shipments of hay are sent to Newfoundland and the English markets at \$10 to \$11 a ton. Potatoes are shipped in large quantities to Ontario at \$2 to \$2 1/2 a bus., oats, \$4 to \$4 1/2; timothy seed, \$6 a bus.; pork, 75c; turkeys, 22c; geese and ducks, 16c; chickens, 15c; eggs, 35c; dairy butter, tub, 25c.—J. D. Mc L.

NORTHERMBERLAND CO., ONT.

BRIGHTON, Dec. 13.—At an enthusiastic meeting of fruit-growers held here the Northernumberland Cooperative Fruit Growers' Association was formed, and the following officers were elected: President, W. J. Farley; vice-president, G. E. Post; secretary-treasurer, E. C. Brown. Executive—Robert White, Dr. C. M. Sanford and S. J. Tinson. R. B. Scripture, who was instrumental in organizing the association, was appointed manager. This association will be one of the largest and strongest in Canada, and will probably pack more high-class winter apples than any other firm or association in the Dominion.

ONTARIO

ONTARIO CO., ONT.

TAUNTON, Dec. 15.—It froze up here on Nov. 12. We had good sleighing. Some had not their turkeys in at that time, but the mild week we have had lately gave them a chance to finish up. After a month of winter weather we also see the plow going, but unless it keeps open till Christmas some will not have finished even then. Feeding cattle are cheaper than a year ago. Feed of all kinds is scarce. Those having a good acreage of corn and a silo are the ones who have the best supply of feed. The winter for dairy products is good this winter. Hogs are at present coming up in price, but farmers are getting tired of the hog business.—A. N.

WATERLOO CO., ONT.

ELMHURST, Dec. 15.—Our local Farmers' Club of West Montrose held the November meeting last Friday, having an attendance of about 200. A debate, "Resolved that Mixed Farming is more beneficial than Specialized Farming," was decided in favor of affirmative. There was also a good program of reading, recitation, songs and music, and a few speeches by young men, which is a good breaking in. The club appointed its president and one director as a committee to attend the club convention at Galt, but they have not yet reported to the club. The club voted unanimously to hold its annual oyster supper on the evening of its regular club night in December; also to have a large Christmas tree, with Santa Claus to attend.—A. B. S.

NORFOLK CO., ONT.

ERIE VIEW, Dec. 8.—The soft, wet weather and the seas of mud are a great detriment to business. Clover seed is being threshed and sold in bulk. Poultry has dropped in price; no cold storage conveniences at hand. All stock is doing well. Creamery men handle lots of cream. Butter, 55c; eggs, 30c; hogs, \$7.50.—B. B.

BRITISH COLUMBIA

NEW WESTMINSTER DIST., C.B.—We are having fair weather. Much fall work is being done. We have had a portion of our winter, and it is hoped we will not be favored with any more. Eggs are now 55c a doz.; hay, \$14; butter, 50c; wheat, \$48; barley, 37c; oats, 42c; peas, \$40.—S. G.

GRACELAND HERD OF HOLSTEINS

The Graceland herd of Holstein owned by Elias Ruby, Tavistock, Ont., consists of some nice animals, such as Belle Mercedes Posh (1217), a prize winner in the show ring. This cow has been shown twice and won two firsts. She is backed up with some good records made by her dams and grand dams. She was raised by A. C. Hallman, Breslau, Ont. In R. of P. she has given 9,000 lbs. of milk and has one month yet to complete her record. Not bad for a two-year-old.

Another one is Nancy Pieterje (1246), who, also, is a prize winner, and, sired by Sir Mesthilde Posh, whose dam, An-

them Jewel Mesthilde, made 27 lbs. of butter in 7 days. Another is Count Pieterje Pride, sired by Prince Belle De Kol, whose dam, Maple Grove Belle, made 17 lbs. of butter in 7 days as a two-year-old heifer. Two sisters, Lady Pauline De Kol, 23 lbs. butter in 7 days; Belle De Kol Queen 2nd, 15.44 lbs. milk in one year. Count Pieterje Pride's dam, Pride of Canada, gives a large flow of rich milk.

A very promising one is Lucy Dewitt. Kept as are my ordinary cows, she was running on pasture in this dry season and gave about 10,500 lbs. of milk in 7 1/2 months, testing from three to 3 1/2 per cent. fat. Also a daughter of Lucy Dewitt, wit.

At the head of the herd is the noted bull named Yaman Beauty Hartog (7556). I have the records in black and white of over 100 cows closely related to this bull that averaged 21 lbs. butter in 7 days. His dam gave 25.37 lbs. butter in 7 days as a three-year-old. The grand dam, 17.44 lbs., was also dam of a 27 lb. cow and a 23 lb. cow. The dam of his sire made 10.70 lbs. butter at three years old in 20 days and 27.42 in 7 days. The world's record at that time was held by the grand dam of the sire, 50.5 lbs. in 7 days. This bull was raised by Geo. Rio, who imported the dam from New York. John M. Howard, Sherburn, bred his cow. This breeding will produce some good ones.

YONGEST, HOLSTEIN BREEDERS SALE

The Yonge St. (North Toronto) Holstein-Friesian breeders are planning to give of their best to the combination sale, which they will hold the day after the annual meeting of the Holstein Breeders' Association. Those who are consigning stock to this sale are: Gordon S. Gooderham, of Bedford Park, E. P. Hicks, Newmarket; Jos. Bale and O. Bale, of Lansing; Geo. McKenzie, and C. James, of Thornhill; John McKenzie, and Joe Willsondale; and Joe Kilgour, Bedford Park. The sale will be held at the latter's farm in his splendid new horse training pavilion.

Last week the editors of Farm and Dairy called at the "Manor Farm" and looked over the cattle which Mr. Gooderham is placing in the sale. Mr.

Gooderham is putting in 20 head. Speaking of them, he said: "I am putting in the best I have in the barn. We want this sale to be an annual event, and we are going to make this first one something that the people will remember and because of it will gladly come back next time to get the good cattle they want."

"There will be over 10 head of pure bred cattle in the sale and 20 head of grades. Ten only of the offering will be bulls. The rest will be females. This is quite different from most sales that are being held, and we are out to give the breeders, and would-be breeders, a chance to get the best of foundation stock at their own prices."

Among some of the cattle Mr. Gooderham is putting in the sale we will mention especially "Canary Queen," 19.33 lbs. butter in seven days and 456.5 lbs. milk as a three-year-old. (Mr. Gooderham will give the man who buys this cow \$125 for her calf if it is a heifer.) "Inka Silvia De Kol," 36 lbs. milk a day, over 36 lbs. butter in a week; her bull calf, five months old at time of sale, will be sold. "Aaggie Korndyke Cow," over 18 lbs. butter as a three-year-old, 425 lbs. milk in seven days and testing nearly 4 per cent. "Dirkie Del.," an imported cow from Holland, and with a record of nearly 33 lbs. and has milked 507 lbs. milk in seven days; both of these cows will be sold. This latter cow especially will give someone a chance to get the kind of cow to breed from.

Other cows that Mr. Gooderham will offer are "Countess Mercedes De Kol," three years old—a show cow of splendid size, and has gained 10,980 lbs. as a three-year-old, but calved too late to qualify in Record of Performance; "Asterbrook De Kol Blossie," 4,600 lbs. in 10 months as a two-year-old. Other splendid young cows of which space does not permit us to make mention are included in Mr. Gooderham's offering.

Noteworthy amongst the young stock that will be sold from Mr. Gooderham's stable is a bull calf (one year old in February) out of a grand big cow having a record of 72 lbs. of milk in a day nine months of age at calving. "Countess De Kol 2nd" will also be put in the sale and she is a full sister to a cow sold at Brown Bros.' sale for \$1,000.

Record of Merit
Record of Performance

Public Dairy Test Winning
Show Ground Winning

Cows

The Kind You Read About in Farm & Dairy

Will be Sold at Public Auction, Tuesday, January 2nd, 1912
At the Big Annual Consignment Sale of the Southern Ont. Breeders
To Be Held in the Roller Ring, Tillsonburg, Ont., commencing at 10 a. m.

These Richly Bred Cattle are from
the noted herds of

E. LAIDLAW & SONS - Aylmer
T. W. McQUEEN - Tillsonburg
M. L. HALEY - Springford
M. H. HALEY - Springford
JAS. RETTIE - Norwich
R. J. KELLY - Tillsonburg
GEO. RICE - Tillsonburg
J. W. RICHARDSON - Caledonia

These men are all well known breeders; they are breeders and not speculators. They are taking this popular way of selling their increase to keep their herds to the capacity of their stables.

THE AUCTIONEERS:

Col. D. L. Perry, Columbus, Ohio,
Moore & Dean; Geo. Ferguson, Wm. Pullin

The offering includes a splendid lot of young females from Record of Merit Dams; Males good enough to lead any herd from great sires and dams with records up to 27.5 lbs. butter a week. Some whose 3 and 4 nearest dams will average this record. Yearly records nearly 20,000 lbs. of milk.

All of the breeders in this sale have their reputations at stake and will consign cattle worthy of their reputations.

Everything will be sold absolutely without reserve, even if it is but a \$5.00 bid. Heavy penalties have been agreed upon to foreclose the possibility of any breeder returning cattle to his barn. Therefore you will have the opportunity of years to get choice richly bred Holsteins at your own price.

A SPECIAL TRAIN will be provided on day of sale from Stratford, leaving there on January 2nd at 7.40 a. m., Woodstock 8.30 a. m., calling at all intermediate stations. Ask conductor or agent for ticket to consignment sale and secure cheap rate. Train returns in evening.

For a Big Catalogue giving Full information, Pedigrees and Breeding, write M. L. Haley, Springford P.O., Ont.



HOLSTEIN-FRIESIAN NEWS

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

ONE OF CANADA'S GREATEST HERDS OF HOLSTEINS; HERD OF EDMUND LAIDLAW & SONS, AYLMER, ONT.

(Continued from last week)

The second heifer is another of the choice ones in the herd. Three months after calving, when two years and two months old, she produced 373 lbs. of milk and 17.35 lbs. of butter in seven days and 1,822 lbs. of milk and 67.75 lbs. of butter in 30 days. At the time of our visit she had been milking seven months and was still giving 40 lbs. milk a day in two milkings. For a heifer she shows an unusually large barrel, possesses a fine open rib and veins that surmount those of many a mature cow.

Two animals that will be sold in the Tillsonburg sale include Jessie Bewande Posch, now seven years and three months old and bought originally from Geo. Rice. She has a seven-day record of 532 lbs. of milk and 19.47 lbs. of butter. After the test had been completed her production ran up until she was giving over 85 lbs. of milk a day. As a five-year-old in the Record of Performance she gave 15,440 lbs. of milk and 580 lbs. of butter. She is a fine large cow, possessing a vigorous constitution, broad and round quarter and an udder almost perfectly formed. Although she had been milking since March her udder was of excellent dimensions at the time of our inspection.

Some Nice Heifers

Among her daughters was a nicely marked, vigorous looking heifer, dry in the field when we called, and another, Wopke Posch. This animal is largely black and possesses the same square, broad quarter as her dam. She is low down and a good individual. Her sire was imported from Holland. Her record as a three-year-old for seven days is 402 lbs. of milk and 18.60 lbs. of butter, and for 30 days 1,703 lbs. of milk and 74.60 lbs. of butter. Another of her daughters, by Lord Roberts, is Jessie Pauline Posch, a fine type of heifer, which, at two years, has a record for seven days of 353 lbs. of milk and 15.56 lbs. of butter, and for 30 days 1,621 lbs. of milk and 62.77 lbs. of butter.

Lady Aberkerk De Kol, which, at four years old, made 23.17 lbs. butter in 7 days, is shortly to be tested again, and great things are expected of her. She is a daughter of Miss De Kol Keut, 25.95 lbs. butter in 7 days as a five-year-old. In marking she is spotted, white predominating. She is large and deep in the body, and possesses an almost perfectly shaped udder that is large, as well as being well formed.

Still another animal going to the sale is Lady Princess Hiawatha, which, when two years and one month old, made a record for seven days of 302 lbs. of milk and 15.41 lbs. of butter, and for 30 days of 1,363 lbs. of milk and 60.57 lbs. of butter. She was very poor when purchased and when she freshened, but proved such a persistent milker, her record under the circumstances furnished quite a surprise. Three two-year-olds that are going in the sale are Rhetta De Kol, 16.53 lbs. butter in 7 days, 66.70 in 30 days; Cairngorm Aggie, 15.77 lbs. in 7 days, 67.69 lbs. in 30 days; Hillview Jean De Kol, 16.08 lbs. in 7 days, 66.61 in 30 days.

Messrs. Laidlaw and Sons have a farm of 330 acres, on which they are able to grow an abundance of feed and bedding even for their large herd. They have a large number of well-bred young animals coming on which enables them to place so many excellent animals as they intend to in the Tillsonburg sale, where, in view of their splendid records, they should draw great attention from the buyers.

OFFICIAL TESTS OF HOLSTEIN-FRIESIANS FOR OCTOBER

Rachob's Daisy (6235), at 5y. 7m. 2nd of age; 19.69 lbs. fat, equivalent to 23.69 lbs. butter; 506.1 lbs. milk. Owned by Dr. L. de L. Harwood, Vaudreuil, Que.
Canadian Carmen Sylvia (10800), at 5y. 8m. 2d. of age; 11.54 lbs. fat, equivalent to 14.42 lbs. butter; 398.61 lbs. milk. Owned by Dr. L. de L. Harwood, Vaudreuil, Que.

Lady Copia Artis (10788), at 5y. 8m. 6d. of age; 14.4 lbs. fat, equivalent to 18 lbs. butter; 401.4 lbs. milk. Owned by Dr. L. de L. Harwood, Vaudreuil, Que.
Coral DeKol Frontier (12566), at 2y. 5m. 26d. of age; 8.38 lbs. fat, equivalent to 10.45 lbs. butter; 282.92 lbs. milk. Owned by Dr. L. de L. Harwood, Vaudreuil, Que.—G. W. Clemons, Secretary.

OFFICIAL TESTS OF HOLSTEIN-FRIESIANS FOR NOVEMBER

Midnight Gem DeKol (12165), at 5y. 11m. 1st. of age; 15.38 lbs. fat, equivalent to 22.97 lbs. butter; 513.6 lbs. milk. Owned by James G. Currie, Ingersoll, Ont.
Abby Hengerveld DeKol (4737), at 7y. 10m. 27d. of age; 17.61 lbs. fat, equivalent to 22.01 lbs. butter; 496.5 lbs. milk. Owned by W. J. Bailey, Nober, Ont.
Mary Lyone (3954), at 9y. 7m. 11d. of age; 16.26 lbs. fat, equivalent to 20.33 lbs. butter; 400.4 lbs. milk. Owned by Dr. L. de L. Harwood, Vaudreuil, Que.
Ideal Daisy (7138), at 5y. 1m. 10d. of

age; 15.2 lbs. fat, equivalent to 19 lbs. butter; 393.2 lbs. milk. Owned by W. J. Bailey, Nober, Ont.

Lyons Duckey Maid (3385), at 9y. 6m. 7d. of age; 14.85 lbs. fat, equivalent to 18.54 lbs. butter; 457.5 lbs. milk. Owned by Dr. L. de L. Harwood, Vaudreuil, Que.

Brookside Mark (10788), at 5y. 8m. 5d. of age; 14.53 lbs. fat, equivalent to 18.17 lbs. butter; 507.7 lbs. milk. Owned by Dr. L. de L. Harwood, Vaudreuil, Que.

Inka DeKol Pieterje 3rd (9410), at 4y. 4m. 26d. of age; 14.03 lbs. fat, equivalent to 17.53 lbs. butter; 410.15 lbs. milk. Owned by A. C. Hardy, Brockville, Ont.
Queen Cora Vale Burke (8323), at 4y. 6m. 26d. of age; 12.26 lbs. fat, equivalent to 16.22 lbs. butter; 405.3 lbs. milk. Owned by Dr. L. de L. Harwood, Vaudreuil, Que.

Centre View Butter Gem (10554), at 5y. 6m. 26d. of age; 12.08 lbs. fat, equivalent to 15.10 lbs. butter; 412.7 lbs. milk. Owned by Geo. Rice, Tillsonburg, Ont.

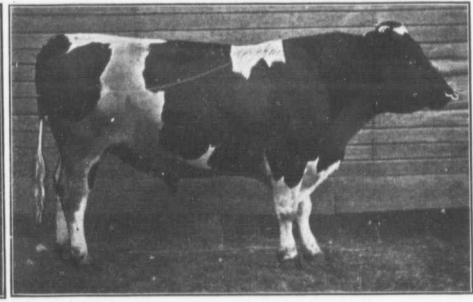
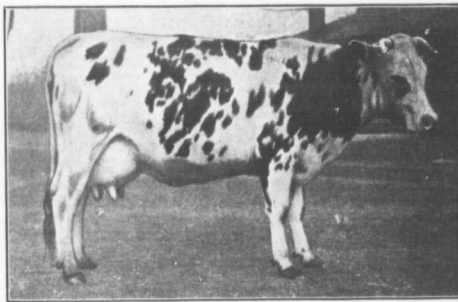
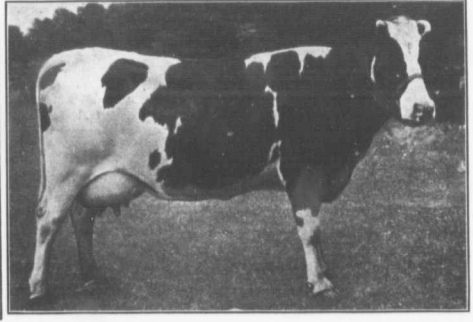
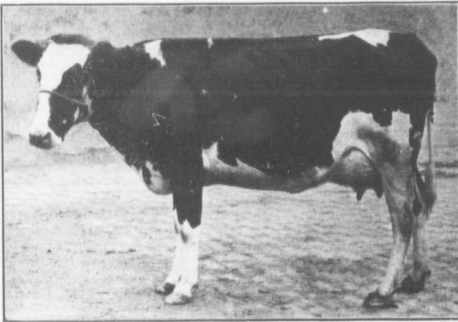
Centre View Butter Girl 2nd (10558), at 3y. 2m. 30d. of age; 11.51 lbs. fat, equivalent to 14.38 lbs. butter; 397.1 lbs. milk. Owned by Geo. Rice, Tillsonburg, Ont.

Daisy Posch (11646), at 2y. 10m. 26d. of age; 13.67 lbs. fat, equivalent to 17.09 lbs. butter; 356 lbs. milk. Owned by W. J. Bailey, Nober, Ont.

Posch Beets Maida (12566), at 2y. 6m. 13d. of age; 9.24 lbs. fat, equivalent to 11.55 lbs. butter; 249.4 lbs. milk. Owned by Dr. L. de L. Harwood, Vaudreuil, Que.

Martha DeKol 2nd (11655), at 2y. 8m. 23d. of age; 9.13 lbs. fat, equivalent to 11.41 lbs. butter; 300.3 lbs. milk. Owned by Robt. McQueen, Courland, Ont.

Lawncrest Meadow Maid (1454), at 1y. 10m. 15d. of age; 12.02 lbs. fat, equivalent to 15.02 lbs. butter; 333.7 lbs. milk. Owned by B. Mallory, Belleville, Ont.—G. W. Clemons, Secretary.



Great Cattle From One of Canada's Greatest Holstein Friesian Herds

To the left and at the top may be seen the likeness of National Queen DeKol—1st prize heifer in her class at the recent Guelph Winter Fair, and fourth in general standing. She has an official record of 2 3/8 c. mos. of 18.15 lbs. butter in 7 days; 73.19 lbs. in 30 days; 69 1/2 lbs. milk in 1 day; 8 mos. after calving she gave 15.83 lbs. butter in 7 days. She has given 14,620 lbs. milk in 10 months. A son of this cow is to be sold at the Tillsonburg sale Jan. 2nd, 1912.

To the left and below this is Lady Abbecker DeKol. She won 1st in her class at recent Guelph Dairy Test as a 3-y.-old.

To the right may be seen Beattie Texal Pieterje, a six-year-old cow having an official record for 7 days 25.44 lbs. butter, 534 lbs. milk, and for 30 days 2,227 lbs. milk and 103 lbs. butter. She is in the Record of Performance and in 11 months 30 days gave 19,651 lbs. of milk. She is to be sold at the Tillsonburg on-argument sale Tuesday, Jan. 2nd.

Dutchland Colantha Sir Abbecker, the bull which appears to the right, is the herd bull, shown here for reference, since a number of the cows to be sold at the sale are in calf to him. His dam has an official record of 29.44 lbs. butter in 7 days.

All four are from the herd of Edmund Laidlaw & Sons of Aylmer, Ont., who have consigned 53 Holsteins to the Southern Ontario Breeders' sale at Tillsonburg, Tuesday, Jan. 2nd. An extended description of this herd has been published in the last three issues of Farm and Dairy, including this number.

—All photos by editors of Farm and Dairy.

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Let us know the size of any roof you are thinking of covering and we will make you an interesting offer.

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Dairy Farmers

Of the horses you have for sale. The Dairy Farmers are mounted farmers. These farmers who read Farm and Dairy have this year enjoyed an income of \$1,000,000. Why you are not a Dairy Farmer and get your share of this they spend their horses' rate is a low flat rate of only 50¢ per inch for the same use. Have your copy in by Saturday of any week preceding date of issue.

FARM & DAIRY, "Peterboro, Ont.

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nearly 100 diseases of farm stock is told in FLEMING'S VEST POCKET VETERINARY ADVISER. Write for this indexed, illustrated 96 page book—it's free.

Tells how to cure the dreaded **LUMP JAW** in a safe, quick, easy way. The first successful cure—the one that cures the highest percentage of cases, and the worst one's, is Fleming's **Lump Jaw Cure**.

FLEMING BROS., Chemists, 83 Church St., Toronto.

AYRSHIRE NEWS

Farm and Dairy is the recognized exponent of the Dairy interests of Canada. Breeders of Ayrshires and all members of the Canadian Ayrshire Breeder's Association will find it interesting to send items of interest to Ayrshire breeder for publication in this column.

In a recent letter to Farm and Dairy, Mr. Wm. Stewart, of Onan, writes us that his stock is doing fine. Several have passed the Record of Performance, one two-year-old heifer making 5,742 lbs. of 4% milk in six months. Others are doing equally well.

TROUT RUN STOCK FARM

An Ayrshire breeder who has come to the front rapidly during the past few years as a breeder of high testing deep milking stock is Mr. Wm. Thorn, of Lynscoe, Ont., whose farm was visited recently by an editor of Farm and Dairy. Trout Run Farm comprises 130 acres, and is situated in Norfolk county, not far from Delhi.

Mr. Thorn has been breeding dairy cattle for some eighteen years, and has selected Ayrshires at the fairs and liking their appearance. Mr. Thorn purchased some Friesians that while they did not give as much milk as the Holsteins, they consumed about only one-third the feed and therefore were more economical producers. His foundation stock was purchased in part at the dispersion sale of the great herd of David Morton, of Hamilton, where three or four cows were purchased, and in part from the great Ayrshire herd of Mr. Ness, of Howick, Quebec, stock turned out well, and Mr. Thorn still has in his herd animals that trace back to these early purchases.

"My aim," said Mr. Thorn, "has been to develop a herd of animals combining both constitution with deep milking capacity and good tests." That Mr. Thorn has been successful is shown by the excellent records that have been made by a number of his animals. "This may be due in part to the fact that in summer the cream from the water is sent to the creamery, while in winter butter is made at home. Last winter nearly 2,000 lbs. of butter were made on the farm. This gives Mr. Thorn plenty of skim milk for the young stock. Among the outstanding individuals in this herd is Holbrook's No. 1, a two-year-old that finished a year's test in the Record of Performance last July with the splendid record of 12,269 lbs. of milk and 453 lbs. of butter fat, her average test being 4.2. This animal is not only a fine producer, but she shows her milk producing qualities in as such as she possesses dairy type and an excellent udder. A fine cow is Lady Cairn. This animal has produced 12,100 lbs. of milk and 322.25 lbs. of butter fat in 307 days milking, her average test being 3.55."

A Show Cow
A strikingly fine individual, in fact a cow that if shown next year, if nothing happens, will give the best show cows in the country a great race. This one promises award is a white cow, Dalbeider Aggie 2d (Imp.). Such a good judge of Ayrshires as Mr. Williamson, of the Department of Agriculture, Ottawa, believes that this cow possesses great possibilities for exhibition purposes. She has the true Ayrshire head and Ayrshire body throughout, great length, depth and fullness between the shoulders, excellent top and underline, a broad, wide and plenty of space between the hook bones, with a well sprung open rib, covered by a mellow skin. As yet she will weigh as much as some of her stable mates at the fall, but this year, up to October, she had produced 8,000 lbs. of milk in the Record of Performance, with three months to complete her test. She is a high tester, never testing less than four per cent, and sometimes as high as 4.8 per cent.

Five Two-Year-Olds
A feature of the herd is the excellent two-year-old heifers it possesses. Besides Holbrook's Flirt, there include the prize Breeds of Trout Run Farm, the second prize of the three-year-old class at Guelph, and finished her test in the Record of Performance last July with a record of 6,826 lbs. of milk. The result of her test of two-year fat had not been received from Ottawa at the time of our visit, but this two-year fat had done well is Bright Lasse, which had a record at the time of our visit of 6,511 lbs. of milk in the Record of Performance with three months of her test still to run. She had been testing 4.04 per cent. A third two-year-old is Lady G. She had given 5,651 lbs. of

milk at the time of our visit, thereby qualifying in the Record of Performance with until February in which to complete her test.

Mr. Thorn showed us a number of fine young females that were dry. These included White Heather, a two-year-old that was first at Toronto a cow and which recently won fifth place at Guelph, scoring 12,373 points and testing 4.3 per cent. This heifer is out of Wm. Stewart's great stock bull, Queen's Messenger, and is a showy, promising youngster. Another two-year-old, one of the best, is Viola of Elmrove, by McArthur's great champion bull Netherhall Milkman. This heifer shows much of her sire's characteristics, being large and possessing good constitution and dairy quality.

Among the mature cows we saw was Red Rose. She was in grand flesh, but she has since entered her at Guelph, where she was placed seventh, scoring 17,956 points. Another was White Bloss, bred by H. & J. McKee, of Norwich. White Bloss has the good record of 10,415 lbs. of milk for ten months, and was expected to give over 11,000 lbs. of milk within the year in spite of the fact that the season had been somewhat against her on account of the poor pastures.

Mr. Thorn has five cows and heifers in the Record of Performance besides those qualified last year. It is believed that all will qualify. If the cow do as well as the two year olds, Mr. Thorn's herd will rank still higher among the best Ayrshire herds in the country.

The herd bull is Holbrook's Pilot (Imp.), of Holbrook from the herd of Robert Woodburn, of Toronto, and he is a fine specimen. The true Ayrshire head and horns so much desired by breeders are well represented in this bull. Mr. Thorn believes that his breeding is such that he is going to prove a most valuable sire. As yet only two of his heifers have completed their test, but the records they have made, including that of Holbrook's Flirt, indicate that Mr. Thorn is not likely to be disappointed in this respect. Mr. Thorn has made up his mind that he will not make the mistake that so many other breeders make, and who have sold their herd bulls before discovering their merit.

Among the young stock on hand were four bull calves, including one from White Bloss, one from Lady G., one from Glandhurst Pearl, and one from Woodsee Cairn. The heifer calves were from Red Rose and a good Aggie and one from Grace Darling 2d. There was also a nice heifer from Holbrook's Flirt.

Ayrshire breeders and dairy farmers desiring good Ayrshire stock will do well to look to this herd in mind. Mr. Thorn's reputation as a breeder is so well established, he cannot afford to send out anything but good stock.

A CHAMPION AYRSHIRE HERD

The splendid dairy herd of Ayrshire cattle owned by Mr. A. S. Turner and Son, Ryckman's Corners, which was described in these columns some months ago, was found when visited by one of our editors recently to be in its usual fine condition. The leading animals in the herd were shown last fall at the Toronto and London Exhibitions and locally, and at the time of our visit they were all enjoying a rest from travel. This herd comprises some 80 head in all, of which we have 30 to describe, and no herd of Ayrshires in the world has as many award holding Canadian and world's records as this herd.

Since our visit, we found that Scotland Princess the 2nd had completed her year's record. She has made a Canadian record for a four-year-old, 13,353 lbs. of milk and 571 lbs. of butter fat.

Flora of Metcalf, a mature cow, made the excellent record of a 1,357 lbs. of milk and 568 lbs. of butter fat in 286 days. Before she, unfortunately, died of heart failure. Her death proved quite a loss to Mr. Turner, as she was only a good producer but a high tester.

Flora of Metcalf, a mature cow, has established a record of 12,932 lbs. of milk and 427.34 lbs. of butter fat, her average test being 3.59 per cent. This cow produced as much as 74 lbs. of milk daily.

The great cow, Snowflake, produced during ten months almost 15,000 lbs. of milk, and will carry a 4.42, 4.6, and 5.4 per cent of butter fat. Mr. Turner hopes to have her in shape to test in the dairy contest at the Ottawa Winter Fair.

White Bloss has established a record of 12,276 lbs. of milk and 449.4 per cent of butter fat. The final purpose of this test at the time of our visit had not been sent to Ottawa.

One of the best individuals in this

herd, Briery the 2nd of Springbank at the time of our visit last April, was only 2½ years old. She was starting her record with her first calf. She has since produced over 12,523 lbs. of milk. And at the time of our last visit was giving 30 to 35 lbs of milk a day. Some idea of her persistence as a milk cow can be had from the following figures, showing her milk production for the months indicated:

(Continued on page 2)

MISCELLANEOUS

CHESTER WHITES

Stock 8 months old, either sex. Also pigs, six to eight weeks old. Eight dollars each, express paid to any station in Old Ontario, on delivery receipt.

ALEX. A. WATT, BRUCEFIELD, ONTARIO

HILLSIDE YORKSHIRES

FOR SALE—Choice Young Boars and Sows, six to eight weeks old. Eight dollars each, express paid to any station in Old Ontario, on delivery receipt.

ALEX. A. WATT, BRUCEFIELD, ONTARIO

AYRSHIRES

Ayrshires and Yorkshires

FOR SALE—High class Ayrshire, all ages, including three bulls fit for service. Also, including all ages, three fine boars and sows six months old. Apply to

HOB. W. OWENS, ROBERT SIMTON
PROPRIETOR, SAUNDERS
Riversdale Farm, Montebello, Que.

Burnside Ayrshires

Winners in the show ring and dairy tests. Animals of both sexes. Imported or Canadian bred, for sale.

Long distance phone in house.

R. R. NESS, HOWICK, QUE.

THE SPRINGBANK HERD OF AYRSHIRES

Contains more Friesian's Champion milk and butter records than any other herd in America. A few choice bull calves from record breaking dams for sale at reasonable prices. Address

A. S. TURNER & SON,
Ryckman's Corners, Ont.
1 miles south of Hamilton.

CITY VIEW AYRSHIRES.

R. O. P. cows and two-year-old heifers for our stock list. Forcing sale. Fine lot of 1911 bull calves. Prices reasonable. Write or phone.

JAMES REGG, R. R. No. 1, St. Thomas.

Ayrshires

World's Champion herd for milk and production. Some young bulls and bull calves, all from R.O.P. cows for sale. A young bull 6 months of Tanglewyle in 'he lot. Address

WOODHISSE BROS., Tanglewyle Farm
BOTHWY, ONTARIO

AYRSHIRES FOR SALE

We are offering seven months old and one four cows. These are from well bred cows and out of our stock. All forcing sale. Price \$400.00. From-2078 gave over 10,000 lbs. of milk as a year old. Another 10,000 lbs. of milk as a year old. Tanglewyle the world's champion gave over 14,000 lbs. of milk as a mature cow. These bulls were bred to the best heifers to be had. Milk producers, and are fit to head any herd.

JOHNS HUSDON & SON, LYN. ONT.

CHOICE AYRSHIRES

Are bred at "CHERRY BANK"
A few young bull calves for sale. Write for prices.

P. D. McARTHUR, Secy of Georgetown
Newick Station on G. T. Ry. Ons.

SUNSHYNE AYRSHIRES.

Imported and home bred are of the choicest breeding of good type are had been selected for production "IMPREG" young bulls dropped this fall, bred by "Nether Hall Good-Ives-3564" (Imp.) with a few females of various age, for sale. Write or come and see.

J. W. LOGAN, Howick Station, Que
(Phone in house.) L.1

LAKESIDE AYRSHIRES

We have a number of fine young bulls of October age all bred to our imported bull, and the majority brought from dams entered or qualified for the record books. These are the best stock for the winter we are prepared to offer these at attractive price.

LAKEBIE FARM, PHILIPSBURG, QUE.
Geo. H. M. 1002
24 St. James St. Montreal

HOLSTEINS

WELCOME STOCK FARM HOLSTEINS
We have at the head of our herd King...

J. LEUZLER and C. BOLLERT
CASSEL - - - - - ONT.

HOLSTEIN BULL
One year old, good size nicely marked, pure bred...

LAKEVIEW DAIRY AND STOCK FARM
Offers two bull calves of 3 and 10 months...

FOR HOLSTEIN BULL CALVES
Bull calf, born Feb. 23 whose four near...

HOLSTEIN CATTLE
Purshed Registered
THE BULLOCKS
BORN FOR FREE ILLUSTRATED BROCHURES...

Lyndale Holsteins

Offers two young bulls born September, 1910...

Holsteins For Sale

A number of high grade calves, both sexes...

LAKEVIEW HOLSTEINS

Bull calf born March 25th, 1911, sired by...

Summer Hill Holsteins

Present offering: 15 yearling heifers in...

RIVERSIDE HOLSTEINS

Hard headed by Prince De Kol Poch; dam was...

MARKET REVIEW AND FORECAST

Toronto, Tuesday, December 26, 1911.—In every section of business except retail...

It is becoming increasingly evident that the situation in Western Canada is most serious...

WHEAT
What prices have achieved a new high record for this season's crop...

EASTERN ONTARIO Live Stock AND Poultry Show

Will be Held at Ottawa, Jan. 16 to 19 1912

Exhibits consist of HORSES DAIRY AND BEEF CATTLE SHEEP, SWINE SEEDS AND POULTRY

\$11,000,000 in Prizes PRACTICAL LECTURES

will be given on subjects relating to the various classes of Live Stock, also to Seeds, Poultry and Alfalfa

SINGLE FARE RATES ON THE RAILWAYS
For Programme of Judging and Lectures, apply to the Secretary

Peter White, Pres. D. T. Eldorlin, Secy. Pembroke Ottawa

for Ontario wheat remain unchanged, the price being 87c to 88c...

COARSE GRAINS
The most notable feature of the coarse grain market has been the drift in oats...

MILY STUFFS
Prices are steady at last week's quotations: Manitoba bran, \$25...

HAY AND STRAW
Hay is up 81 to 81.50, due to the very small quantities coming in...

HIDES
An average of prices being paid for hides at country points is about as follows...

HONEY
Wholesale quotations remain unchanged. Binned clover honey, 10c to 11c...

SEEDS
Prices being paid by dealers are as follows: Alfalfa, fancy, \$9.50 to \$10; No. 1...

POTATOES AND BEANS
Local dealers have secured a fairly good supply of potatoes and prices are not so strong...

EGGS AND POULTRY
Receipts of fresh eggs are practically nil and dealers are depending altogether on...

Dressed poultry is still dull. Wholesale quotations here are: Chickens, 12c to 14c; fowl, 7c to 10c...

DAIRY PRODUCE
Butter one cent advanced the price of creamery butter has advanced...

ABSORBINE

Will reduce inflammation, relieve pain, cure rheumatism, cure the cure...

NEVERMIFEG

The best and most effective remedy for Bot and other worms in horses.

HOLSTEINS

HOLSTEINS FOR SALE
Two bull calves, deep milking strain, also a few pure bred Tamworth pigs...

Leslie Farm Holsteins

FOR SALE—Two young bulls 18 for service, one from a 21 lb. four-year-old...

FERNDALE STOCK FARM

Clydeedale Horses and Holstein Cattle were never stronger than now...

"LES GNEAUX FARMS"

HOLSTEINS—Winners in the ring and at the paid. Gold Medal herd at Ottawa...

Best Record Bull in Canada

Lewis Prilly Rouble Hartog heads our herd, sire of a 3 A.O.C. cow...

FOUR YOUNG BULLS

Several R. O. M. Cows in Call for This Sire Will be sold at the Breeder's Consignment

Tillsburg, Jan. 2nd, 1912
A limited number of cows will be accepted for service to this great bull...

HORSES

Quotations on this market are: Heavy drafters, \$175 to \$300; medium weight, \$170 to \$220; agricultural, good, \$160 to \$220; fair, \$100 to \$150; drivers, \$120 to \$150; saddlers, \$150 to \$270; and express horses, \$160 to \$200.

LIVE STOCK

The live stock market is taking a rest during the holidays. Trade was fairly active on the opening market of last week, and a lot of good cattle were cleared up rapidly. Butcher cattle of the best quality met with a keen demand and prices on some classes went up as much as 50c a cwt. The second market of the week was small and from then on there was little doing. The prices established on the first market of the week held away on succeeding markets. An average of quotations would be about as follows: Butchers' cattle, choice, \$5.25 to \$6.75; good, \$5.00 to \$5.30; common to medium, \$4.50 to \$5.25; butchers' cows choice, \$5.25 to \$5.75; common to medium, \$3.50 to \$4.50; export cattle, choice, \$5.30 to \$5.75; medium, \$5.00 to \$5.25. Heavy feeders are quoted at \$4.75 to \$5.25, and stockers, \$3 to \$4.75; canners, \$2 to \$3.

Milk cows are in good demand at \$60 to \$90 for choice, \$70 to \$85 for com. to med., and \$45 to \$75 for springers. Calves are \$4 to \$5.50, should have shown small and sturdy strength this past week, and lambs are again above the 8c mark. Quotations are as follow: Ewes, \$3.25 to \$3.75; bucks and culs, \$3 to \$3.25; lambs, \$5.60 to \$6.75.

The market for hogs is indifferent. Hens quote \$6.10 to \$5.15 f.o.b. country points and \$6.00 on the market.

Receipts of live stock on the Montreal market last week met with a good demand. Some of the cattle were of the choice lot, and were taken up for the Christmas trade at prices ranging from \$5.50 to \$7 for the best. The offerings of common stock were much smaller than usual. Quotations are as follow: Butchers' cattle, choice, \$5.25 to \$5.35; com. to med., \$3.50 to \$5.50; butchers' cows, choice, \$5.25 to \$5.50; medium quality, \$4.50 to \$5; canners, \$1.50 to \$2.25.

Choice milk cows are \$75; com. to med., \$55 to \$60; and springers, \$30 to \$40.

Sheep are the strongest feature of the live stock trade, quotations having advanced 5c to 30c. Lambs now sell at \$3.75 to \$5.35; ewes, \$4 to \$4.25; and bucks and culs, \$3.50 to \$3.75.

HALEY BROS.' GREAT HERDS

(Continued from last issue)

Other splendid young animals in the herd of Mr. M. L. Haley of Springfield, in addition to those described in last week's issue, include Dewdrop Johanna Belle, a two-year-old that freshened when 22 months old. She is proving a good tester and is much the same type of animal as Lady Aggie, mention of which was made last week. She has the large muscle and depth that show constitution, and milk veins that run well up to her fore leg. In good hands she should develop into a valuable animal. Already she has a record of 10.40 lbs. of butter and 22 lbs. of milk in seven days. Homebred Mercedes Belle, coming two years old, is one of the nicest youngsters of the herd. She has a straight top line, nicely blended shoulder, and a large barrel for her age. She is due to freshen Jan. 6.

Homebred Aaggie De Kol was only one year and four months old when she freshened, but even at that age made a record of 10.42 lbs. of butter in seven days. She is believed to be the youngest heifer known to have an official record. Her bull calf will be sold at the Tillsonburg sale.

Homebred Stock Farm

Like his brother, Mr. M. L. Haley, of the Homebred stock farm, although he has always used a pure bred Holstein bull, only started to keep nothing but pure breeds in 1903. Since then he has gathered a herd of Holsteins that is a distinct credit to him as a breeder. The herd includes some 45 animals, among which are 48 females. Mr. Haley is a good feeder, a believer in ensilage, and aims to keep his stock in good, thrifty condition all the time.

The outstanding individual in this herd is Calamity Starlight Butter Girl, now four years old. This is the cow that in the dairy test at Guelph last year, as a three-year-old, won the championship for her breed with a score of 29.45 points, the next highest animal in the test scoring 249.88 points. In this test Calamity girl had 17.9 lbs. of milk in 7 days at 4.5 per cent butter fat. This is the best record that has ever been made by a heifer or cow

at Guelph. Shortly before going to the test she made a 7-day record at home of 23.60 lbs. of butter and was improving every day in her production as the test

finished. Mr. Haley bought this cow at an auction sale with her calf for \$150. A yearling calf out of her won first last September at Toronto and was later sold

for \$700. A bull calf out of her, sired by Grace Payne, 2nd, Sir Galatia, will be sold at the Tillsonburg sale. Calamity Starlight Butter Girl is also to be sold at the same sale.

Her half sister on the sire's side, Queen's-Butter Baroness, has a junior three-year-old record of 25.66 lbs. of butter in seven days and held the championship for her age for some time. Her average test for the week was 4.4 per cent. She won the first place in the Guelph dairy test two years ago, scoring 40 points more than her next nearest competitor. She is one of the biggest cows in the field, showing length and depth, a well sprung rib, large broad basket, fullness and depth behind the shoulder, breadth across the loins, and a broad quarter. She has a straight back and a nice, melow skin.

Artalissa, 2nd, to be sold at sale, a six-year-old, has a four-year-old record of 432 lbs. of milk and 29.15 lbs. of butter. She is another large cow just going dry at the time of our visit. She has a grand muzzle, a vigorous constitution and is one of the most promising animals of the herd.

Her only daughter in milk, Marceus Artalissa, was at Guelph in 1909, where she won a second in the class for two-year-olds, although she was the youngest in her class. During the test she gave 41 lbs. of milk per day, testing 4.6 per cent. Marceus Artalissa has just been officially tested and made nearly 21 lbs. of butter as a junior four-year-old under very unfavorable conditions. She has a two-year-old record of 15.91 lbs. of milk although not by any means fully developed she already shows an unusually strong build and possesses an exceptional udder.

Still another large animal is Queen Fayre, who she is three-year-old and has a record of 362 lbs. of milk and 17.96 lbs. of butter, her average test for the seven days being 5.31. She is a long animal, broad in the quarter, wide across the loins and a splendid handler.

Belle Aberkirk, Mecklinthe, another good three-year-old, has a 7-day record of 377 lbs. of milk and 16.90 lbs. of butter. She is a somewhat smaller cow than the others mentioned, but is proving a good breeder. Her calf won first this year as a yearling at Toronto.

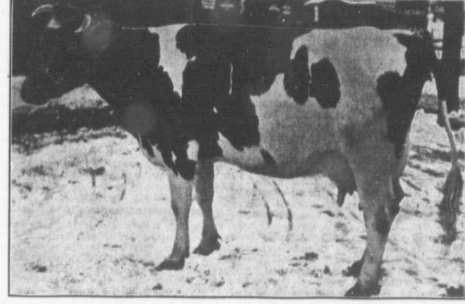
Aggie Rivercreek and is one of the females Mr. Haley will sell at the Tillsonburg sale. In the Record of Merit she has produced 329 lbs. of milk and 15.93 lbs. of butter at three years of age in seven days. She is a nice animal throughout, being a regular show type of cow. She is the dam of the grand champion and gold medal female at Toronto 1911.

The prize winners noticed include the grand champion heifer calf at Toronto, the second prize yearling heifer to be sold at the same time, and the grand champion heifer calf under six months, with which went a silver and gold medal. Among the animals Mr. Haley purposes consigning to the Tillsonburg sale is Calamity Starlight Butter Girl. This is a herd that any breeder may well feel proud of and one that has a bright future.

ENTRIES FOR EASTERN SHOW

Only a few days now remain in which to make entries for the Eastern Ontario Live Stock and Poultry Show which will be held in Ottawa January 16th to 19th, 1912. Any owner of high class stock who has looked through the premium list of this show must be convinced that to exhibit there will be a most profitable undertaking. Not only will it be profitable in immediate financial returns but, as the breeders' show such as this, the advertisement which results from winning continues to attract buyers for long into the future.

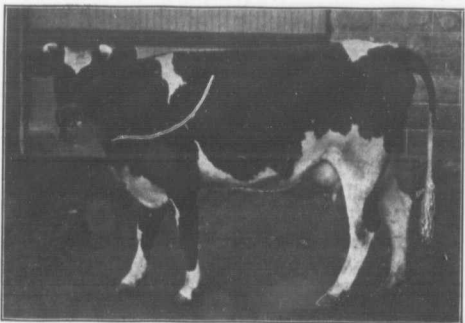
Over \$1,000 are offered in cash prizes for the leading kinds of horses, dairy and beef cattle, sheep, swine, poultry and seeds. Awards will be placed by competent and impartial judges, who will endeavor to give every exhibitor his just due. Each exhibitor will receive a full amount of his awards, even if there is no competition. Send entries before Monday, January 1st, to D. T. Eldergin, Secretary, 280 Bank St., Ottawa.



"How Much for this Cow?" She may be Yours at Your Price

Queen DeKol Posch, here shown, is one of the splendid string of Holstein cattle to be offered by M. H. Haley, Springfield, Ont., at the grand auction sale in Tillsonburg next Tuesday. Her official record is 29.06 lbs. butter in 7 days. Her average test for fat in milk is 4.16 per cent.

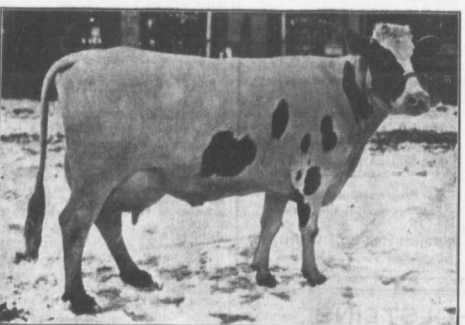
—Photo by an editor of Farm and Dairy.



A Young Holstein of Much Promise

This heifer, Aggie De Boer, has an official record of 15.9 lbs. butter and 386.1 lbs. milk in 7 days at 2 years old. She too is owned by M. H. Haley of Springfield, Ont., and is another of the choice lot he is putting in the Breeder's consignment sale at Tillsonburg Jan. 2nd.

—Photo by an editor of Farm and Dairy.



Average of Five Nearest Dams, 88 lbs. Milk a Day

This grand cow, Aggie Camella Posch, is another one owned by M. L. Haley of Springfield, Ont. Her bull calf will be in the Holstein sale at Tillsonburg Jan. 2nd. Who ever gets this calf will have a grand good herd-head of choicest breeding.

—Photo by an editor of Farm and Dairy.

