

Issued Each Week—only One Dollar a Year

VOL. XXVIII

NUMBER 45

# FARM AND DAIRY

## RURAL HOME

PETERBORO, ONT.

NOVEMBER 11,

1909

Gribbale J. H.  
C.E.F.



AYRSHIRES IN THE STABLE, ALASKA-YUKON-PACIFIC EXPOSITION, SEATTLE, WASH.

The herd exhibited by Mr. R. R. Ness, of Howick, Que., may be seen to the right of the illustration, the senior champion bull, "Bargenoch Gay Cavalier," in the centre of the passage way; herds of Messrs. R. Hunter & Sons, Marville, Ont., on the left and "Willermoor Farm," Seattle, at the far end. These cattle were a great attraction to the visitors. Note the well lighted stable, due to the cotton roofing.

DEVOTED TO  
BETTER FARMING AND  
CANADIAN COUNTRY LIFE

## Sprung Spindles

**N**EXT to bowls going out of balance, due to wear and tear, or misuse, there is no other feature that is a source of so much trouble as the bowl spindle becoming slightly sprung. While this can happen only by rough handling, or accident, it is a frequent occurrence. Even if the spindle is sprung as little as one one-thousandth of an inch, it will cause a decided vibration, or jar, in the whole machine. The only thing to do is to send such a bowl back to the factory and have the spindle straightened.

## The Self-Centering Bearings

used in the "SIMPLEX" Link-Blade Separators exclusively, overcome this trouble. The reason is, that with the **Self-Centering Bearings**, the bowls are free to run on their neutral axis, instead of being confined by bearings to try to make them run on their mechanical axis, therefore they are independent of the location of the mechanical axis, and it makes no difference, so far as the running is concerned, if the spindle is slightly sprung. Of course, this does not apply to extreme cases, but it takes care of the average case as met in practice.

## The Simplex Separator

is the only one now on the market that will always preserve its running qualities independently of the balance of the bowl, or the absolute straightness of the spindle.

Send for our New Booklet in colors  
It's Free

## D. Derbyshire & Company

Head Office and Works: BROCKVILLE, ONT.

Branches: PETERBOROUGH, ONT. MONTREAL and QUEBEC, P. Q.

WE WANT AGENTS IN EVERY DISTRICT

## A BT Litter Carrier and BT Feed Carrier

should be in your stable—

1st Because they will save you more hard and disagreeable work than any other machine you can invest your money in.

2nd Because they are the best machines made for handling Litter and Feed.

Let us tell you what they will do and why they are better. We also build Cow Stanchions, Steel Stalls, Hay Carriers, Forks and Slings.

**BEATTY BROS., FERGUS ONT.**

BT stands for Best

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

## Cows and Cash

Is it not time that all dairy farmers in Canada came to think seriously of what might easily be accomplished by a little, a very little extra effort? Very few would pass by the opportunity of picking up five or six five dollar bills the conditions were not difficult. There is a huge sum of money waiting for owners of dairy cows.

Not only in present cash value assured for the application of a little brain power, but a solid and permanent improvement of dairy conditions, a distinct raising of the whole status of dairy farming, a measurable gain in contentment and self-respect, a notable and enviable addition to our reputation among the nations of the world as high-class dairymen would quickly result.

Unfortunately we have to go on record even in these days of wide spread and easily available dairy knowledge as owning lots of cows that produce only 2,800 or 2,500 lbs. of milk during their best six or seven months. Such cows are no credit to their owners and such owners rarely do credit to the dignified title of dairymen. As Canadians we should jealously guard against such a condition of affairs being possible. It is easy to detect those poor cows by recording weights of milk, and it is injurious to any district to retain such wretched specimens, mongrels not real dairy cows. The queen of the dairy, the select cow will do infinitely better if handled right by men who put dairy intelligence into daily operation.

To return to that pile of cash; if only half the cows in Ontario were made to yield just ten dollars more milk, it means an extra Five Millions of dollars within easy reach.—C.F.W.

## Split-Log Drag in British Columbia

Editor, Farm and Dairy:—I note with pleasure the communication from D. James, York Co., Ont., (Aug 26th last), referring to the work done by the split-log drag or King road drag. I would like Mr. James, or some other party familiar with the work done by Mr. Rittenhouse in Lincoln Co. to favour your readers with particulars of work and results accomplished.

I like the suggestion that the Provincial Government make a grant for the encouragement, by means of competition of the use of the split-log drag. From what I have heard and read, as well as from personal use there is no other means by which an earth road can be so cheaply and effectually maintained as by the systematic use of the King road drag.

Being path master in my district for the past season I have endeavored to have it used along the lines suggested by Mr. James. I have rebated taxes to four parties who have undertaken and are using the drag, but it is uphill work to get people to adopt and put into practice this simple and cheap method of maintaining earth roads.—N. F. Page, New Westminster Co., British Columbia.

## The Canadian Navy

Editor, Farm and Dairy:—The proposal of the Canadian Government to spend \$20,000,000 on the establishment of a navy is a very important issue at the present time and should be very carefully considered. I am not in favor of the proposed expenditures as I fail to see the advantages of such a course. Money would accomplish much more good, were it used in holding peace conferences between nations.

At the rate the warship craze is going, our few boats would be of very little value. Canada is a peculiar country with a peculiar people, why

not let it stand out boldly for peace? Why hold conferences and then turn around and build boats to kill the other fellows? Besides the expense in maintaining a fleet and the notion on it could be used more advantageously in running many and varied industries.

The will of the people should be ascertained on such an important question before action is taken.—C. H. Shuh, Waterloo Co., Ont.

## Strongly Opposed to Navy

Editor, Farm and Dairy:—One of the first of its kind, and I believe one of the worst pieces of legislation that has ever been brought forward by our Canadian Government, is to be brought forward next session, and no doubt neither party will oppose it. But why? Because they would be called disloyal and for this reason we are to be treated as a nation that no one can estimate. But, be that as it may, it is not the worst feature—not by far. War is never thought of in Canada and the idea of turning the attention of an industrious people to even think of such, may have a far reaching and very bad effect on the nation that is making the greatest progress of any nation at the present time, and that without a navy.

Human nature is about the same, whether taken in a nation or in an individual. How would a farmer succeed who was spending more money on guns and ammunition than on farm implements? and then he and his sons are spending their time training how to use those guns and boasting that the lion and cubs are going to keep the supremacy? Would his method of war peace or would the lion and cubs not get into serious trouble some day when not expecting it? Lambton County is represented by two of the ablest men in Parliament one on each side of the House. Let us get after them on this question.—D. N. Anderson, Lambton Co., Ont.

## Farmers' Institutes

The dates for a portion of the regular series of Farmers' Institute meetings in Ontario have been announced. These meetings are worthy of the support of all interested in agriculture. Not only do those who attend get information of value from the speakers bearing directly upon their farming operations, but they are also afforded an opportunity of discussing local conditions with their fellow farmers. In every locality there are one or more farmers who are producing grain, fruit, roots, stock, etc., at greater profit than the average farmer. A discussion of methods and practices on the part of farmers in a community is disseminating beneficial ideas. Indeed, the discussion at regular institute meetings or at meetings of farmers' clubs have proved to be most valuable in disseminating information that means dollars and cents to those taking part.

Superintendent Putnam reports the regular institute work during the past year as having been most encouraging. Attendance has been larger and a larger number of young men are taking an active interest in the work.

Members of the institutes in each locality should make it their business to invite their friends and neighbors to the meetings and assist the officers wherever possible. Such class as do not manifest a keen interest in the institute work during the coming season will be presented to give assurance by the presentation of a petition means that a meeting will be supported before lecturers will be sent in succeeding years. Some points where the people did not show appreciation of the work last year have been struck from the list.

Issued  
Each W

Vol. XX

THE

A Heart-to-He

DENMARK

dairying  
of Canada  
ment. They  
the yield of  
they done it  
selecting and  
production.

There are co-  
nels. Her ex-  
oper and the ad-  
her methods by  
practice was t

The phenome-  
nion would be  
regard to has  
it advisable for  
range and de-  
Commission to  
regard to this  
dairy industry  
tance. Since it  
success of the  
upon the milk  
age dairy cow,  
man who knows  
have doubted th  
dairy cows is of  
extracts from  
subject given a  
Dairy Show, he  
Mr. Helmer Ra-  
ment, Dairy Dis-  
ment of Agricult

Is it possible  
average product  
believe you will  
can be done. I  
titled to this op-  
been through di-  
and that is what  
I want to get be  
Denmark just a  
rate to you what  
people go to the  
In 1848-49-50  
sad war. It last  
true they were v  
and a lot of mon  
and Denmark los  
lot of the best m  
a great deal of m  
a big national de  
from \$600 to \$1  
from one to five

AGRICULTURE  
Denmark has a  
ture; there are no  
shipping to amo  
so the only resour  
national debt had  
agriculturists. De

Issued  
Each Week

# FARM AND DAIRY

&

## RURAL HOME

Only \$1.50  
a Year

Vol. XXVIII.

FOR WEEK ENDING NOVEMBER 11, 1909.

No. 45.

### THE POSSIBILITIES OF DOUBLING THE AVERAGE YIELD OF MILK PRODUCTION

**A Heart-to-Heart Talk with Cow Owners on How the Danes have Doubled the Average Production of Their Cows—The Lessons Applied to Home Conditions**

DENMARK can teach us much in regard to dairying. Her farmers are far in advance of Canadians in the matter of cow management. They have in a period of 23 years doubled the yield of the average Danish cow. How have they done it? Simply by systematic effort in selecting and breeding those cows only of high production.

There are many things in which Denmark excels. Her co-operative organizations are the wonder and the admiration of other countries. Indeed her methods are being adopted and put into practice by thinking agriculturists everywhere. The phenomenal success of this little kingdom in regard to her pork production was such as made range and despatch, at considerable expense a Commission to study her methods in regard to this great industry. The dairy industry is of greater importance. Since in the last analysis the success of the dairy industry rests upon the milk production of the average dairy cow, some comment by a man who knows, upon how the Danes have doubled the production of their dairy cows is of especial interest. Some extracts from an address, upon this subject given at the recent National Dairy Show, held at Milwaukee, by Mr. Helmer Rabild, Assistant Dairyman, Dairy Division, U. S. Department of Agriculture, follow:

Is it possible for us to double the average production of our cows? I believe you will agree with me that it can be done. I feel that I am entitled to this opinion because I have been through dairying in Denmark and that is what they have done there. I want to get back in the history of Denmark just a few years to illustrate to you what can be done when people go to the work systematically.

In 1848-49-50 Denmark went through a very sad war. It lasted three years and while it is true they were victorious, it cost a lot of blood and a lot of money. In 1864 another war occurred and Denmark lost that war. She lost besides, a lot of the best men in the country. This war cost a great deal of money and it left the country with a big national debt. Land in Denmark is worth from \$500 to \$1,000 an acre. Taxes went up from one to five dollars an acre a year.

AGRICULTURE HER ONE RESOURCE  
Denmark has no other resources than agriculture; there are no forests, no mines of any kind, no shipping to amount to anything in those days, so the only resource was agriculture. This great national debt had to be paid by taxation of the agriculturists. Denmark had previously been en-

gaged in the beef industry; the farmers had grown corn, fed it to the beef cattle and shipped their cattle to England at a fair profit; but there came a day when the English dairyman thought he must raise his own beef and keep the money in his own country, so Parliament passed laws restricting the importation of Denmark beef. They passed laws guaranteeing beef for two to three weeks to two months, so that stopped the profit in the beef business. The Danish farmer stood without a resource. Now, it is necessary to have money to live, so a great many of the Danish farmers went bankrupt and a number came to this country to try and make new homes for their families, but when it looked the darkest help was the nearest.

I always thought it was the Danish government



**A Cow that looks to be a Heavy Milk Producer**  
Dixie de Annandale (8 yrs. old) owned by Ed. Purtselle, Prince Edward Co., Ont., as illustrated, possesses the indications of "a milker." Note her quality and the exceptional development of her milk veins.

that was responsible for helping the Danish farmers, and it was only when I went to Denmark two years ago that I learned my mistake. It was the farmer who saved himself, and it can be truly said that the Danish farmer saved the Danish nation. In those days, interest on money in Denmark was three and a half per cent. more than in London, in 1875 to 1877. They paid something like ten and a half per cent. on loans. No wonder the farmers could not pay expenses. In different communities throughout Denmark the farmers sized up the situation and said to themselves, "We will have to go into dairying. If the Englishman will not take our beef he will take our butter. We have a good reputation for our butter in England." But they had a large number of beef cows; they had been raising beef for years. Now then, what would they do? Some of them tried

to go out and buy dairy cows. They imported some dairy cattle from northern countries but the conditions and environment in Denmark were different than they were in those countries and the cows died out. They finally saw they could not rely on imported cattle for their dairying stock, they simply had to change their beef breed into a dairy breed, change the beef cows into dairy cows.

In those days, 23 years ago, the average production of butter per cow in Denmark was 119 lbs. a year. Now it is 224 lbs. Have they not changed the beef cows to dairy cows? They have doubled their production in the course of 23 years. Not only did they double the production of their cows, but, as I told you before, Denmark was then almost bankrupt, while to-day it is the second nation in the world in wealth, and dairying has done that. But they have not gone at it in a haphazard way, they do not do dairying as it is done here. They go at it systematically and we all realize that we have to go at our business systematically to get the most out of it.

#### NET PROFIT THAT COUNTS

There are three things we have to know about the dairy business. First, how much milk do our cows give, not in a day or a month, but in a year, because we have to feed them a year; second, we have to know how much butterfat there is in that milk, not in a day or a month, but in a year, because we have to feed them a year; and then last but not least, we have to know how much feed those cows eat, how much it will cost to keep them a year. I believe if there is one point where American dairymen have made a mistake, it is in that one fact that they do not keep an account of the cost of feed. We hear a great deal about the enormous yield a certain cow will make in a year, enormous yields of butter and enormous yields of milk. I am not casting any reflections on those records, but it is very seldom we hear what it costs to produce those yields. I want to tell you the American farmer is in the business to make his living, to make some money. If the net profit does not count, what in the world is he in the business for? I believe we want a breed of cows that will give us a large amount of net profit, not necessarily an enormous yield, but an economical yield.

#### MUST HAVE CAPACITY

Let me tell you where we may drift if we do not think of this. I was over in Maine two months ago where the farmers have what we call a "Maine Jersey." I wanted to know something about the Maine Jersey, so I asked the butter-maker at the creamery to show me a Maine Jersey, and I found that she looks more like a race horse than a dairy cow. The Maine Jersey has been kept on concentrated feed for a number of years, until she has lost her capacity. The farmers down there will feed as high as four to six

pounds of digestible protein a day to their cows. Roughage is scarce and they have fed her concentrated feed in an effort to make a great yield. Now they have a cow without capacity for taking the roughage off their farms and turning it into profit for them. That is where we may drift if we do not consider this matter of economical production. We have to have a cow that will take our feed, our roughage and some grain, and turn it into the most profit for us. That is what the average farmer wants and I believe the fault lies with the individual more than it lies with the breed. We have got to find those individuals and the only way to find them is to find how much milk they will give in a year, how much butterfat, and how much feed they eat in a year. We have to find what they do with the feed they eat.

We will find when we do that, that there are three kinds of cows. There is one kind of cow that will take a certain quantity of feed, digest and assimilate it and from inherent tendency in her nature she turns that food into choice cuts of meat on her back, and if she does that she is a beef cow and we must make beef of her as soon as possible. Another cow will take that feed and turn it into milk in the milk pail, and if she does that she is a dairy cow, and that is the kind of a cow we want to tie to, I do not care whether she is a Jersey, Ayrshire, Guernsey, or anything else. Then we have a third class of cows, that take that same quantity of feed, digest and assimilate it, and the Lord only knows what becomes of it. That is the kind of a cow we want to get rid of.

#### STICK TO A SYSTEM

We cannot rely on buying our dairy cows. If we do, we will never get any further ahead. Then again, if a man relies on buying his dairy cows he has to pay a bigger price than the average farmer is willing to pay. We have to raise our dairy cows ourselves. The average farmer will bear me out in that, he has to raise the cows himself and he can do it if he will adopt a system and stick to it, as they have done in Denmark.

Let me show you what one man did in the little country of Sweden. His name was August Kink. I visited his herd a year and a half ago. I had heard of his record and wanted to assure myself that it was correct. He joined a cow testing association in 1900; he had then 70 cows. Each cow gave him a production of 7,320 lbs. of milk in a year. That is a mighty good average; you would not think he could increase it much, yet in the course of six years he had increased that production from 7,320 lbs. to 11,330 lbs. How did he do it? He had 70 cows the first year and he found out that those 70 cows 28 were good, economical producers,—just the kind of cows he needed. They would take the roughage from his farm, with a certain quantity of grain and turn that into the most profit for him, and those were the sort of cows he wanted. He kept those 28 cows, kept their heifer calves. The next year he had 46 cows, the next year 51, then 61, the year following 64 and now he has 75 cows again and they each bring 4,016 lbs. of milk more in a year.

#### FIGURING BY FEED UNITS

They have a system over there for figuring the feed that in some respects is different from ours. They have what they call "feed unit." They figure the feed regardless of the price. For instance, (I may not have these figures exactly right, but they show the principle of figuring the feed), 1 lb. of corn and oats is one feed unit; 1 lb. cottonseed meal is 1.7 feed unit; 5½ lbs. clover hay is one feed unit; 10 lbs. beets is one feed unit, etc., regardless of the price. They have the feed reduced to feed units. A certain quantity of feed produced this man 302 lbs. of milk; now, the same quantity of feed produces him 372 lbs. of milk. The first year, 100 feed units gave him 10.1 lbs. of butter; now the same quantity of feed gives him 13.2 lbs. of butter. Now, he did not try to make his \$40 cow produce \$75 or \$80 worth

of milk, but he simply picked out the cows in his herd that were good animals, raised the heifer calves from those cows, and in that way built up a herd. That does not seem so very difficult for us to do. It is not, it is only a matter of getting started.

What I have told you about this is nothing new; we have known it for years, we have known it ever since we got the Babcock test, have known it for 17 or 18 years. It has been taught from institute platforms, from dairy schools and colleges; we have been trying to educate the dairy farmers to do this, but they do not do it. I have had some experience along this line myself and I confess, too. A few



Bee Keeping in Quebec—Apiary of Mr. Theodoric Cloutier, L'Islet Co., P.Q.

Mr. Auguste Farford, the Farm and Dairy correspondent for L'Islet county, writes of this apiary as follows: "Visitors are numerous and very welcome. The small house in the background is where the honey is extracted, and where visitors are compelled to eat some honey due to Mr. Cloutier's generosity." Those appearing in the illustration are Mr. and Mrs. Cloutier; the two young men in the centre are visitors.

years ago I was in charge of a large dairy in Denmark. A dairy of 800 cows was owned by a nobleman who lived in the city during the winter. The management of the farm was left entirely to me. I came directly from a farm where there was a membership in a cow testing association and I was interested in putting in operation on that farm a system whereby we might be able to weed out the poorer cows, those star boarders, as Mr. Lillie says, and you know a star boarder is one that never misses a meal and never pays a cent. I was interested in weeding out those poor cows, in raising the average production per cow in this herd and I told the owner about it. I outlined a system of weighing the feed, weighing the milk, testing the milk, etc., for each cow. He listened and said: "It is a splendid idea, go ahead." Then he went up to the city to live during the winter.

#### INCREASED 100 PER CENT.

Well, when a man looks after 800 dairy cows, he has his hands pretty full and I was trying to get this work reduced to a system so I could take care of them, trying to teach the men how to do this, and do that, and it entailed a good deal of work, so I had just about forgotten about the new system I had explained to the owner trying to help him weed out the poor cows and raise the average production of the herd. I had almost forgotten about it because I had gotten into a rut, until I received a letter from the gentleman, asking me how the work was coming on, then I got ashamed of myself, went to work and tested those cows and when he came in the spring I had a record for a few months, and from those records we picked out 35 cows that we could see even then were not going to pay for their board. I visited him this last year in Denmark and he told me, as a result of this work I had started, that he now received 100 per cent. more profit

than he did the first year that I came there. I might say that on my own home farm the average production was increased 60 per cent. as a result of the cow testing work over there.

My father was a dairyman, had 80 cows, and he used to take us boys out to the stables on the rainy days and show us the cows and he would try to teach us lessons about those different cows. He would say, "This is a good cow. Don't you see her horns crooked just so, her tail reaches down below the hock joints. She has all the signs." We got so we thought we could pick out a good cow by her looks, but when he joined a cow testing association he found looks did not count for anything; we could not tell by the

comes. The two or three if weak cows to winter to cluster they will... There at you have, he can show you first ring your heavy oil

If feeding as follows: pails will a ary table must be ra pencil or an syrup is ma of wh a wash-boil the first few the top of t plenty of oil and the beo of it down. low, then t you have a hot, thick or three or fou used for fill or four feet. A busy fa this uncerta unless these and wintered cellar, espec iver. So th comb to free little honey cookstove, if stove in his Belated be been plac filled com holes throug warmly wit be substituted the frames in storing of be a subsequent

#### Diseases

Dr. H. G.

This is another resulting from chronic laminitis is entirely different inflammation of in the hoof.

Long hard dirt joint, allowing long, are some which are not occasionally give suffer more spess of the feet

The first sym mal may gi next day. Oft quite stiff and found to make he will be alme stand for an ho stiffened up ag begin to contrac to be cause result of it. Th standing and w will drag the be

#### How to Get Bees in Shape for Winter

R. F. Whiteside, Victoria Co., Ont.

The first of November sometimes finds bees like their unfortunate owners in a sad plight for winter. With bees, however, not unlike other things, attention is better late than never. If one has plenty of time to attend to them, bees can be doubled up if fed in numbers, or fed if light in stores. One plan of doubling is to get them clustered during the first warm spell that



combs. Then on a cool evening a week or so later, two or three of these can be placed in one hive. If weak colonies have no heavy combs sufficient to winter them, say 15 or 20 pounds on which to cluster the case is still worse. In such a case they will require to be fed.

There are three or four plans for feeding. If you have heavy combs saved from your other hives, you can shake the bees off their own combs, having first replaced these combs with two or three heavy ones.

#### METHODS OF FEEDING

If feeding needs to be resorted to, one plan is as follows: invert ten-pound honey pails (lard pails will answer) over shallow tin plates, ordinary table plates will do—the pails after filling must be raised one quarter of an inch on a lead pencil or small stick to let the syrup out. The thick syrup is made by pouring two and one third pails of water into one pail of boiling water in a wash-boiler, stirring it well, of course, during the first few minutes. Then place the feeder on top of the frames while hot and cover up with plenty of old quilts and blankets to keep all warm and the bees comfortable. If the weather is warm and the bees lively, they may take some or all of it down. Should they fail to take it down below, then take as heavily honey filled combs as you have and fill up the empty cells with the hot, thick syrup. An ordinary tomato can with three or four small holes in the bottom may be used for filling; hold it when filling cells three or four feet above the comb.

A busy farmer bee-keeper has no time for all this uncertain fuss that usually ends in failure unless these stocks are looked after early in April and wintered in a warm, well ventilated dark cellar, especially if the winter proves to be severe. So the short cut is to shake them off the comb to freeze and starve and extract out what little honey they have near the warm kitchen cookstove, if one has not or cannot afford an old stove in his bee house.

Belated bees are sometimes fed after having been placed in the cellar. To do this lay heavy filled combs on top of the frames. Make a few holes through these combs, and cover up the hive warmly with a blanket. A slab of candy can be substituted for the combs, it being placed over the frames in the same way. The feeding and storing of bees for winter will be dealt with in a subsequent article.

### Diseases of Horses Feet—Navicular Disease

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

This is another disease of the foot. The lameness resulting from it, is not unlike that produced by chronic laminitis although the seat of the disease is entirely different. Navicular disease is an inflammation of the navicular joint which is situated in the hoof.

Long hard driving on hard roads, a sprain of the joint, allowing the toe of the foot to grow very long, are some of the ordinary causes. Horses which are not regularly exercised, but which are occasionally given long drives, are very prone to suffer more especially if there is any natural weakness of the feet.

#### SYMPTOMS

The first symptom noticed is lameness. The animal may go lame one day and go all right the next day. Often the horse will leave the stable quite stiff and lame but a little exercise will be found to make him go much better. Sometimes he will be almost all right but when allowed to stand for an hour or two, he will be found to have stiffened up again. As time advances the hoof will begin to contract, this condition is often thought to be the cause of the disease but it is only the result of it. The horse will point his feet while standing and when being backed out of the stall will drag the bedding back with his feet.

To be effectual, treatment must be resorted to in the early stages of the disease, otherwise, a change will take place in the affected joint which no treatment can restore to its normal condition.

The shoes should be moved so that the frog will touch the ground and bear its share of the weight hours during the day and in a poultice at night. In about two weeks the hair should be clipped off the coronet and a blister applied around the top of the hoof. This treatment if adopted in time will generally affect a cure but if not taken in the early stage will be of little use. Where the disease has become chronic, it is always well to have the animal shod with the heel calks of the shoe longer than the toe so as to raise the foot at the heel. If the animal be kept in the stable his feet should be kept moist and soft by the application of water either in the form of a foot bath in a tub or by soaking boots. If the horny tissue of the hoof is allowed to become dry and hard the lameness will be very much aggravated.

Like all other troubles incident to farm stock, lameness is usually the result of carelessness. The man who looks properly after the feet of his horses is not likely to have a serious case of lameness on his hands more especially if his horses naturally have good strong feet.

### Mixed Grains Best for Hogs

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

In our experiments in hog feeding I have tried about every mixture that I ever heard of, or could prepare myself, and I will say that we have got the very best results from the simplest rations, with this modification, that we very seldom find one single grain or even two mixed that will do as well as a mixture of several kinds of meal. Where one has some barley he wants to feed his pigs, he had better sell off a few bushels of the barley and buy a few other things and mix with it, and the same applies to other grains or feeds. We find that a mixture always does very much better than one grain, and a mixture of three or four grains will do better than one or two.

These three, oats, peas and barley fed in about

### Corn and Root Land Cultivation

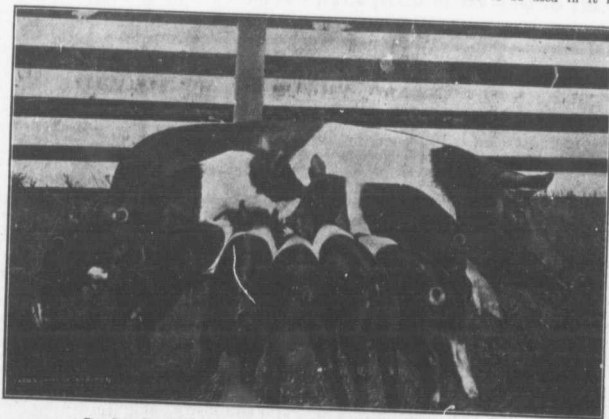
H. N. Carvan, Wellington Co., Ont.

The season of fall plowing being now well upon us I wish to give the readers of Farm and Dairy my experience in the matter of surface cultivation as against plowing root and corn ground. I was much interested in the discussion, upon this subject in Farm and Dairy a year ago, which was provoked by the article by Mr. Fister of Macdonald College, Que., in which he advocated that all land be plowed and that deeply. I had intended giving you my views then but put the matter off until it was too late.

I cannot agree with anyone who advocates deep plowing at any time. Such practice might have been all right at one time but that day is long since past. Five inches is my limit for plowing. Corn ground that is reasonably clean I would not have plowed if one would do it for nothing. After cultivating it all summer it would be worse than folly to put that fine soil, that has been worked up on top, down where the young plants could not immediately avail themselves of it. Beside we need that same fine soil on top to prevent evaporation of water. Then there is the weed problem to consider. After having destroyed all weed seeds in the surface layer, why plow up more to germinate and stifle the crops next year? We will have plenty, you may be sure, without fostering them in this way.

It has been my experience that corn and root land not plowed, but surface worked entirely, gave as good, and frequently better yields, than strips alongside of it that were plowed after the usual condition. And, again, that land not plowed, after it had grown a crop of barley was much more readily plowed the next fall for wheat, this latter being especially true if the land was dry at the time of plowing.

Maple Industry.—If a stone arch is to be used in maple syrup making, it should be made in November at the latest. If made in October it would be better, especially if it is to be finished with cement. The wood to be used in it next



First Prize Hampshire Sow Caring for Her Family at the Western Fair, London, Ont.

The Hampshire is a new-comer among the breeds of swine in Canada. This breed has been represented at our larger fairs only during the last few years. The pigs illustrated are from the herd owned by A. O. Neil & Son, Birr, Ont.

equal proportions will give good results, and if you have no roots an addition of a little bit of oil cake meal will largely take their place. If you have no roots of any kind or potatoes, then add to 100 pounds of each of these others 50 pounds of oil cake meal, making a mixture on which your pigs will thrive.

spring should be put under a roof now or better still, should have been done a month ago. If any buckets leak, the holes can be stopped with putty and white lead, mixed half and half. It is an advantage also, to brush over doubtful seams and rusty spots with white lead and oil.—R. F. Whiteside, Victoria Co. Ont.

## TO EARN THAT BIG SALARY, LEARN RAILROADING.

GET OUT YOUR LEAD PENCIL AND DO  
A LITTLE FIGURING.

Whatever your present monthly salary may be, multiply it by 12, and find your yearly income. Will it amount to \$1,609.80, the salary shown above? Do you earn one-half that amount? If not, why not?

### FIRMEN AND BRAKEMEN

Earn from \$75 to  
\$150 per month.

With the rapid progress of railway building in Canada it takes only from two to three years to be advanced to engineer or conductor, whose salaries are from \$90 to \$185 per month.

You can  
earn that money.  
We can start you for it.

We teach and qualify you by mail in from 8 to 14 weeks without loss of time from your present work. Positions are secured; in fact, there are many openings right now if you were qualified to fill them. Our Course is the most complete treatise on the subject of Railroading in existence. We defy any school to show a course anywhere nearly as thorough. Don't tamper with your education by buying cheap bargain courses. Ours is the only School of its kind in Canada with text-books written for use on Canadian Railways. Our free booklet tells all about our system of teaching. When writing, state age, weight and height. Address:

THE DOMINION RAILWAY SCHOOL,  
Dept. R  
Winnipeg, Canada.

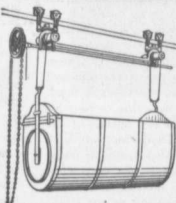


## SAVE TIME WITH BEATH FEED AND LITTER CARRIER

This is money—and the BEATH FEED AND LITTER CARRIER will earn big dividends in the time it will save you. No other simple in construction, so sure and easy in operation. None so well made or so durable. Catalogue explains its superiority in detail. Send for a copy and get posted on this great labor-saving device.

Agents Wanted for Unrepresented Districts

**W. D. BEATH & SON, LTD., TORONTO, ONT.**



## ARE YOU HAVING A SALE?

ADVERTISE IT IN OUR SPECIAL BREEDERS' NUMBER

Breeders who are planning to hold a Sale of Live Stock, should see that it is well advertised in the special Breeders' Number of Farm & Dairy, which will be published Dec. 2nd. This issue will be of special interest to live stock men, and will reach a large number of breeders who are not regular readers of Farm and Dairy.

Copy should be here by Nov. 25th. Advertising Rates on Application. Write to Advertising Department, FARM AND DAIRY, Peterboro, Ont.

## DO YOU KEEP PIGS? IF SO, COULD YOU KEEP ONE MORE?

Would you like to earn one FREE, a pure bred? Send us only 7 new yearly subscribers to "Farm and Dairy" at \$1.00 each, and we will send you a pure bred pig, any breed you desire, with pedigree for registration.

Write Circulation Department

**FARM AND DAIRY**  
PETERBORO - ONT.

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

## How to Whitewash Stables

In these days of increased vigilance on the part of local sanitary authorities, the dairy farmer finds that more and more time and labor has to be expended in complying with their demands. The farmer, who is relatively least affected by these demands is the one who is in a position to carry them out expeditiously.

The operation that receives most attention at the hands of the inspector is whitewashing. Even in outlying districts it is now generally insisted on twice a year, while in some model cowhouses it is done weekly. Not only is the appearance of an interior vastly improved by a coating of lime-wash, but the lime is destructive to organisms and parasites.

The method of applying with a brush is tedious, and would cost, for brushing down and covering with one coat, about five cents a square yard.

With a machine, it is possible to cover quite 10 times the area covered by hand in a given time. If stop-

ping attention has been paid to the sides and ends as well as from above.

In the north-east corner on the ground floor a room 61 feet by 54 feet has been partitioned off for the dairy cattle. The equipment of the dairy stable should be studied by all who are interested in stock construction. There are concrete floors, mangers and gutters, iron piping partitions between the cows and patent stanchions, litter and feed carriers and an approved system of ventilation. The balance of the ground floor, except the space occupied by the judging ring, is given over to the stalls for the horses. There are three rows of 36 stalls each and in the old building where the dairy cattle stable formerly was there are 40 stalls.

Surrounding the judging ring will be a promenade seven feet in width and extending from the second floor will be seating for about 1,000 people. On the second floor of the new build-



The New Addition to the Winter Fair Building, Guelph, Ont.

The Guelph Winter Fair, with its enlarged and improved accommodation and with a horse department added to the exhibit, will prove to be more popular than ever. It will repay a visit on the part of those who attend.

pages do not occur, and the operators are used to the machine, even jots may be accomplished.

Time is lost by the spraying-jet, getting obstructed, but the frequency of this happening will be lessened by attention to the following points:—(1) Choose a machine fitted with a nozzle that can be easily cleared. (2) Slake the lime carefully, and pass it through the strainer provided with most machines. (3) Use only fresh lime. Lime that has been exposed to the atmosphere for some time contains lumps of calcium carbonate, or chalk. Aid in making by crushing the lime. The liquid used must be of a creamy consistency, about two lbs. of lime to a gallon being normally required. The addition of a little blue will make the wash purer white, and whitening added at the rate of one lb. a gallon will improve the consistency.

## The New Winter Fair Building

The new building at Guelph for the Ontario Provincial Winter Fair, as will be seen by the accompanying illustration, is of imposing appearance with its massive walls and towers. It occupies a part of what was formerly the old open market square immediately adjoining the old building and a few feet to the east of the City Hall.

The building is 260 feet in length by 113 feet in width and is two stories in height except for a space 170 feet by 43 feet next to the old building which will be used as a judging ring for horses and beef cattle and which will be without a second floor so that the immense sky-lights will be effective in lighting the ground floor of the central parts of both new and old buildings. The walls are of cut limestone placed upon a solid foundation of concrete. It will be noted that

ing the poultry department will have 12,000 square feet of space. Large and numerous openings have been provided between the new and old buildings so that they practically become one.

## Dairy Meeting at Lindsay

The Lindsay district dairy meeting held on Thursday last, not unlike the meeting held at Peterborough on Friday previous, lacked only in attendance. A very strong program had been arranged. The speakers were Geo. H. Barr, Chief of the Dairy Division, Ottawa, J. F. Singleton, Creamery Instructor, Henry Glendinning, Instructor Cameron of the Lindsay group and W. Newman of Lorneville. Others who addressed the meeting were C. A. Gillespie, Peterborough, Wm. Wright, Dunsford, and Wm. Thurston of Bobcaygeon. Mr. T. Robertson of Dunsford occupied the chair. Mr. Henry Glendinning was re-elected to represent the district on the directorate of the Eastern Ontario Dairymen's Association.

### LESS WORK AND BETTER MILK

Mr. Barr gave his celebrated lecture on "The Care of Milk for Cheese Factories," illustrated by lantern slides. A noteworthy feature of Mr. Barr's advice re care of milk, and one which should apply to all farmers, is that he tells them to do less work. Mr. Barr, having been brought up on a farm, knows that the farmer has little time to waste and that the less work one can expend on the raising of milk and have it right, the better. The method he advocates has been proved by actual practice to require very little work or trouble and where it is followed, the milk will be delivered in the very best condition. The method advocated as many

(Continued on page 12)

Editor, of a Cl  
of the N  
interest.  
emphases  
horses not  
so for the  
districts  
are looked  
dray purp  
over, who  
working su  
of going  
For five  
team of 1  
that weigh  
working co  
with pleas  
time used  
In addition  
horses show  
larly quan  
24,7 troubl  
which I bel  
I gave part  
ing, to alo  
ness of bon  
Good, he  
able kind t  
luck favori  
colt each ye  
as well the  
they can be  
a ready pri  
made a mo  
farm.—W. I

## The Na

The largest  
hibit ever  
industry was  
held recent  
than 800 da  
tion. A rec  
dairy suppl  
ances, an ex  
Division of  
ment of Agr  
ing, contain  
of various da  
tional charac  
the exhibition  
The attend  
for the 10 d  
show was ho  
built of steel  
cost of \$500  
were stalled  
owing to lack  
satisfactory li  
to advantage.  
were well rep  
pecially milk  
Eleven differ  
of by 44 her  
steins in add  
sionally ment  
ment, but th  
tives of the  
and Dutch Be  
Outstanding  
features of t  
graphic exhibit  
of the Dairy  
States Depart  
Another was t  
in the basem  
rations and m  
ing associations  
were held dai  
ment of Agric

## Devise For

M

Editor, M  
discussing the  
Laurence-Kenn  
with a success  
Paul. I secured  
be of value to  
who have invest  
He said that af  
outfit he was  
milk being suck  
this making h  
senseless. The  
hine on the wa  
was constantly  
where the m

**Heavy Horses Most Profitable**

Editor, Farm and Dairy.—The photo of a Clydesdale mare that appeared on the front cover of Farm and Dairy, Nov. 4th, was of particular interest. The mare illustrated exemplifies the proper type of heavy horses not only for city work but also for the average farm. In too many districts, horses of such proportions are looked upon as being suited for dray purposes only. Any farmer, however, who has had the privilege of working such animals will never think of going back to the lighter class.

For five years, I have worked a team of imported Clydesdale mares that weigh over 1,700 lbs. when in working condition. They are gifted with plenty of ambition and do their work with ease, work for which I at one time valued three horses.

In addition to possessing quality, farm horses should possess quantity, particularly quality of bone. I never have a trouble with my horses' legs, which I believe is due to the fact that I gave particular attention when buying, to slope of pasterns and cleanness of bone.

Good heavy horses are the profitable kind to keep on farms. With coll each year and work right through all year. These costs when grown, and they can be raised cheaply, command high prices. Heavy horses of this type made a most profitable feature of the farm.—W. R. Doyle, Grey Co., Ont.

**The National Dairy Show**

The largest and most complete exhibit ever made of the great dairy industry was the national Dairy Show held recently in Milwaukee. More than 500 dairy cattle were on exhibit. A record breaking display of dairy supplies, machinery and appliances, an exhibit made by the Dairy Division of the United States Department of Agriculture, a students' judgment contest, and the presence of various dairy organizations of national character, combined to make the exhibition complete.

The attendance was large, totaling for the 10 days, 200,000. The show was housed in a new auditorium built of steel, brick and concrete at a cost of \$500,000. The dairy cattle were stalled in the basement, where owing to lack of ventilation and unsatisfactory lighting they did not show to advantage. All the dairy breeds were well represented, the Jerseys especially making a strong showing. Eleven different states were represented by 44 herds. Guernseys and Holsteins in addition to the Jerseys previously mentioned formed the larger number, but there were also representatives of the Ayrshire, Brown Swiss and Dutch Belted breeds.

Outstanding among other valuable features of the show was the photographic exhibit of object lessons made by the Dairy Division of the United States Department of Agriculture. Another was the demonstration herd in the basement illustrating different rations and methods of the cow testing associations. Two demonstrations were held daily. The work was in charge of H. Rabel of the Department of Agriculture.

**Device For Improving Milking Machines**

Editor, Farm and Dairy.—While discussing the merits of the Burrell-Lawrence-Kennedy milking machine with a successful dairyman at St. Paul, I secured a pointer that was of value to readers of your paper, who have invested in this appliance. He said that after he first bought the outfit he was greatly troubled with the milk being sucked up into the pipes, thus making his purchase practically useless. The opening of the suction hose on the under side of the cover was apparently too near the nipple where the milk entered, and as a

result the milk was carried over from one opening to the other, and so into the pipes. He had heard of cases of this kind where cotton batting was used in the suction pipe to check the inflow of milk, but he did not consider this satisfactory, and devised a remedy of his own.

He took the top of the can to town and had a piece of copper tubing, about an inch and a quarter long, soldered on the ring of the opening where the milk enters, the tube being the same diameter as the aperture. Now, the milk goes through this suction tube, and then it is too far away to be acted upon. As a result he now has a machine that works perfectly, and he has had the added satisfaction of helping out a neighbor who was in the same dilemma.—Mac C. Cutting, assistant editor, "The Farmer," St. Paul, Minn.

**The Two-Furrow Plow**

W. R. M. Cready, Carleton Co., N.B.

I have read a number of articles in the "Farm and Dairy," in the Sept. 2nd issue of Farm and Dairy, J. D. McLean of Prince Edward, I. D. McLean says: "It works well anywhere that a single furrow plow will work, except, perhaps, among stumps, and it is capable of doing good work where the ordinary plow would have great difficulty in working at all."

Now, I use both a two-furrow plow and a single plow and I can't imagine what kind of a plow I use in P.E.I. if a two-furrow plow will do better work in any kind of soil. I keep a single plow to use where the two-furrow plow can't be used. Not only on stumpy ground but on good work where a two furrow plow can't be kept in the ground.

Nearly every one who writes of the two-furrow plow says that one man with three horses can plow twice as much as one man and two horses with a single plow. I will challenge any man with two, three, or a two-furrow plow to plow twice as much as I can plow with my team and single plow. Many standard makes of steel plows are used here, but I use a plow manufactured in my own county and I can turn 14 inches and do good work. I have never used a two-furrow plow that will turn more than 22 inches, mine turns only 20. I am not decrying the two-furrow plow by any means for it has its place and is very useful in it will do it will be a long time before out of business.

**Our Apple Trade with South Africa**

It is to be sincerely hoped that an honest effort will be made to amend out of the stringent regulations in force here, and include over a certain percentage applies infested with scab or codling moth, writes Mr. H. R. Poussette, Canadian Trade Commissioner, Durban, South Africa in his latest report of the Department of Trade and Commerce, Ottawa. If before packing, all fruit displaying traces of infection be rigidly rejected, there is little doubt that it will pass the inspection of the Cape, Orange River Colony and Natal, although perhaps not the Transvaal in which the percentage is fixed at one per cent. It is to be hoped the inspection does not have the result that some of our growers were admitted that this section was condemned. But this section, therefore, Canadian shippers who may be counting upon the receipt of a severe shock. Perhaps it

is wrong to speak of "luck," they doubtless received cash against consignments, and some of them may have cared little what happened their shipment or what loss the consignee may have and to sustain. If this state of mind seems harsh, it is beyond a doubt that it is not made without foundation. It could well be wished that poetic justice might descend upon those who so endanger a valuable crop, and bring discredit upon conscientious exporters.

Canadian apples come in here at a time when the fruit market is practically empty including the Christmas season. They are consequently most welcome to both the dealers and the public, by the latter of whom they are held in high favor. If this season's operations result in loss, it will mean that many next season from taking a risk which holds out so small a probability of compensating profit. And this matter of profit suggests a further point, a very large margin is required to cover avoidable but apparently inevitable losses; if, however, these latter could, or rather were minimized by more careful selection at the other end of the fruit could be sold at more reasonable prices, and it follows, in larger quantities. It requires little perspicacity to prophesy that those Canadian firms who send apples this season to South Africa, carefully picked and properly packed, or in a word, who conscientiously endeavor to protect the interests of their clients, will the following season reap the result.

**Our Legal Adviser**

**RIGHT TO PLANTS ON RENTED PLACE.**—I have rented a house on lease for one year, but have put considerable expense on the property, and have planted fruit trees and bushes, shrubs and vines. If I am compelled to leave at the end of the year through illness or other cause, can I legally take with me any property, can I have set out, provided I have planted the trees in good condition as it was when I leased it?—Petersboro Co., Ont.

"Yes!"

**LIABLE FOR LINE FENCE.**—Will you kindly tell me through the legal columns of Farm and Dairy, what law will compel me to build half a line fence around my farm, if the poor fellow owned the one acre lot built a good board fence around it, and always kept it in good repair. They have sold it to another party, and he claims that I have half of the fence to build. The old board fence is boards. It is just six years ago since I bought this 100 acre farm, and I tell you the man I bought from that I had nothing to do with the fence around the acre lot.—A Subscriber, Simcoe Co., Ont.

In the absence of a definite agreement with the owner of the acre lot you will be liable to build and maintain half of the line fence. This is made compulsory by the provisions in the Line Fence Act. If the fence in the owner's mind of repair, either of the parties can modify the agreement, who will come in and inspect the fence and determine the proportion to be built by each, and the quality.

**A Good Word for Skim Milk.**—I see no reason why skim milk should not be sold. It is of special value to growing children. A great many cities have by-laws prohibiting the sale of skim milk. I hold that skim milk should be sold, that the poor of the towns and cities ought to have it. But it is hard to get anyone to buy skim milk, because it gives the appearance of being poor.—Prof. H. H. Dean, O.A.C., Guelph.

The post cards you sent me for securing one new subscription to Farm and Dairy came all right and are fine. I am much pleased with them.—Jas. Moffat, Pontiac, Co., Que.

**Warranted to Give Satisfaction.**

**Gombault's**  
**Gaustic Balsam**



**Has Imitators But No Competitors.**

A Safe, Speedy and Positive Cure for Curb, Spint, Rickets, Gapes, Hoop, Stomach Troubles, Founder, Wind, Puffs, and all illnesses from Spavin, Rheumatism and other bone tumors. Cures all skin diseases or Parasitic Thrush, Blisters, Swells, and all Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Bone Throat, etc. It is invaluable. Every bottle of Gaustic Balsam sold is warranted to give relief within five days. Sold by druggists, or sent by express, charged extra. For descriptive circular, send 2c. to the Lawrence-Williams Co., Toronto, Ont.

**1500 Iron & Wood Pulleys,** for sale. All sizes, half price. Also Shafting, Hangers, Iron Pipes, Belting good as new. Cheap.

**IMPERIAL WASTE & METAL CO.**  
6-13 QUEEN ST., MONTREAL.

**CRUMB'S IMPROVED WARMER STANCHION**



"My barn that was BURNED."

Wallace R. Crumb, Box 88, Forestville, Conn.

**WINDMILLS**



Towers Girted every five feet apart and double braced.

Grain Grinders  
Pumps  
Tanks  
Gas and Gasoline Engines  
Concrete Mixers

Write for Catalogues

**GOOLD, SHAPLEY & MUIR CO., LIMITED**  
BRANTFORD, CANADA

**STEVES** Raise them without Milk. Booklet Free.

**STEVES BRIGGS SEED CO., Toronto, Ont.**

**INSURANCE**

In return for one new yearly subscription to Farm and Dairy, we will give an Accident Insurance Policy to the amount of \$1000, good for one year, through the Imperial Co. of Canada. This will apply only through the balance of the year. Send in your subscription to the

**CIRCULATION MANAGER**  
**FARM & DAIRY**  
Petersboro, Ont.

## HORTICULTURE

### Organize a Horticultural Society

All towns and villages in Ontario where horticultural societies have not been organized should take up this work. It is noticeable that in those places, wherein active horticultural societies are at work, are the most beautiful, the cleanest and the most attractive in the province. Every municipality should have a horticultural society.

Under the Horticultural Societies' Act, the organizations must be formed before the second week in January to participate in the government grant. Further information will be given on this and other points on application to Mr. J. Lockie Wilson, Superintendent of Horticultural Societies, Parliament Buildings, Toronto. Towns and villages that would like to take up the work should send a delegate to the convention of the Ontario Horticultural Association this month in Toronto. Any person that is interested may attend.

### Blackberry Root Cuttings

John Ferguson, York Co., N.B. The process of making root cuttings is to dig up the entire plant, securing all the roots possible over one-eighth of an inch in diameter. These should be cut into pieces two or three inches long, and should be planted in broad rows, somewhat as peas are planted, covering about two inches deep. Before severe freezing weather sets in, the bed should be covered with five or six inches of straw or stable manure to prevent deep freezing. In the spring the covering is raked off and by the middle of June the rows will be studied over with buds coming from every piece of root planted. These plants are much better than the "sucker" plants because they have large numbers of fine fibrous roots and are much more sure to live and make stronger canes.

Apply a dressing of barnyard manure to the patch in late fall or very early in the spring. If no disease attacks them, blackberry plants will, with good treatment, live and bear fruit for ten or fifteen years, much of course depending upon soil and cultivation.

### Fall Cultivation

R. W. Starr, Kings Co., N.S.

I have been advocating for many years the practice of fall cultivation of orchards, believing it to be the best method. It will give a few reasons why orchards should be cultivated and fertilized in the autumn wherever possible.

By plowing say five or six in, deep after the leaves have fallen and harrowing to a fine tilth you have an earth or dust mulch, which is one of the best protections from frost. You will have buried all the spores of the black-spot which may be deposited on the leaves, which is undoubtedly the main source of propagation in the spring. You will also have disturbed, and buried deep, any weevils, canker worms, codling moth and other insect pests that may harbor on, or on the surface soil. And you will have placed the cover crop or other vegetation, with the leaves, where it will be converted into plant food, and made ready for the early growth of the trees in the spring.

If you also apply such fertilizers as barnyard manure, ground bone, muricite of potash, or others of those partially insoluble commercial manure and harrow in, you will assist nature to provide the trees with an early spring breakfast and enable them to commence the season with vigor, and pass the period of what is sometimes excessive bloom, without the exhaustion that we frequently observe, and

that is followed by failure to set fruit or by excessive dropping after it is set.

If this system is properly carried out in the fall, the disc is all that is required in the spring to get a mellow surface, and if on the narrow rows, say, once a week to conserve the moisture, until the time has arrived it sows the cover crop, the orchardist may superintend himself when the latter is in that stage of the season, so far as cultivation is called for, is done.

As there can be no rule without exceptions, it will be found impracticable to follow this system on side hills or where the soil washes badly in the winter. There you may have to leave the cover crop to bind the soil until spring, if so, then do not cultivate and manuring at the earliest possible date, for it is the early and vigorous growth in the spring and health in late fall, that ensures the buds of our fruit trees through our changeable winter weather.

### The Canadian Apple Industry

With the approach of winter, the apple industry once more asserts its position as a Canadian export trade. Apple exporting, despite the inevitable fluctuations of crops, may fairly be said to have expanded as rapidly as any other branch of trade in which the Dominion assumes a leading part. An excellent resume of the methods employed in packing, sorting and shipping, which may serve to enlighten many upon these important details, was recently published in "Canada," and is reproduced herewith for the general information contained—

#### LARGE SHARE IN BRITISH MARKET

The French call the potato the 'apple of the earth,' and the British might well describe the apple as the 'potato of the orchard.' For as the potato is the best known and most used vegetable—at least in the Old Country—so the apple is the most easily obtained and favorite fruit for sweets and dessert. The great demand for apples in England, although the home growers raise huge crops. The produce of the British orchards is reinforced by fruit from all over the world, and especially from the overseas Dominions. In this trade Canada has her share and every year the maritime provinces, Quebec and Ontario export enormous quantities of apples to British ports. The importance of this industry may be seen by the following figures of the quantities of apples exported by Canada in recent years. In the fiscal year ending March 31, last, 1,092,080 barrels (value \$2,804,282) were exported, of which amount 1,066,477 barrels (value \$2,748,434) was sent to various parts of the empire, principally Great Britain. In the previous year 1,629,400 barrels (value \$4,823,645) were exported. The exports in previous years were: In 1907 (when owing to the change in the fiscal year the exports only covered a period of nine months) 977,961 barrels; in 1906, 1,217,564 barrels; in 1905, 1,037,148 barrels; and in 1904, 1,598,614 barrels.

The exports fluctuate, and it would seem that last year the trade had declined somewhat. But it must be remembered that the apple crop as other agricultural products, varies year by year, and again the Dominion's own increased and ever-growing capacity for consumption—notably in the prairie provinces, where fruit is not generally grown—accounts in some measure for the decrease in the exports year by year.

(To be continued next week.)

A short course in fruit growing will be given at the Ontario Agricultural College, from January 25 to February 5, 1910. Write to President G. C. Creelman for a copy of the calendar that describes it.

### For Fruit Growers and Gardeners

There is much to interest fruit growers and gardeners in the November issue of THE CANADIAN HORTICULTURIST. Valuable information for fruit men is given in such articles as "Grape Culture in Cold Districts," "Protecting Strawberries," "Fall Cultivation," "Starting a Peach Orchard," "Growing English Gooseberries," and others of similar nature.

### A Welcome Visitor

I have been a subscriber to Farm and Dairy for over a year now and must say that it has always been a welcome visitor. It fully carries any agricultural journal I have ever read. The cuts and illustrations are well kept up and are an inspiration to its readers. Enclosed you will find a remittance of \$1 for my renewal subscription for another year.—M. A. Foster, Prince Edward Co., Ont

excellent article on the apple situation, comprising reports from correspondents in all parts of Canada, tells how the crop is moving and what prices are being secured. A number of letters from growers in all the provinces gives valuable fruit notes. Furthermore, fruit growers are warned against the operations of men who claim to represent a large nursery in

the United States and who are at present working in certain counties in Ontario. They are using fraudulent means of selling nursery stock. Farmers and fruit growers are cautioned against purchasing stock from them.

Much consideration is given in this issue to home gardening and to the work of horticultural societies. Growing violets, protecting roses, planting for winter effect, the care of lawns, care of house plants in winter and similar subjects are dealt with by practical writers. An excellent article entitled "Lawn and Garden Hints for November," tells what to do with plants, flowers and vegetables this month. This is a regular feature of THE CANADIAN HORTICULTURIST and alone is worth much more than the price of a year's subscription. Vegetable growers will find articles of special interest in "Fumigation with Cyanide," "Market Gardening," "Grubs in Greenhouses," and "Forcing Fall Tomatoes."

THE CANADIAN HORTICULTURIST is a monthly publication for the fruit grower, for the vegetable grower and for amateur gardeners. It is the only publication of its kind in the Dominion. All articles are practicable, reasonable and well illustrated. Every person who is interested in these things should become one of its subscribers. The small sum of 60 cents is the subscription price for one year, and \$1.00 for two years. Address, THE CANADIAN HORTICULTURIST, Peterborough, Ontario and mention Farm and Dairy.

Renew Your Subscription Now.

# FREE

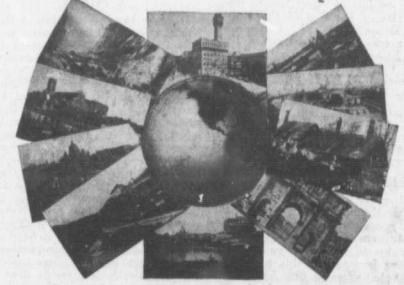


"CHAMPION" EVAPORATOR

THE GRIMM MFG. CO.  
58 Wellington St., MONTREAL

Send us your name to-day and we will send you our illustrated 'booklet. This book is full of money-saving tips for Syrup Makers. You need a "Champion Evaporator" in your maple grove next spring, because—"The Champion" will save you time, labour and money, and get more out of your grove than any evaporator on the market. The successful men all use "Champions." The size you want doesn't cost so much either. Write for prices.

## Absolutely Free—Trip Around the World



A set of beautifully lithographed post cards giving a complete trip around the world, free for One Renewal or New Subscription to FARM AND DAIRY. Renew your subscription now. Secure a set of 36 cards for 50c. Set of 50 Nature Study Cards sent if preferred. Quantity limited. Send to-day.

CIRCULATION DEPT. FARM AND DAIRY PETERBORO, ONT.

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

PO

The Co

H. C. Pier

The wo

try man

farmer h

mon chick

mits), the

which do

much h

thirsty pe

poultry in

killing ad

cutting do

only attack

even man a

SYMPT

Hens whic

cease layi

dampish, an

feathers rou

head and co

bird presen

These sympt

and irritat

of visit of

parasites. In

that town c

small posts,

numbers tha

is one of t

most pernici

ous here th

most at all

of blood. A

often resul

nest or in

hatch in eit

hen does wit

mite, the ne

is attacked

the shell and

short time.

DESCRIP

The adult

elliptical and

shape. The a

1-20 of an in

visible to t

grayish in c

except after

a reddish app

which it has

is white gro

known as t

rather slender,

it can move

needle-like

into the flesh

ing sucking

greatly differe

ness, which

and cannot

HAIRY

Unlike the

lives on the

in extreme

lives and breed

and corners

of the house.

It is gene

when upon

the nest. Be

fore, an exam

the bird wou

pest. They

seen by a care

less, which

cracks in the

ro

Bl

Wa

Chewi

The gi



## POULTRY YARD

### The Common Chicken Mite

H. C. Pierce, Iowa State College Experimental Station.

The worst external parasite of poultry against which the poultryman and farmer have to contend is the "common chicken mite" or "red chicken mite." There are other species of mites which attack poultry, but they do much less damage. This blood-thirsty pest causes great loss to the poultry industry of the country by killing adult fowls and chicks and cutting down egg production. It not only attacks poultry but horses and even man as well.

#### SYMPTOMS OF INFESTATION.

Hens which are attacked by mites cease laying, become poor in flesh, dumpy, and listless in action. The feathers roughen and drop out. The head and comb become pale and the bird presents a sickly appearance. These symptoms are caused by the irritation and loss of blood due to nightly visits of hordes of these hungry parasites. It seems hardly believable that fowls could be killed by such small pests, but they are so many in numbers that their total capacity for mischief is enormous. Their ravages are most pernicious on sitting hens, as here they may have access to their host at all times, causing a rapid loss of blood. Attacks upon sitting hens often result in the hen leaving her nest or in her death, spoiling the hatch in either case. Even if the hen does withstand the ravages of the mite, the newly hatched chicks are attacked as soon as they emerge from the shell and are often killed in a short time.

#### DESCRIPTION OF THE MITE.

The adult common chicken mite is elliptical and somewhat flattened in shape. The adult varies from 1-25 to 1-20 of an inch in length and is plainly visible to the naked eye. It is grayish in color, with darker spots except after feeding, when it assumes a reddish appearance due to the blood which it has sucked from its host. It is while gorged with blood that it is known as the red mite. It has eight rather slender, tapering legs by which it can move rapidly. It has sharp needle-like mandibles which it inserts into the flesh to obtain blood. In having sucking mouth parts the mite is greatly different from the poultry louse, which has biting mouth parts and cannot suck blood.

#### HABITS OF THE MITE.

Unlike the louse the mite does not live on the birds at all times, except in extreme cases of infestation, but lives and breeds in cracks, crevices and corners of the roosts, building, nests, and elsewhere about the poultry house. It generally attacks the fowl when upon the roost or nest. Therefore, an examination of the body of the bird would not always discover the pest. They may be discovered, if present, by a careful examination of the cracks in the roosts, nests and walls

of the building, lifting up the roosts and lotions of nests, where they will be found gathered in patches which have the appearance of grayish or reddish-brown, powdery deposits. These patches are composed of adult cases, young mites, eggs, cast skins, excreta and filth. The patches are gray, or reddish in cast depending upon the amount of blood in cast mites. It requires a very careful examination to discover mite patches when there are but few mites present, as they are hidden away from the light, but in cases where they have been allowed to multiply six or seven times they increase in size and spread over the exposed surfaces of the walls, roosts and nests. In some instances of extreme infestation, it is actually possible to gather them up by the spoonful.

#### LIFE HISTORY.

The adult mite lays her eggs, which are elliptical in shape and about 1-100 of an inch in length, in the cracks and crevices of the roosts, walls, nests, or boxes, usually where there is some manure or other filth. Under favorable conditions the eggs will hatch in a few days. When hatched the young mites are white, oval in shape, and have but six legs. They feed for a few days upon filth, but attack fowls when older. Every few days the young mite molts or sheds its skin and increases in size, becoming full grown in about ten days from birth. The remedies for mites will be dealt with next week.

### Feeding Pullets

Prof. F. C. Eijford, Macdonald College, Quebec.

How to feed growing pullets in order to secure the best results in winter egg production was discussed in Farm and Dairy last week. An experiment conducted at the Cornell experiment station was quoted in this connection. The conclusions drawn from the results of this experiment are as follows:

How to feed was verified by repeated experiments with vastly more pullets. Forced pullets made a better profit than retarded pullets.

Forced pullets ate less food per hen than retarded pullets.

Forced pullets produced more eggs of a larger size, at less cost per dozen than retarded pullets.

Forced pullets produced more eggs during early winter than retarded pullets.

Forced pullets gave better hatchability results of eggs than retarded pullets.

Forced pullets made a greater percentage of gain in weight than retarded pullets.

Forced pullets showed less broodiness than retarded pullets.

Forced pullets had less mortality than retarded pullets.

Forced pullets showed better vigor than retarded pullets.

Forced pullets showed the first mature moult earlier than retarded pullets.

Retarded pullets gave better fertility of eggs than forced pullets.

Hopper-fed dry mash gave better results in gain of weight, production of eggs, gain in weight of eggs, hatching power of eggs, days lost in moulting, mortality, health and profit per hen, than wet mash.

Wet mash and grain fed pullets produced slightly larger eggs of slightly better fertility, and showed less broodiness than dry mash and grain fed pullets.

Dry mash and grain fed pullets laid eggs of good size at an earlier period than wet mash and grain fed pullets.

Hopper-fed pullets ate more than hand-fed pullets.

Pullets having whole grain ate more grit and shell than those having a proportion of ground grain.

Pullets fed on grain were more inclined to develop bad habits than those having a mash.

Earliest producers did not give as many eggs in early winter.

Early layers gained as rapidly in weight as those beginning later to lay.

Prolificacy made but slight difference in weight of hen and weight of egg.

The most prolific pullets did not always lay earliest.

Pullets did not as a rule lay while moulting.

### Poultry Keeping for Egg Production

Bulletin No. 122 of the Massachusetts Agricultural Experiment Station contains considerable practical information that ought to be of interest to readers in Canada. Among the questions dealt with in this bulletin by Mr. Wm. P. Brooks, is "Pure Air for Poultry."

Pure, fresh air is needed more and more for both man and beast, whether in health or disease. Poultry houses should be built so as to provide abundance of pure air and sunshine. Mr. Brooks says he is a fresh air crank. He claims to have cured several cases of roup by, as he terms it, a heroic treatment with fresh air. Fowl affected with this disease were put into a wire cage, where only a strip of bur-cane lath protected the west side. They were kept there all the winter and came out well. Though in Massachusetts the winter is not Canadian, the writing states it was as low as seven and a half degrees below zero. Movable coops are advocated for growing chicks.

Coops that are easy to clean, easy to haul from place to place, give the chicks fresh pasture and variety with cleanliness. In speaking of the breed to select, the strain is more important than the breed. A preference is expressed even for the production of eggs of a strain of one of the American breeds especially bred for improvement in that direction. Such hens, on the one hand, are less broody than the Asiatics, and will, on the other hand, lay more eggs when eggs are dear than the Mediterranean breeds. There is also the advantage that the cockerels are at an early age fit to make good roosters.

Those who want winter layers, get some good advice when Mr. Brooks says they should not be hatched too soon, and is done when the high prices come along, whereas, the sater, hatched a few weeks or a month later, commences to lay during the last of October and first of November, and, if of a good laying strain, continues throughout the winter. In Massachusetts, May seems to be the popular month for having the chicks come out.

Good results have been obtained from the following method of feeding the young chicks: Billed infertile eggs are run through a mincer, shells and all, in conjunction with stale bread

one of egg to four or six of bread. This is fed three times a day for two or three weeks. At the end of three or four days a little cracked grain is given, alternating with the mixture, which gradually takes its place until at the end of the third week the first mash step. The cracked grain is fed in litter to induce exercise. Fine beef scraps are given at about four weeks; give range in your case, if necessary.

In the summary, Mr. Brooks states the following conclusion:—

1. The regular use of condition powders is not likely to increase the egg product and is unnecessary as a means of insuring health.
2. Calbage given in moderation is better than cut clover hay as a winter food; if much is given the flavor of the egg may be affected.
3. The number of eggs produced is not affected by the presence of the male.

## METALLIC CEILING

Both clean and fire-proof—no dust and dirt falling, as from plaster ceilings. Costs no more, but looks thrice as artistic. The life of a plastered or papered ceiling is short and nearly every year needs repairs. Our Metallic Ceiling will last as long as the house—always fresh and clean. We can send you hundreds of pretty designs to select from for both ceilings and walls.



Our beautiful free booklet tells you all about Metallic Ceilings and Walls. Send for one. Phone Park 500.

"Really I don't know how people managed the convalescent dry during the winter. It is the ordinary ceilings and walls clean, healthy, and sanitary."—The "Philosopher" of Metal Town.

MANUFACTURERS 3749



4. Protein can be better given in animal food than vegetable foods.
5. Dry prepared beef scraps and meat meals cheaper and safer than cut fresh meat and bone.
6. Where mashes are used the morning is better than the evening.
7. Corn, if judiciously fed, is a safe feed for laying hens.
8. Buckwheat is not as desirable as corn.
9. Fibrous covered grains should be used sparingly in feeding laying hens.

Let your hens do the bragging for you.

The greatest cause of failure in the poultry business is, without doubt, from inattention and its being handled as a side issue, the fowls getting but a remnant of thought and attention after one is exhausted by close attention to other business and has nothing left for the sadly neglected poultry. Give the poultry the same careful study and care it is necessary to give any other remunerative business, and there will be any question as to which will pay best.

#### Renew your subscription now.

**PERFECT MAPLE EVAPORATOR**  
Price low, quality high. Produces maple syrup, the kind you like; syrup retains maple taste; all unnecessary expense to middlemen's profits cut. Write for sample and price. Do not wait. The STEEL TROUGH & MACHINE CO. LTD., "Dix" N.Y.

**\$1 A Week for this sized space for Poultry Advertisements. Advertise Your Stock and Sell it**

## POULTRY FOR SALE

Advertisements under this heading, two cents a word, payable in advance.

R. C. R. L. REDS, Partridge Wyandottes nice geese—selling out, high class stock; for sale cheap. Write at once. Mrs. Robt. Smith, Collville, Ont.

FOR SALE—Good Rose Comb Brown Leghorn Cockerels, \$1.00 each if sold soon. Also Brouse ducks, \$2.00 each.—J. H. Bathford, Caledon East, Ont.

**Black Wach**  
Chewing Tobacco

The big black plug.

# FARM AND DAIRY

## AND RURAL HOME

Published by The Rural Publishing Company, Limited.



**FARM AND DAIRY** is published every Thursday. It is the official organ of the Dominion Farmers' Association, Eastern and Western Ontario, and Bedford District, Quebec, Dairywomen's Association, and the Canadian Holstein, Ayrshire, and Jersey Cattle Breeders' Association.

**SUBSCRIPTION PRICES** are a year, strictly in advance. Great Britain, \$1.20 a year. For all countries, except Canada and Great Britain, add 50c for postage. A year's subscription free for a club of two new subscribers.

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

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

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

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

### CIRCULATION STATEMENT

The paid subscriptions to **Farm and Dairy** exceed 100,000. The actual circulation of each issue, including copies of the paper sent subscribers who are slight in arrears, and sample copies, varies from 5,000 to 12,000 copies. No subscription are accepted at less than the advertised rates. Thus our mailing lists do not contain any dead circulation.

Some detailed statements of the circulation of the paper, showing its distribution by countries and provinces, will be mailed free on request.

### OUR PROTECTIVE POLICY

We want the readers of **Farm and Dairy** to feel that they can deal with our advertisers with our assurance of our advertisers' reliability. We try to admit to our columns only the most reliable advertisers. Should any advertiser become discredited by the treatment he receives from any of our subscribers, we will investigate the circumstances fully. Should we find reason to believe that any of our advertisers is unreliable, even in the slightest degree, we will discontinue immediately the publication of their advertisements. Should the circumstances warrant, we will expel them through our columns of the paper. Thus we will not only protect our readers, but our reputable advertisers as well. And that is necessary to entitle you to the benefits of this Protective Policy is that you include in all your letters to advertisers the words "I am your friend in **Farm and Dairy**." Complaints should be sent to us as soon as possible. The reason for dissatisfaction has been found.

## FARM AND DAIRY

PETERBORO, ONT.

### TAXING LAND AND LAND VALUES

One of the greatest needs of the present day, is a clear conception by the public, and particularly by us as farmers, of the principles underlying all systems of taxation, as well as the conditions which permit of the creation of monopolies. As long as men can make millions of dollars in the cities in a few years, so long will our boys on the farms desire to leave the country for the city.

The present system of taxation is unjust to us as farmers. Our productive labor creates wealth, which people in other callings are able to appropriate for their use. In other words, as farmers we do not obtain the full results of our labors. If we did, there would not be such a vast difference between the value of farm and city property.

Nothing, possibly, has done more to retard the single tax movement than the inability of many people to distinguish the difference between a tax on land and a tax on land values. The difference, really, is simple. As

farmers, we own more land than the average city resident, although we do not earn more money. A uniform tax therefore would be unfair to the farmers. When, however, we talk of taxing land values, the situation is altogether different.

The Toronto papers reported the purchase recently, by the T. Eaton Co., of Toronto, of some land in that city, at the rate of several million dollars an acre. If that acre of land were taxed in proportion to its value, and the money thus derived were used for Provincial purposes, it would mean that that acre of land would pay as much taxes as many thousand acres of farm land, and as farmers we would receive our share of the proceeds. Therein lies the essential difference between taxing land and taxing land values. Farmers help to increase the value of land in cities. We should, therefore, receive a proportion of the increased value of such land. We can do this without being unfair to any person, by securing a more equitable system of taxation.

### DISHONEST PACKING OF APPLES

Theoretically the Fruit Marks Act should ensure to the consumer, apples honestly packed. That it falls short in accomplishing this end is well known. Notwithstanding convictions that are made by the fruit inspectors and agents of the Dominion Government, the practice of putting up apples of an inferior grade to that marked on the barrel still goes on. It would seem that those responsible believe anything in the way of apples to be good enough for the west. The impression has gone abroad that Ontario fruit is not reliable, which impression has been brought about through our western provinces having been made the dumping ground for inferior stock.

Who is responsible for this impression that westerners have gained of Ontario apples? In all probability, it is well founded. Much inferior fruit has been shipped to the west. But is the fault wholly that of the Ontario packer or grower? Is it not probable, that much inferior stock honestly marked has been sold as No. 1, by western dealers?

The remedy, no matter how the question may be answered, is to ship No. 1 fruit only, to the west. Disposal of inferior grades in other ways, or, better still, do not produce them. The freight on apples to the West amounts to such a figure that there is comparatively little difference between the price of No. 1 and of inferior stock to the western consumer.

The more general practice of spraying and properly caring for orchards would reduce the amount of inferior apples to a minimum, which can be disposed of without shipping them to distant markets. It is inconceivable that, in spite of the information gained through experimentation and commercial practice in regard to the benefits of spraying, the average Ontario farmer continues to keep an orchard and then not give it proper care. The large percentage of culls produced under present methods of orchard management is largely re-

sponsible for any dishonest packing that is practised.

### ATTEND THE DAIRY MEETINGS

It is difficult to understand just why there is not more interest taken in the district dairy meetings that are being held throughout Ontario under the auspices of the Eastern and Western Ontario Dairywomen's Associations. The addresses and discussions have directly on the needs of the localities in which they are held. The annual conventions of these associations are not accessible to all who might wish to attend or to profit directly from their proceedings. The branch or district meetings are so arranged that at least one of them will be held in close proximity to each dairy section that all may have the privilege of attending. Instructors for the district and leading authorities of repute address these meetings.

Since they are so well appointed from the standpoint of speakers, it is too bad that these meetings are not more largely attended. At the Peterboro district meeting, as well as at Lindsay, barely a handful of men availed themselves of the opportunity of attending and, were it not that the proceedings are more or less fully reported in the press, it would be a question whether or not it were advisable to go to the expense and trouble connected with them. At Peterboro even the salesmen, leaders in their respective communities, and who attended the cheese board in the morning, failed to remain for the meeting designed especially for them. Patrons should reprove these men for not taking advantage of the instruction given, and, incidentally, reproach themselves for not having turned out. It is to be hoped that the remaining meetings of the series will receive the support that is their due.

It may be that the meetings are held too early in the season. They probably would be better attended if held at smaller places. Those responsible should give this matter consideration before another year and, if possible, devise some means of getting a larger attendance.

### UNPROTECTED FARM MACHINERY

"Difficult to plow around but very convenient to hook to..." that's what keeps lots of farmers poor." Such was the remark made recently by Mr. R. H. Harding, the well known sheep breeder and expert judge of Middlesex Co., Ont., to the editor of **Farm and Dairy**, concerning a binder which had been left in the field close to a railroad, where it was observed as they travelled through Simcoe Co., Ont. That particular binder is not the only one in old Ontario, nor to mention other progressive farming districts in Canada, to which Mr. Harding's remark would apply. Scores of binders and implements of complicated machinery are exposed at this very date to all the destruction worked by the various elements.

No inconsiderable portion of the total investment on any up-to-date farm is tied up in the numerous implements that are now-days indispensable to the proper working of

the farm. For the most part, the life of all farm machinery can be considerably extended beyond what is generally considered a satisfactory term. Binders allowed to rot, it, soon become subjects fit only for the scrap heap. Such must be apparent to all, yet notwithstanding the lesson inevitably taught, many continue year after year to lose a great part of their capital through giving their farm machinery no housing, except when convenient. To what extent neglect of farm machinery is responsible in keeping some farmers poor, would be difficult to estimate. It is, however, a significant fact that invariably it is the poor farmer who countenances such neglect; those who are in more favorable circumstances knowing that such practices would work their ruin.

There never was a time when suitable housing, designed and used for implements exclusively, was more necessary than it is at the present day. A rapid succession of new labor-saving machines, many of which are delicate and complicated, is continually coming to the front. The nature of these, appeals to the good judgment of progressive farmers. When purchased, some place is needed in which to properly protect them.

### Reading in Farm Families

(Breeder's Gazette)

Literature is a brain food of which character is made. Wholesome reading for families in the open country is as essential as good food in the evolution of efficient citizens. An appetite for a better quality of periodical literature is growing in all agricultural communities. High-class journals and magazines find their most appreciative and helpful readers on farms. Rural mail carriers are delivering tons of these publications at homes where melodramatic trash has ceased to charm. In the unfolding of the larger rural life the taste for literary diswater has been supplanted by an instinctive craving, awakened by the sweep of progress, for a higher type of reading matter.

Parents who seek conscientiously to discharge the obligations which the rearing of children imposes, cannot be over-cautious in supplying their homes with books and current literature. Quantity is not the need. Piles of cheap papers and libraries of bound rubbish afford a plenty in which a keen mind can be starved and distorted. Quality is the vital desideratum. A few weeklies, offered at a price and embelished, and a few magazines are full of it. Less than five feet of shelf will hold most of the books which the centuries have approved. It is not for us to suggest books or periodicals to seekers of the best; they will ultimately get together. We warn against the cheap and vicious publications and books which sneak into farm homes.

The Gazette believes with "The Youth's Companion" that "parents are the natural leaders in selecting the reading of the family." There is a type of leadership which is second to none in its final consequences. Uplifting and inspiring literature is

periodical  
search of it

Crean

Butter Milk  
shows to the  
makers red  
post subject  
to the

Some

What is  
to be kept  
before  
of butter  
strained  
from the  
in the cream  
ward Co.

One can  
to the  
ture. It  
tions, chief  
the cream.  
character of  
content of  
the acidity  
cream. The  
lower will  
it can be  
more difficult  
the cows  
they are on  
factor, how  
cream. The  
5 per cent.  
may be said  
which will  
dition in fr  
churning.

practice, thi  
50 to 56 de  
however, a  
would never  
low tempera  
in the sum  
It should be  
the same cre  
In creamer  
creameries)  
24 hours le  
should be w  
thickened up  
flavor and  
ance, before  
kept too long  
farm practice  
cooled down  
the 52 degree  
from three  
The chances  
the butter c  
cream has be  
churned at  
Hot cream, or  
in hot weath  
suits.

There is som  
For churning  
should be tak  
cont., for the  
It will then  
temperature i  
ened for 24 h  
for having mu  
25 per cent.  
give better s  
than a 30 pe  
small churn  
would have t  
to it in order  
come properly  
Creamery Ins  
tario.

### The Home Pa

L. A. Rogers,  
Division,

Milk deliver  
mer months fr  
teria in such  
not a safe fo  
for infants w  
of milk. In  
milk can be s  
times difficult  
dition's expense

periodicals and books is within the reach of every farm family. Whoever seeks it will find it.

**Creamery Department**

Butter Makers are invited to send contributions to this department, to ask questions of the creamery department, to send questions to the creamery department, to send questions to the creamery department.

**Some Churning Questions Answered**

What is the proper temperature for cream to churn? How long should cream be kept after it has come from the separator before churning? What is the cause of butter coming so soft that it has to be strained through a cloth to separate it from the buttermilk? Does a little milk in the cream do harm?—T. L. Prince, Edward Co., Ont.

One cannot give definite directions as to the proper churning temperature. It depends on several conditions, chief of which is the ripeness of the cream. Other factors are, the character of the food of the cow, the extent of the period of lactation, also the acidity or the ripeness of the cream. The ripeness of the cream is, the lower will be the temperature at which it can be churned. It will be then most difficult to churn the cream when the cows are dry and then when they are on fresh pasture. The main factor, however, is the ripeness of the cream. The acidity should be about 5 per cent. The right temperature, which will give butter in firm condition in from 30 to 40 minutes of churning. Ordinarily in creamery practice this temperature runs from 50 to 56 degrees. With this cream, however, and in cool weather, one would never get it churned at this low temperature. A 30 per cent. milk will churn at 52 degrees in summer. In winter the temperature should be from 60 to 63 degrees for the same cream.

In creamery practice (whole milk creameries) cream is usually kept for 24 hours before churning. The cream should be well ripened, should have thickened up and have a clean, acid flavor and a smooth velvety appearance, before churning. Most cream is kept too long before churning. In farm practice, the cream should be cooled down and kept at a temperature of 52 degrees. It may then be kept for from three days to a week.

The chances are that the cause of the butter coming soft is that the cream has been too thin and has been churned at too high a temperature. Hot cream, or cream that is not cooled in hot weather, will give such results.

There is some milk in any cream. For churning on the farm cream should be taken from 25 to 30 per cent., for the creamery 35 per cent. It will then churn at 58 degrees in temperature if it has been well ripened for 24 hours. There is no call for having much milk in the cream. A 25 per cent. cream will be found to give better satisfaction on the farm than a 30 per cent. cream, for the small churns a 30 per cent. cream would have to have some water added to it in order to get the butter to come properly.—J. F. Singleton, Creamery Instructor, Eastern Ontario.

**The Home Pasteurizing of Milk**  
L. A. Rogers, Bacteriologist, Dairy Division, Washington, D.C.

Milk delivered in cities in the summer months frequently contains bacteria in such large numbers that it is not a safe food for children, especially for infants whose food consists entirely of milk. In many cities a special milk can be secured, but this is sometimes difficult and always involves additional expense. Under such circum-

stances it is advisable to pasteurize all milk consumed by small children. The pasteurization should be done in such a way that disease-producing bacteria as well as those likely to produce intestinal disturbances are destroyed without at the same time injuring the flavor or the nutritive value of the milk. This may be accomplished in the home by the use of a simple improvised outfit.

Milk is most conveniently pasteurized in the bottles in which it is delivered. To do this use a small pail with a perforated false bottom. An inverted pie tin with a few holes punched in it will answer this purpose. This will raise the bottles from the bottom of the pail, thus allowing a free circulation of water and preventing lumping of the bottles. Punch a hole through the cap of one of the bottles and insert a thermometer. The ordinary donkey type of thermometer is likely to be inaccurate, and if possible a good thermometer with the scale etched on the glass should be used. Set the bottles of milk in the pail and fill the pail with water nearly to the level of the milk. Put the pail on the stove or over a gas flame and heat it until the thermometer in degrees shows not less than 150 degrees. The bottles should be removed from the water and allowed to stand from 20 to 30 minutes. The temperature will fall slowly, but may be held more uniformly by covering the bottles with a towel. The punctured cap should be replaced with the new one, or the bottle should be covered with an inverted cup.

After the milk has been held as directed it should be cooled as quickly and as much as possible by setting in water. To avoid danger of breaking the bottle by too sudden change of temperature, this water should be warm at first. Replace the warm water slowly with cold water. After cooling, milk should in all cases be held at the lowest available temperature.

**Dairy Meeting at Peterboro**

All that kept the Peterborough district meeting of the Eastern Dairy-men's Association, held at Peterboro on Wednesday, November 10, from being a most enthusiastic and helpful gathering was the lack of attendance. Speakers of the day were the well known dairy authority, Mr. Henry Glendinning of Manilla, Ont., J. F. Singleton, Creamery Instructor and Assistant to Mr. Puhlow in the Kingston Dairy School, and Mr. H. C. Duff, of the Department of Agriculture, Norwood, Ont. Mr. Fred Davy, secretary of the Ottawa Cheese Board, Mr. G. A. Gillespie, of Warsaw, Mr. G. A. Gillespie, Mr. J. R. Rind and Mr. H. B. Cowan of Peterborough also spoke.

The representative for the Peterborough district on the board of directors of the Eastern Ontario Dairy-men's Association, Mr. G. A. Gillespie, who has given most satisfactory service during the past few years, was again unanimously elected to represent the Peterborough district.

The addresses dealt with matters of vital interest to cheese makers and producers alike. Mr. Henry Glendinning handled his specialty "The Feeding of the Dairy Cow." He emphasized the need of weeding out the poor cows by means of the scales and Babcock test and at the same time, he showed that in order to weed out cows, one must feed them. It was not fair to condemn any cow unless she was given a fair chance. Corn silage and alfalfa may together furnish an abundance of water supplied at times. It was given as the secret of cheap production of milk.

The composition of milk, and the uses of the various constituents in cheese making, formed the main part of the address given by Mr. Singleton. This address was pointedly il-



**WARNING**

to Dairymen

**De Laval Cream Separators**

ARE LARGELY IMITATED BUT NEVER EQUALLED

See that the name "De Laval" is on the machine you buy

Send for Free Book

**THE DE LAVAL SEPARATOR CO.**

175-177 William St.

MONTREAL

VANCOUVER

WINNIPEG

lustrated by means of samples of the various constituents in their relative quantities, each constituent being an individual bottle. Other subjects touched upon by Mr. Singleton were the care of samples, the matter of paying by test and some discussion relative to the creamery business.

Information of interest to farmers locally was brought out by Mr. H. C. Duff. He dealt briefly with the work that he is engaged in and spoke of the advantages of the Farmers' Institute Clubs. A club has been already organized in Norwood. Others will be organized shortly. Mr. Duff called upon the cheese makers and salesmen as leaders in their respect. He invited them to help along the work of the farmers' clubs and to lend their assistance wherever possible.

**Eastern Dairy Meetings**

In addition to the district dairy meetings that have already been held at Peterborough and Lindsay in connection with the Eastern Ontario Dairymen's Association other meet-

ings have been arranged for as follows:

- November 16, Renfrew; November 17, Carleton Place; November 18, Vars; November 19, Manotick; November 23, Vankeek Hill; November 24, Moose Creek; November 25, Alexandria; November 26, Iroquois; November 27, Kingston; November 30, Kempton; December 7, Napanee; December 8, Queensborough.

It is hoped that dairymen generally, as well as others interested, will call upon the dairy men for the information and instruction to be given. Mr. George N. Barr will give his illustrated address on "The Care of Milk for Cheese Making," which will be illustrated by lantern slides at Renfrew, Carleton Place, Vars, and possibly at a few of the other places. Well known authorities, all experts on their respective subjects, will address the meetings. Those attending may be certain of gaining much information of value that will amply repay them for their time and trouble.

**BETTER and LARGER than EVER**  
THE ONTARIO PROVINCIAL

**WINTER FAIR**

GUELPH, ONT.

DECEMBER 6th to 10th, 1909

Over \$13,000 HORSES, CATTLE, SHEEP, SWINE AND PRIZES FOR POLTRY, SEED, JUDGING COMPETITION

ENTRIES CLOSE NOVEMBER 20TH

For Prize Lists or Entry Forms apply to the Secretary

Lieut.-Col. R. McEwen, Pres. BYRON, Ont.

A. P. WESTERVELT, Secretary TORONTO, Ont.

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

## Cheese Department

Makers are invited to send contributions to this department, to ask questions of masters relating to cheesemaking and to suggest subjects for discussion. Address your letters to The Cheese Maker's Department.

### Business in Flourishing Condition at Glanworth

Ed., Farm and Dairy.—I visited the cheese factory at Glanworth and found everything in a flourishing condition. Mr. Geo. B. Brodie, the owner says, "That the rush of milk this season means enlargement for 1910. On the morning of my visit 25,543 lbs. of milk were received, and the total output of cheese this season will be in advance of 175 tons. Which means the distributing of more than \$7,000 a month among the farmers."

Mr. Brodie won a diploma and medal at Chicago and a diploma at Buffalo. When at Danbury, N. Y., at the "Fair," the largest local fair of this county, he won a first on his cheese. Mr. Brodie further informed the writer, that his patron's herds were composed of about 100 Durhams, and half Holsteins. He could see no difference in the milking qualities of either kinds. He says where cows were well cared for, intelligently fed, the milk was sure to be forthcoming. Many silos are in use, and much corn grown.—James E. Orr, Middlesex Co., Ont.

### Instruction Work in Peterboro Section, 1909

R. W. Ward, Dairy Instructor

It is gratifying to me to look back over my 11 years' work in the Peterboro section as dairy instructor and sanitary inspector and be able to note the change and improvements that have been made. Improvements have been more marked for the last few years under my new laws and system of instruction. A number of factors have contributed to these improvements, but one I wish to make special mention of is those meetings held in connection with the factory business meetings at the close of the season. I am sure we all appreciate the assistance that we have had from the Governments both at Toronto and Ottawa.

I have found the officers, patrons, owners and makers, almost without exception, ready to co-operate with me in bringing about the necessary improvements, which has made the work more pleasant for me, and the success of it greater, more permanent and lasting. The dairymen of Peterboro section are known to me to be well pleased with the results of the past season's operations. They have had good demand for their product at a very uniform good price, coupled with a good supply of milk up to the closing day of the season.

#### BETTER CONDITIONS PREVAILING

I have had under my charge this season 36 cheese factories and one creamery and am making it possible to state as a whole that the milk has reached the factories this season in better condition than ever before. I think it is up to us as instructors and makers to sit up and do some hard thinking, for the thought has been forced to my mind for the last two seasons, that the patrons as a whole were making more improvements than we were as a whole. We cannot sit down and rest on past laurels won. The strainer on the vat at the factory is a good indication of the general condition of the milk. The less sediment, dirt and whey cream we find on it, the better the results in the manufacture. The old rusty cans are nearly all discarded and the very supply of milk improved. Do not use rusty tinware of any kind in storing or handling milk. To

every patron of every cheese factory and creamery let me say, make provision for cooling, and the proper storing of milk and cream for the season of 1910.

#### COOL CURING ROOMS

I would say to the patrons of every cheese factory that the owners of them on the question of expense, and have cool-curing rooms installed. The value of holding cheese at a cool temperature has been so well proven that I need say no more.

The aim of the producer should be to produce a first-class article at the least cost possible. I think it was H. H. Dean, B.S.A., who said "Feed, Feed and Weed." There is probably more in this than we see at first glance. If good cows, liberally fed, and properly cared for, do not show right performance, the soil will weed them out. I have noted and seen pleased to see more corn growing this year than usual. With silos and alfalfa hay the cost of feed should be materially reduced. In weeding, there is nothing better than weighing and testing the individual cow in fact it is the only thing, so I would advise every farmer to make use of the cow testing associations that have been placed within the reach of all.

#### EQUIPMENT OF FACTORIES

Your cheese factories on the whole are very well equipped and managed and are kept quite clean and sanitary but there should be a determined effort made to exclude the flies. There is more trouble in the surroundings at the other factories than from any other cause. Let me suggest that the tanks be kept clean and cement platforms on which to load the whey be installed and have these connected with underground drains.

Every cheese factory, to my mind, should be equipped with alkali test, curd or fermentation test, lactometer, and butter test, and all milk should be paid for by the latter fat test. In my group of 36 factories, there are 14 that pay by butter fat test.

The make and the quality of the cheese on the whole for the season has been very good. Probably the greatest mistake made in the manufacture was in the fore part of the season. The curd was not allowed to form sufficiently in the whey, resulting in a short sandy texture, weak body and they were not as close as they should be. I believe 90 per cent. of the faults in the manufacture would be traceable to this one source. We are liable to run into these conditions every year under certain conditions of weather and feed, but this year it seemed to be more pronounced than usual.

Let me urge to makers to keep close watch of the curd while it is in the whey, and if properly firm when you have right amount of acid for removal, and if they rest your cheese will be pretty well assured.

#### STARTERS ADVOCATED

I cannot close this paper without a word on the starter question. I would like to see, and think that every maker should attend a dairy school, or if they cannot do so, that they would use ordinary sour milk as a starter, and take chances of all the more fermentations it may contain. I most strongly advise that every factory be equipped for carrying a pasteurized starter prepared from a pure culture and then have this used intelligently and in moderation. I have a few makers, but am pleased to tell you that they are very few, that are doing their patrons serious harm by the too free use of sour milk.

I hope and trust that there will be greater effort put forth by the season than ever before, for the uplifting and placing of this great industry, dairying, on a sure and right footing where it rightfully belongs on account of its importance to the agricultural industry of this country.

### Dairy Meeting at Lindsay

(Continued from page 6)

Farm and Dairy readers know, is to cool the milk immediately after milking and not aerate it; the cooling to be effected by setting the can into a tub of cold water. Experiments on a larger scale have been carried out this year involving all the patrons of the Smith's Falls factory. The work the past summer, as was the case in connection with the experiments of a year ago, points to the fact that the cooling without aeration is the proper thing to do.

Mr. Glendinning dealt with the feeding of the dairy cow, and showed that the business was one of dollars and cents, that we want to feed our cows at less cost than we did in the past and yet get good plenty of milk. This can be done by feeding a suitable ration of corn silage and alfalfa hay, by supplementing pastures, and by providing cows with sufficient feed for all times. He urged especially the need of feeding cows and fleshing them up when dry in order that they would have a store of flesh that they could draw on after freshening.

#### THE MAN ON BAY

The report of Instructor Cameron showed that he had inspected creameries as well as cheese factories, that there had been a considerable increase in the amount of cheese made. The quantity of butter supplied was slowly but steadily improving and that the majority of the factories were kept in good sanitary condition. Instructor Cameron pointed out that a few patrons still made the mistake of feeding turnips and rape. He urged that this practice should be condemned by all interested in cheese or butter production.

Mr. J. F. Singleton stated that the greatest need for the creamery business was cream in better condition. At present much of it is delivered too hot and too fat. If it is sour, this latter being due almost wholly to lack of cooling. Patrons were inclined to think that the cream was not gathered often enough. Under present conditions, it was not possible to haul it often. If the separators on the farm were kept clean and a thick cream taken, cooled immediately and kept cool, there would be no sour cream delivered, even if it were only drawn twice a week. The success of the Locust Hill creamery, which speaks not only twice a week, was noted of to illustrate this point. Mr. Singleton called upon all to urge the gospel of putting up ice every where.

#### CREDIT WHERE CREDIT BELONGS

Credit was given Mr. Henry Glendinning for the great success that the business was reaping from the many times that he had addressed meetings on the question of feeding the dairy cow. Seven years ago, a merchant in Lorneville had a bag of alfalfa seed corn and had never heard of alfalfa. Now he sells a car load or more of seed corn each spring and a merchant is springing up for alfalfa seed. Merchants in other towns in the district also reported largely increased sales of seed corn. The time when farmers used to try to produce cream on timothy hay and barley chop had become a thing of the past. Figures showing the condition of creameries seven years ago, taking in creameries from Lindsay west to Lake Simcoe and comparing them with their output to-day, were given. 90,000 pounds of butter having a value of \$16,200 were the figures for the season seven years ago. This year, the output was \$75,000 of butter having a value of \$138,000. Figures including Mr. Newman stated that there was no excuse after the instruction that had been given, why they should not receive good milk and cream next year.

## MISLED

Have you been misled into believing a modern cream separator needs disks or other complicated parts inside the bowl? Tubulars and dealers selling common separators like you to believe so because they know their machines must have them.

The simple, sanitary, easy-to-clean Shingles Dairy Tubular has nothing in the bowl except the thin piece here shown on the thumb. Compare washing this simple piece with washing the pan full of disks

here shown from a common separator. Yet Tubulars run easiest, skim fastest, and cleanest, wear longest, are the most economical. Tubulars sales exceed most, if not all others combined. Tubulars probably replace more common separators every year than any other maker sells.

The manufacture of Tubulars is one of Canada's leading industries.

WRITE FOR CATALOGUE NO. 225  
 29 Yrs  
**THE SHARPLES SEPARATOR CO.**  
 Toronto, Ont., Winnipeg, Man.

## THE WAY

### OUT

of your inferior position is through the door.

Central Business College of the

**Central Business College**

In this school you may enjoy practical training at a small cost of time and money which will positively bring you a good salary. Particulars free. Please write and let us help you. Address—

W. M. SHAW, Principal  
 Yonge and Gerrard Streets—Toronto

A Pleased Winner.—The pig I received from Farm and Dairy, which was sent me by Mr. W. J. Murphy, of Rockburn, Que., for a club of seven new subscribers to Farm and Dairy, arrived in fine condition and I must say that I am well pleased with it. I am very thankful to Farm and Dairy for having given me the opportunity of procuring such a pig. It is a credit to Mr. Murphy for such stock.—F. J. Pelletier, Que.

"None of you Hannah, and starting after her. She heard that 'Somebody had given down the feed. Dodd, never wavy basket, own house. He ed the door and st. up with joy. T beautiful story. Mother by those Farlands. They signos, and danced tioned them away head covered w. 'You just keep ain' for you, no needn't think it faces fell. The gan to cry. 'S cried Hannah s open the shed. T this truck in the Hannah entered down huddled log the cold, and I sacred, wondering 'Oh, mother,' est.

#### WE MANUFACTURE

Steel Cheese Vats, Steel Cuck Sinks, Steel Whey Tanks, Steel Whey Leaders, Whey Butter Tanks, Water Tanks, Steel Smoke Stacks, Galvanized Ventilators, Cheese Hoops, Everything guaranteed.

Write for new Catalogue  
**The Steel Trug & Machine Co., Ltd.**  
 Tweed, Ont., Can.

#### FOR SALE AND WANT ADVERTISING

TWO CENTS A WORD CASH WITH ORDER  
**CHEESEMAKER WANTED**—Half interest in up to date factory, and make the cheese, \$1000 Box 15, Farm and Dairy, Peterborough.

**CHEESEMAKERS**—Can secure good winter employment by working for Farm and Dairy. If you want business and are anxious to earn a good wage weekly, write for full particulars to Circulation Manager, Farm and Dairy, Peterboro, Ont.



## THE STRIKE OF HANNAH

Mary E. Wilkins Freeman.  
(Continued from last week.)

SHE made two strides into the great clothes-basket. Then she bundled carefully into it the MacFarlands' Thanksgiving dinner. She had a great respect for this stupendous dinner even in her rebellion. She stowed away everything carefully and daintily in the pots in which the cooking had been done. The enormous turkey crowned the whole, his brown and uncouth drumsticks protruding. Then, without stopping her hat, merely flinging her old cape over her shoulders, out of the back door she plunged, a New England anarchist, not armed with a bomb for her oppressors' destruction, but having a spiritual might compared with which a bomb would have been a toy. She was bearing away what they were craving, she was adjusting forcibly the scales of justice away. She was ridiculous, she was homely, she was terrible.

When Hannah was about half-way home, she met an old man with his young grandson who was escorting him home to Thanksgiving at his mother's. Both stopped and eyed Hannah amazedly. Hannah knew them quite well. Finally the old man spoke in a hoarse voice: "What hev you got in that clothes-basket, Hannah Dodd?"

"None of your business," retorted Hannah, and strode on, leaving them staring after her.

"She heard the old man remark: 'Somebody has give her a Thanksgiving dinner, sony,' and she laughed."

Down the frozen road went Hannah Dodd, never wavering, carrying the heavy basket, and she reached her own house. Her four little girls opened the door and stood staring. Then suddenly their pinched little faces lit up with joy. They thought that this beautiful store had been given to their mother by those rich and great MacFarlands. They rushed down the steps and danced about her. She motioned them away with a shake of her head covered with wind-blown hair. "You jest keep off," said she. "This ain't for you, not a mite of it. You needn't think it is." The children's faces fell. The two younger ones began to cry. "Stop that howling," cried Hannah sternly, "and go and open the sled door. I want to take this truck in there."

When the sled was opened and Hannah entered there were the children huddled together, shivering with the cold, and staring at her with sacred, wondering faces.

"Oh, mother," began Eliza, the oldest.

"Oh mother, what?" asked Hannah setting the basket down carefully.

"What is it all for?"

"Providence," replied Hannah, with an airy grimace. The children continued to stare with round, innocent, frightened eyes. "There ain't one thing in this basket for you, and you needn't think there is," said Hannah. "Have you had your dinner?"

"We were waiting till you got home," replied little Eliza meekly. "Well, go into the house," said Hannah, "and we'll have dinner, and

crowned with and throned on the flight. The country woman in her shabby attire, with her background of poor home and half-starved children was pitted against the rich man, who had the might of gold which prevails in the land, and who, never in his anything which gold could buy, and who had moreover been generally dealt with by nature. George S. MacFarland was a handsome, popular man, whom everybody liked, even loved. His family had disappointed him in no fashion, everything had gone his way.

"What has become of our Thanksgiving dinner?" asked George S. MacFarland. He tried to speak sternly, but he could not do that poor tragic woman with those little frightened faces at her back.

"It is in our wood-shed in your clothes-basket," replied Hannah Dodd.

"In what?"

"In your clothes-basket," said George S. MacFarland had never known that he owned a clothes-basket. His mouth twitched a little, then he cast a glance at the dinner-table in the kitchen.

"You can look," said Hannah, "but you won't see no turkey bones. We had codfish for dinner, and now we're topping off with hasty pudding. We ain't eatin' none of your dinner."

A horrified look came over the man's face. "Are you crazy?" he asked.

"No, I ain't crazy, and I reckon I never shall be," replied Hannah Dodd. "I'm jest lookin' at things



Comfortable home of Mr. T. S. Cornell, Brant Co., Ont. The house was built about 50 years ago, and remodelled about five years ago. It is an up-to-date, cozy farm ground floor.

I can tell you one thing; it was mighty thankful you've got as much as you have. Some children don't have anything."

It was half an hour later, and Hannah and the children were still seated at the table. They had finished eating a hasty pudding which Hannah had made from corn meal, when there came a knock at the door.

Hannah motioned the children to remain where they were, and then she unlatched the door which led directly into the open. She was very white, but unfinching. There stood and opulent in his sable-lined overcoat. He looked at Hannah and she looked at him. In his look was bewilderment and some indignation; in heavy-laden of the earn who at last arise.

Mr. George S. MacFarland was the first to speak. "You are the woman who has been working at my house, aren't you?" he asked.

"Yes, I be," replied Hannah. She looked at him with the utmost pride and defiance, as one who was fairly

square, and I see that some folks have got everything and some have got nothin' and I'm only one, but I'm going to set things right as far as I can. Here Mrs. Maria Gore wouldn't pay me my two dollars last night, because I hadn't all the work done, and here are my children 'most starved, with hardly enough codfish to go round for a Thanksgiving dinner, and all that turkey an' fixin's when you've already eat about all you ought to for one day for breakfast."

Mr. George S. MacFarland stared at Hannah Dodd in a puzzled, interested way. Now he did not look at all angry. Indeed his blue eyes twinkled pleasantly.

"But Mrs. Dodd," he said, "I don't see exactly how you are righted things if you and your children don't have any of our Thanksgiving dinner. You say you won't let them have any."

"I'd see them starve first," said Hannah.

"Then who has the dinner, anyway?"

"Providence," replied Hannah Dodd. "It's Providence that gives

dinners, and everything else, and Providence don't mean things to be so uneven. I'm for giving back things to the one that gave 'em, and let 'em be divided over again. If you rich MacFarlands have grabbed, it's no reason why I should, or why my children should."

"You don't call it stealing then?"

"Stealing is taking something for yourself or them that belong to you," replied Hannah promptly. "I ain't stole."

"You have only put my Thanksgiving dinner on the scales of Justice," said George S. MacFarland. Then a most gentle and winning expression came over the rich man's face. "I can tell you what is the best thing to do," said he.

"What?" asked Hannah suspiciously.

"You take hold of one handle of that basket, and I will take hold of the other, and you and your children come home with me and we'll all have Thanksgiving dinner together."

Hannah still surveyed him with suspicious, incredulous eyes. "You don't mean a word of it."

"Yes, I do. Tell that pretty little eldest girl of yours to hustle her and the children into the warmest things they've got, and we'll start."

It was almost dark when Hannah and George S. MacFarland went to the clothes-basket between them, went up the street, with the children marching behind them, and the windows of the houses were dark with wondering faces. People did not know what it meant. They never knew, for Hannah Dodd kept her own counsel, and taught her children to do likewise, and so did the MacFarlands. When they arrived at the MacFarland house Mr. George S. MacFarland bade Hannah and the children remain in the kitchen, and take the things from the basket and beat them and he would be back soon. Hannah and the children worked fast. They heard exclamations and loud laughs from the other rooms, but could not distinguish anything that was said. Finally Mrs. George S. MacFarland and her daughter Alice came out in the kitchen, and both were smiling.

"We are so glad you and the children are coming to dinner," they said. Then they kissed the children, and Miss Alice took the youngest, little Abby, who snuggled close to her like a cat to the south room.

The fire was good, and it was not long before dinner was on the table. Hannah Dodd sat at Mr. George S. MacFarland's right hand. She felt shy, but she had the native dignity and self-respect of New England, and Maria Gore glowered at first, then she said when a plate was passed to the youngest and talked more than a baby, "She hasn't any jelly."

Alice MacFarland, at whose side the child sat, immediately gave her some. "So she shall have jelly," she said, in her sweet, caressing young voice. Hannah Dodd sat at her. Then she spoke, with a great vigor and tremor of truthfulness.

"I heard you say how much nicer that chicken pie was because it was baked in the brick oven," said she.

"Yes, it was," replied the girl, laughing.

"Well, it wasn't baked in no brick oven. The oven was out of kilter, and it was baked in the stove oven, and just warmed up in the brick oven."

"Well, it was delicious, anyway."

"I didn't want to tell any lies about it, that's all," said Hannah, a quibble or of restrained mirth ran over her gaze. Her little white eyes were too dazed and also too kind to laugh.

Hannah ate her dinner in a sort of agaze. Her little white eyes were too dazed the inequality of possessions of the rich and poor had ended, and she could not for the life of her tell who had capitulated. She looked at her children eating, then at the rich Thanksgiving food of their ancestors.

tors, but he could not tell whether the rich MacFarlands were dividing with her, or she with them.

It seemed to her that she was on a pinnacle of thanksgiving for the present. She scarcely, for a moment, remembered the past, and she certainly had no provision of the future, in which she was to live with her children in the old MacFarland house, she was taking the place of Mrs. Maria Gore as caretaker, while Maria was pensioned and sent west to live with a niece. She watched her children eat, and she ate also, but as for herself, she realized no sorrow except that of a universal love and kindness which she had not thought existed, and an enormous thankfulness to God, and a comradeship with all who partook of his bounty.

(The End.)

## The Upward Look

### Temptations

For we have not an high priest which cannot be touched with the feeling of our infirmities; but was in all points tempted like as we are, yet without sin.

Let us therefore come boldly unto the throne of grace, that we may obtain mercy, and find grace to help in time of need.—Heb. 4, 15, 16.

The evil spirit, who is constantly watching for opportunities to tempt us and to discourage us in our efforts to lead better Christian lives, is wonderfully ingenious in the methods he adopts. One of his favorite actions is to put sinful thoughts in our minds and then endeavor to persuade us that they are our own and that we must be very wicked or we would not have such evil conceptions. This method he knows, is apt to confound, confuse and discourage us especially if we have not been long started in Christian life. When Satan discourages us we are more ready to listen to his further suggestions and to doubt God's power and willingness to help us.

Do not sin when we have evil thoughts. We sin only when we listen to and act upon them. Evil thoughts, strange as it may seem, are a means by which we advance in

grace and in Christian power. Every time we refuse to listen to them and resolutely cast them out of our minds we weaken the devil's hold upon us and we find it easier to reject similar temptations in the future. When we resist the devil he flees from us.

Our text shows that even Christ was tempted and yet He was without sin. This was because He refused to act upon the devil's suggestions. Christ must have been tempted much more severely than we are. In Luke 4, verses one to thirteen, we read that Christ was tempted by the devil in the wilderness "for forty days." This proves that the devil put evil thoughts into the mind, even of the Son of God. Notice carefully verse thirteen wherein it says that after the devil had ended the temptation he departed from Christ for a season. This clearly implies that he returned later with further temptations.

It is because Christ was tempted just as we are that He is able to sympathize with us in our struggles and why He is glad to help us in our times of need. When we are tempted we must remember that we are not tempted by God (James 1, 13, 14), but by the devil.

Evil thoughts are a sign that we are in danger of sinning and a warning that we should pray for strength and help to enable us to overcome the devil. It is a glorious assurance we have that if we are in earnest in our desire for help Christ will grant it to us for we know that He is able to save them to the uttermost that come unto God by Him and that He ever liveth to make intercession for them. (Hebrews 7: 25). Every time we ask God and receive this aid we draw nearer and nearer to God. Thus we can do as the apostle James directs when he says, "My brethren, count it all joy when ye fall into divers temptations." (James 1, 2)—I.H.N.

\*\*\*

### Country Homes

Bertha A. Duncan, Emery, Ont.

(Concluded from last week)

Having considered the matter itself one must not forget the outward surroundings. The country affords more space than the city to show off a beautiful house. The beauty of many a city home is overlooked by being situated so close to the street and hemmed in by other houses. In the country, we are not so crowded for

space, and can have a lawn, garden, orchard, and probably a tennis court where use, beauty and pleasure may be linked together. Here there may be much artistic taste displayed in the arrangement of these outward surroundings. The back and front lawns might be separated by a hedge, grape arbor, shrubs or even a wire fence covered with vines. The backyard may be screened from view in this way, but it does not follow, however, that it should be a catch all for ash barrels, tin cans, and all kinds of rubbish. On the contrary it should be as carefully cared for as the front lawn and made as pleasant as possible. It costs very little for shrubs, vines and seeds to beautify the home surroundings, and certainly affords much pleasure to be placed in front of the high-growing, and so arranged that there will be a succession of bloom, having together colors that will harmonize instead of clash.

After all, it is not four walls and a roof that are of so much importance in the making of a home, as the life within the walls. Each member of the family can add his or her share to the pleasure of the home life. Preferably the simplest life is best, and this rests with the head of the house to see that everything in the house is convenient, simple, useful and necessary, and that some definite plan exists for doing the work, with a view to having more leisure time. The same arrangement for a week's work may not suit in any two houses, so that each housewife must think for herself.

There should be a time for meals, and each should put forth special effort to be punctual. Those who prepare wholesome meals and have unkind remarks passed about the food by people coming in late when things are not just as nice as they were at the appointed hour will realize the necessity of punctuality at meals. This could be taught to children, to make the household affairs run more smoothly, and more pleasantly.

Usually in the country people find, or rather take, very little time for reading. There should be at least a

little time for reading each day, to keep abreast of the times, and every home should be provided with a newspaper and some good magazines, and books along lines of interest to the family. In the living room, should be found every possible comfort provided for the family, when they meet during their spare moments of the day to enjoy a quiet hour together. Nor should music be neglected—"Music hath charms." Those who have a talent along that line might be allowed to cultivate it, as far as means will permit. Some of the simple airs are, in many instances, more pleasing than classical music, and add much to the entertainment in the home.

There are a great many games and means of affording amusement, and it is the duty of every mother and daughter in the home to do her utmost to make life there attractive, so

No Work Washing Clothes Wash

**"New Century" Washing Machine**

No scalded hands—no tired arms—no strained back—no rubbing—no all-day spent over the wash tub. The picture shows the "New Century" way of washing. And you can wash a tubful of clothes in 3 minutes. The New Wringer Attachment makes the wringing easy, too, and drains the water right into the tub, 50¢—delivered at any railway station in Ontario or Quebec. Write for a free booklet that tells all about the "New Century."

Dunsmuir St.,  
St. Louis,  
Canada, Ont.

82

## "Puritan" Reacting Washing Machine

The machine with the improved roller gear—a time and labor saving invention, exclusive with the "Puritan."

Then, there's the extra heavy Balance

means easy running.



"Puritan" Washers take all the work out of washday. Write us if your dealer does not handle the "Puritan."

## "Favorite" Churn

You can churn with your hand—so with your foot—or both together, with the "Favorite." Easiest churn you ever used. Roller bearings make it so. In 8 sizes—churns from 1/2 to 30 gallons of cream. Ask your dealer to show you the "Favorite" or write us for full description.



DAVID MAXWELL & SONS  
St. Mary's, Ont.

# MUSIC FOLIOS FREE

## CONTENTS OF SOME OF THE FOLIOS GIVEN AWAY



### EASY PIANO PIECES

Vol. I. Contents:  
 Abide With Me  
 Behm  
 Cahn  
 The Gypsies (Op. 42, No. 3)  
 Behr  
 Cuckoo's Song  
 Becker  
 Fly, The (Op. 101, No. 8)  
 Gaudin  
 Golden Youth  
 Heinecke  
 Golden's Song (Op. 78)  
 Kahler  
 Good Night  
 Loeschhorn  
 Huppy Days  
 Lichner  
 Peaceful Dreams  
 Behm  
 Petite Tarantelle (Op. 46)  
 Heller  
 Priere Du Matin (Morning Prayer) Op. 130  
 Strossberg  
 Little Hunting Song  
 Schumann  
 Schottische (Op. 185)  
 Strossberg  
 Valse (Op. 272)  
 Duvernoy

### SABBATH ECHOES

A Collection of Best Known Church Hymns with Variations  
 Contents:  
 Abide with Me  
 Adeste Fideles  
 Catechism  
 Come Ye Disconsolate  
 Evening Hymn  
 Holy, Holy, Holy  
 Holy Night  
 Jesu, Lever of My Soul  
 Joy to the World  
 Hallelujah  
 Italian Song  
 Hear ye God to Thee  
 Old Hundred  
 One Sweetly Solemn Th'at  
 Oursard Christian Soldiers  
 Palms, The  
 Prayer from Zampa

### FAMOUS SONGS OF ALL NATIONS

With Original as well as English Words  
 Containing the National Songs of  
 America, Austria, Denmark, England, Finland, France, Germany, Greece, Holland, Ireland, Italy, Norway, Poland, Russia, Scotland, Spain, Sweden, Switzerland and Wales.

### POPULAR DANCE FOLIO

Contents:  
 Blue Danube  
 Waltzes  
 Love's Dream after the Fair  
 Lilli, Schottische  
 The Old Time Favorite, Lullaby  
 A Frangese. March and Two-Step  
 The King's Messenger  
 March and Two-Step  
 On Parade, March and Two-Step  
 Violets

### FAMOUS FLOWER SONGS

Vol. 3  
 Contents:  
 Alpine Rose's Longing  
 Faded Flowers  
 Flowers of Spring  
 Flower Song  
 Forget-Me-Not  
 Necessity of Violets  
 Spindler  
 Pure as Snow  
 Merley Waves of the Ocean

### POPULAR PARLOR PIECES

Vol. 3  
 Contents:  
 Battle of Waterloo  
 Dying Poet  
 Fifth Nocturne  
 Fountain, The  
 La Fantele  
 La Fontaine  
 Pure as Snow  
 Waves of the Ocean

Look over the above list. See which folio you want. Send in your renewal to Farm and Dairy, or your One Yearly Subscription, and we will send you your choice at once. Address:

MUSIC DEPT.,  
**FARM AND DAIRY**  
 PETERBORO, ONT.

Novem  
 that the h  
 icipate a  
 their own  
 emptied th  
 the undesi  
 Country  
 impress ma  
 very dread  
 those of us  
 the freedom  
 veins, awa  
 and noise  
 surrounded  
 there, were  
 are abunda  
 of giving u  
 home with  
 calls forth  
 life affords  
 not get in  
 people over  
 they are li  
 seek city li  
 glare.  
 There is  
 the world—

hat the husbands and sons may anticipate a pleasant evening around their own fireside. They will not be tempted then to look for pleasure in the undesirable places.

Country homes and country life impress many of our city friends as very dreary and monotonous. For those of us who have grown up with the freedom of country life in our veins, away from the smoke, dust and noise of the city, where we are surrounded by all the beauties of Nature, where fresh air and sunshine are abundant and free, the prospect of giving up such luxuries for a city home with its cramped surroundings, calls forth considerable sacrifice. City life affords advantages which one does not get in the country, but too often people overlook the comforts with which they are blessed in the country, and seek city life with all its rush and glare.

There is too much discontent in the world—a constant desire to sud-

denly gain wealth, but after all of what use is it, if one has not health? An abundance of fresh air, sunshine and good food are three important factors in health, and where can they be gotten better than in the country? To teach children the necessity of these, and interest them more in their homes, is important, and a step towards carrying out the Women's Institute motto, "For Home and Country."

\*\*\*

**Good Farms Competition**

We are indeed interested in Farm and Dairy. We owe many comforts to it. The Good Farms Competition Dairy gave a stimulus to my husband and myself, particularly to him, that I am sure nothing else on earth could have done. It reached a point that I myself could not have touched, and now my only fear is that we may be getting too proud. But oh, the joy

of it all. I see steady progress all along the lines of our work and it is all owing to these blessed competitions, making us better farmers, better citizens and having more faith in ourselves. We can do so much more, if we only have the desire. To desire what you want, to know what you want and to work for what you want, is a good creed for success.—"Aunt Faithie."

\*\*\*  
**Useful Presents**

One of our new Cook Books would make a most useful holiday present for one of your friends. Why not send us two new subscriptions to Farm and Dairy and in return we will send you one of these Cook Books, free of cost.

For one new subscription, we can send you a 14k gold Fountain pen, which would be useful to any member of your family. Put these premiums away for Christmas. They make ser-

viceable gifts and do not cost much, a few minutes only, in securing new subscriptions. Our new premium list is full of other equally as interesting and valuable premiums that could be used in the same way. The list is illustrated, and is worth sending for. A post card will bring you one, free

\*\*\*  
I think Farm and Dairy is steadily improving and meeting the wants of the farmers.—Mrs. D.J.M., York Co., Ont.



**HOME KNIT HOSIERY**

These stockings can be knit in minutes on Gearhart's Family Knitter. New machine with Ribbing Attachment. Knits everything for home or trade, from factory or home-spun yarns. Ribate on duty or cross charge free. All year around. Write to-day for catalog and free samples of work.

Address:—J. E. GEARHART, Box 8, CLEARFIELD, PA.

# EATON'S

## CHRISTMAS CATALOGUE

### READY NOW

### WRITE FOR IT TO-DAY

THE T. EATON CO LIMITED  
TORONTO CANADA.

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

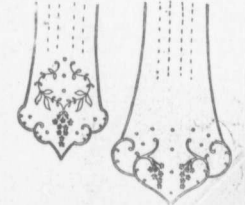
### Embroidery Designs

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.

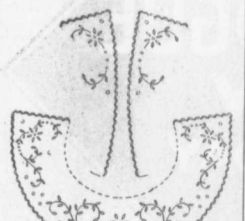


420 Design for a Braided Bolero. Especially adapted to May Manton Pattern No. 6181.

Patterns for stamping front, backs and two sleeve loops are given. Suitable for silk, mohair and cotton and rat-tail cord are appropriate.



436 Design for Embroidering a Double Bolero. The scalloped edges are designed to be padded and buttonhole; the sprays of leaves and the round dots to be worked either in solid embroidery or as eyelets; and the stems are to be outlined.



442 Design for Embroidering a Dutch Collar and Rolled-Over Cuffs. Especially adapted to May Manton Eastern 6316.

The scalloped edges are designed to be buttonhole. The stems are to be outlined and the flowers, leaves and dots can all be worked as eyelets, or the flowers and leaves in solid embroidery and the dots only as eyelets.

To set colors in wash goods add a handful of salt to a three-fourths pail of hot water—also two tablespoons of turpentine. Put the material in this and let remain until the water is cold. This will set the colors permanently and neither sun nor washing will fade them afterward.

Have you won any of our new premiums? If not, better send for Premium List at once.

### OUR HOME CLUB

#### SIMPLE THINGS

One of the most encouraging of modern tendencies is the growing inclination towards simplicity. It has taken us a long time to learn that a clutter of so called, "fancy work" is not necessarily a thing of beauty and a joy forever.

Let us have cushion covers which will encounter the wash tub with impunity; upon which the man of the house may put his head—or feet—without wrecking creations in the shape of tortured looking roses or like monstrosities. Let us have plenty of good books and pictures and we will find that we can easily dispense with superfluous "tidies" and ornaments of startling appearance, useful chiefly for their dust-gathering qualities.

In short let us heartily join the crusade and eliminate from our homes all that cannot be classed as either "useful or beautiful."—"Sister."

#### A BOY'S EXPERIENCE

I have read a lot about how to keep the boys on the nod and I think that I will take a whack at the subject myself, even though it is worn almost threadbare and out-at-the-knees. I was a boy once myself, and I remember I got some schooling until about 12 years of age when one day along came two city boys to visit friends that lived in a big house not far away from my dad's little shack.

As those city boys were a little older than I was, they made fun of my country ways and old patched pants and I didn't like it a bit. I managed to give one of them a good licking one day but the next time both of them pitched into me together and for a week afterwards I had to carry my left eye in a sling and stand up to my meals. Well, there was no fun in that; so, I reasoned it out that if two boys could give me such a drubbing what could a whole city full of boys do to me. The thought of it kept me on the farm. I wonder if it is the reason that I am here now—"The Hired Man."

#### SHALL THE SON BE PAID?

Who ever heard of paying the son wages? Surely that is never done? Yes. But you need not call it wages. Call it what you like. The principle is the same, however, namely, the boy must be getting some returns for his labor commensurate with his idea of the value of the work he performs else he will not be satisfied. Whether or not you would have the boy in that happy or unhappy frame of mind is for you to decide.

"Pay the boy? Why, he will have the farm or so many thousand dollars when I am through with it!" Too true. But you may be a long time

## FOR economy in the table expenses increase the amount of Quaker Oats; eat it at least twice a day. It does more than other foods and costs only a fraction as much.

ding and your son, let us hope, is one of ambition and in his mind he has a real need for something coming in right now. He may not live till his Dad is dead and gone.

You have to pay a hired man. Surely you would rather have a son with you than an ordinary hiredling. If you would keep him in these modern times you will have to pay him. At some future date, you will receive some suggestion, as to ways and means of working out this pay, from "The Son."

### Care in Ordering

We have several orders for patterns on hand, which we are unable to fill, owing to incomplete address of the orders. Several orders give no address, several have omitted size of patterns desired, while others do not state number of patterns desired. We are unable to fill these. All orders should give name and address, number of patterns and size desired. If you are without receipt of patterns ordered, this may be the reason. Better send in duplicate orders at once, if such is the case.

### Buckwheat Cakes

#### BY REQUEST

Ingredients:—1 pt buckwheat meal, 1 qt water, salt according to taste, 1 gill home made yeast. Mix the water (which should be lukewarm if the weather is cold), with the meal add the salt and yeast; beat it well; when light, bake them on a griddle. Grease the griddle; pour on a little of the batter; spread it so as to form a cake about the size of a small breakfast plate; the cakes should be smooth at the edges. When done one side, turn them over, and let bake till a nice light brown. They are much nicer if served hot, and only one or two served on a hot plate.

### New Musical Folios

We publish in this issue in our Musical Folio premium advertisement, the contents of some New Folios, we have been able to secure. They are sure to interest you. Read the advertisement and find how to obtain one of these Folios absolutely free of cost.

### Useful in Filling Lambs

The disagreeable task of filling lambs is greatly lightened by building a contrivance like the one shown in the illustration. This one is large enough to support a five-gallon oil can and



the projecting shelf underneath holds the lamp. If fastened to the wall high enough so that the user will not have to stoop, the convenience will be much greater.

If troubled with perspiring hands, wash frequently in white wine vinegar, and dust with powdered orris root.

### The Sewing Room

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

#### PRINCESS COSTUME 6461

The princess costume, made with Jersey knit and plaited shirt, one of the smartest. This one is closed with buttons and buttonholes at the left of the front, and includes a beaded chemise. The dress is adapted to silk as well as can be utilized for the combinations that are so much in vogue.

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

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

#### FIVE GORED YOKE SKIRT 6456

Every form of the yoke skirt is to be much worn this coming season. It can be either gathered or tucked, and consequently it suits a variety of materials.

The skirt is cut in five gored and is joined to the yoke. The yoke is fitted by means of darts over the hips and the material is made up visibly at the back.

Material required for medium size is 7 1/2 yds 24 or 27, 6 yds 38 or 44 wide.

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

#### CHILD'S YOKE DRESS 6457

A simple little dress such as this can be utilized in a great many different ways as good as it can be made of all-over material, however, and for the handling either lace or embroidery is appropriate.

Material required for medium size (4 yrs) is 3 yds 24, 2 yds 32 or 34, 3 yds 44 in wide, with 4 yds of banding and 3/4 yd 18 in wide for the yoke.

The pattern is cut for children of 4, 5 and 6 yrs and will be mailed on receipt of 10 cts.

#### TUCKED FANCY BLOUSE 6458

The simple tucked blouse is always a pretty one. This model can be utilized either for the old waist or for the new gown. It can be trimmed with contrasting bands as illustrated or with any fancy material that may be preferred.

Material required for medium size is 3 1/2 yds 24 or 4, 2 yds 32 or 34, 3 yds 44 in wide with 1/2 yd of silk for trimming.

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

Write for our New Premium List.

### OUR F...

CARDIAN... have made possible and... we fall all... Up to date... The potato... erage one... er have quite... ple of our ente... chanced a potato... er, which tak... and six pickers... a bush; potato... four horses to... able and pack... hang to the l... out and hacki... with their han... a short time... jws and farm... largest farm in... raised, dig 35... every year and... in the field... good work when... grain crops turn... and late wher... stook. Turnips... are twice as mu... at the present... low; Oats, wh... potatoes, 20c a... 10 lb. bush, 1... from 100 to 22... 30 to 40... mostly done—H...

VILLAGE DES... is generally good... both shores of... north as Rimous... for, \$2.50 for f... apples. The p... light, but some... varieties in L... selling at 53 a...

WATERVILLE... vanced. The fall... ined. Threshers... are well paid... tater, being... found to be an... and sold from 3... early frosts prev... as good as us... dung and the far... rains greatly in... winter apples ar... very scarce an... very good conditi... fall feed. Butter... kinds of feed is... selling at \$1.50... supply has been... but still... dry—J.M.

PRESCOTT—Th... is more than th... train. Farmers a... meal as formerly... have started to... are feeding out... the buckwheat v... The potato cro... ord; a large quan... some farmers com... really. On last... to the cows. The... the same as last... under way and ne... of our farm. Th... hay is selling fo... hay, \$14 to \$15; o... wheat bran, \$2 1/2... a bus; butter, 20... a bush; potatoes... 10c. To \$1 a... W.C.

ANSLEY—Thresh... roots all up. The... up to expectations... were not one-third... but not the 10... for buckwheat wa... The winter bumper



OUR FARMERS CLUB Contributions Invited. PRINCE EDWARD ISLAND

KING'S CO., P. E. I. CARDIGAN BRIDGE.—Heavy rain falls have made potato digging very disagreeable and backward. The weather is very wet fall all through, and still it plows up to date, a lot of low land is flooded. The potato crop in general is only an average one. Some of the growers have quite a lot to dig yet. A number of our enterprising farmers have purchased a potato digger called "The Hooper," which takes four horses to haul it, and six pickers to keep it to work. Others use the tractor diggers which throw the potatoes quite a distance, takes three to four horses to haul it, and eight to 12 pickers to keep it running. Some still hang to the old method of plowing them out and hacking or scratching them out with their hands. One farmer who lives only about 10 miles from here, who owns and farms 500 acres of land and the largest farm in this county, if not on the island, digges 35 acres of potatoes this way every year and would not have a digger in the field. The diggers do not make good work when the land is wet or heavy. The tractor diggers turn out very barfy, and late wheat threshed excellent crop. There are twelve schoolhouses producing here at the present time, leading produce are: Oats, white, 30c bush; black, 42c; potatoes, 25c a bush; turnips, 16c a bush; pork, 10c a lb.; hams, 10c a lb.; beef, from \$100 to \$250 each; milch cows from \$30 to \$40 each. The fall plowing is mostly done.—H. W. F.

QUEBEC LISIET CO., QUE.

VILLAGE DES AULNAIES.—Apple crop is generally good east of Montreal, on both shores of the St. Lawrence, as far north as Rimouski. Price, \$1.50 for summer, \$2.50 for fall, \$3 to \$3.50 for winter apples. The winter crop was generally light, but some orchards of European varieties in L'Islet Co. gave large crops, selling at \$3 a bushel.—A. D.

COMPTON CO., QUE.

WATREVILLE.—Farm work is well advanced. The fall plowing is nearly all finished. Threshing has well done; farmers are well pleased with their crop. Potatoes have been dug and have been found to be an exceptional crop. Potatoes are sold from 35c to 50c a bush. The early frosts prevented the corn from being as good as usual. Turnips are being dug and the farmer finds that the late frosts greatly improved the crop. The winter apples are not very good. Milk is very scarce and is not very good. The price of feed is high. Pork is selling at \$1.50 to \$1.75 a cwt. The water supply has been improved by the fall rains, still many of the wells are dry.—J. M.

ONTARIO.

GRENVILLE CO., ONT.

PRESCOTT.—Threshing is over and there is more than the average quantity of grain. Farmers are not buying as much manure as formerly, and a large number have started to use liquid manure. They are feeding oats to the cows and mixing the buckwheat with oats for the horses. The potato crop was the largest on record; a large quantity about then being given away. Unmarketable ones are being fed to the other farm stock. The price of the same as last year. Plowing is well under way and next week will see a number of farms through. Timothy hay is selling for \$15 to \$16 a ton; wheat, \$14 to \$15; oats, 40c to 42c a bush; winter bran, \$24 a ton; eggs, 35c to 36c a dozen; turkeys, \$7.00 a pair; chickens, 75c to \$1 a pair; hides, 1c a lb.—W. C.

PETERBORO CO., ONT.

ANSLEY.—Threshing is all done, and roots all up. The crop has come up to expectations. Peas, in most cases, were not one-third of a crop; oats did better than the big yield that was looked for; buckwheat was not an average crop. The only bumper crop which was potato-

atoes. They are first class in both quantity and quality. There is also good beef cattle are a good price and are pretty well all picked up. Pasture has been good as the winter had plenty of rain. Stock is in good shape to stand the winter. The prospects are that feed will not be any too plentiful before spring. The season has been so dry that the water in the wells left the farmer little time to plow. It has work is away behind for this season of the year.—A. D.

BRANT CO., ONT.

ST. GEORGE.—Silo filled, apples picked, roots harvested, the snow is over. These are the days when work or comes into his own. The new wheat is short yet, but this is a defect which time and warmer weather will remedy. That an early plowed land is invariably the best; the difference between early and late plowing can be seen almost as far as the plow can see the fields. Dairy production is continuing in strong demand, 30c a lb. being the ruling price for butter on Brantford market. Hogs brought \$7.65 a cwt. at local shipping points last week, with small deliveries. The shortage of both coarse grains and corn has had an effect on live stock and cattle alike; the cattle and hogs having in some cases to worry about their feed. This should not be; stored up for five to six months before spring. Dairy will be boarders through the winter, and it wants boarders in his herd? Then, don't give them boarding house rations.—C. C. S.

OXFORD CO., ONT.

NORWICH.—Pastures have been very poor all fall; weather was very dry and cattle have had to be fed. Many farmers started feeding from silo as soon as they could. A great deal of plowing is being done. A good percentage of fall wheat has been sown, and is looking well. Apple packing is about finished. Cattle are selling at high prices. At auction sales, good fresh milk cows for give beef, Hay brings \$14 a ton; oats, 40c a bush; wheat, 50c a bush; what, \$1; buckwheat, \$2; corn, \$1.50 a bush; meal, \$2; and meal, \$3 a ton; butter, 35c.—Mc.

WATERLOO CO., ONT.

AYR.—Farmers are busy taking up the turnips; they are only a fair crop, the dry weather has retarded their growth. Mangels are a fair crop, as were also potatoes, which are of good quality and free from rot. Apples are not grown to any extent but are not grown to any extent, especially the winter varieties. Fall plow is being pushed along rapidly now, it is the majority being sown with wheat. A good many of the pastures are being pastured pretty well. Early fall feeding of cattle is being practised, which makes a considerable drain on the winter's supply of feed. Cattle are just as scarce and dear as ever, the price running from 4c to 4 1/2 c a lb., depending on size and quality.—J. C. S.

WELLINGTON CO., ONT.

MOUNT FOREST.—The last harvest of the winter wheat is about over and apples, is just drawing to a close. Potatoes for the most part have been a light crop. Mangels are being sown light also but crop is expected to be good. All turnips and apples have been good. Although fall rains have not been heavy but they have been rather frequent and, consequently, better for the crops such as turnips and rape, have made good growth.—C. N.

MIDDLESEX CO., ONT.

KILWORTH.—This is an old settled part; in about 1800 there were about 200 cabins along the river bank. One hundred years of faithful industry is noted in the comfort and prosperity seen on every hand. Splendid pineries at one time covered the land, and from here thousands of little pines were obtained for planting in other parts, for shelter, many years ago. Considerable of the original timber remains uncut, and this adds much to the beauty of the landscape. The pine spruce and other trees build up a fine harmony. Turnips are a fine crop, clean and free from rot. Potatoes are grown gal, at shipper's prices. I note several turkeys about 35c to 36c, with strong demand for all poultry. Eggs are strong at 50c a dozen. All farm produce are in good demand and realize good prices.—P. J. E. O.

ELGIN CO., ONT.

UNION.—An eagle was shot along the creek here on Thanksgiving Day. For a

LIVE HOGS

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

THIS WEEK'S PRICES FOR HOGS DELIVERED AT FACTORY \$7.85 a Cwt.

THE GEO. MATTHEWS CO., LIMITED PETERBOROUGH, HULL, BRANTFORD

while back this strong winged bird has been raiding the farmers' poultry yards, and one flock of hoovie birds were nearly carried away. In color the eagle was cinnamon brown, while its decorations were a golden yellow. It would weigh about ten lbs., and is now being mounted by a taxidermist. The apple crop is very fine. Out of an orchard of 100 trees, one of this village, 1000 blis. of choice apples was packed. To those who are a taxidermist, the sight was beautiful—the big apples in all their coloring coats, completely hid from view the green foliage.—J. E. O.

HURON CO., ONT.

BLITH.—During no time in the whole year has the agricultural season so busy as now. The weather has been anything but favorable for the past three weeks, nevertheless a great deal of work has been done. A goodly number have commensurable plowing done. The fruit crop is very heavy, and has taken up a lot of time and labor, but none of any advantage, as the crop is a large one, the quality is well cared for orchards are in good shape generally, very few have sold their crop of the trees, others picked them and laid the fruit on the ground ready for the packers, while from retail large plantations sold their output E. O. B. and some shipped their own. There was a large number of outside buyers throughout this section of the country this fall. The root crop of the very fall, wheat, especially early sown, is looking fine.—R. E.

BRUCE CO., ONT.

HEPWORTH.—The latter part of October has been very disagreeable weather for all farm work. A large quantity of potatoes are not dug yet, and the fall plowing is getting behind also. Potatoes are a good crop; the blights did not strike them and the tops remained green very late, as there was no heavy frost. But in 30c a bush. Eggs are in demand at 40c to 45c a dozen. Our Farmers' Club meets each week. The topics for November are: "The Growing of Alfalfa," "Shall the Boys and Girls be at School and College?" and "How to Increase the Production of our Farms."—J. K. L.

BRITISH COLUMBIA

NEW WESTMINSTER CO., B.C.

MATSQUI.—The usual fall rains have started; they find most of the crops saved, except roots. Potato digging is in progress; the crop is the best I have ever seen. The price of the crop is 60c a bush, an acre. Hay is in strong demand at \$20 a ton, f.o.b. at shipping point. Hogs are scarce and live weight is freely offered at seller's homes. Apples are in demand at \$1 to \$2.50 a box of 50 lbs. Prices for dairy produce from November 1st to May 1st have been arranged by the Mainland Milk and Cream Shippers' Association and are: Sweet cream, \$1.30 a gal, for 25 per cent. cream; milk, 22 1/2c a gal, at shipper's prices. I note several turkeys about 35c to 36c, with strong demand for all poultry. Eggs are strong at 50c a dozen. All farm produce are in good demand and realize good prices.—P. J. E. O.

SUCCESSFUL TRAVELLERS HAVE AN OUTING

One of the finest trips ever planned commenced on November 1st. The comfort of the Wire France Company took 16 of its agents on a 31 day's outing through the western and southern portions of the continent, winning a sales competition which began a year ago. The company engaged the private car, Sunbeam, of the Pullman Company. It is a combination sleeper and observation car, with private rooms, and the company arranged every detail of the trip, even including the travellers with picture post cards of the different places they will visit. The agents will not incur the slightest expense, all their hotel, theatre, boating and other expenses, being paid for before they leave. J. L. Frost and A. L. Page will personally look after the comfort of the prize winners. The party went direct to Chicago. From there they go to Denver, Colorado Springs, and trip to the West. At the latter place they will be met by Mayor Von Tilburg, and will be shown through some of the gold mines. From there they will go to Salt Lake City, Santa Barbara and Catalina Island, where they will fish in the Pacific Ocean, and see the wonders of the deep through the glass bottomed boats. They will also visit Los Angeles, Santa Fe, Kansas City and Pasadena, and will be the guests of Arthur Outbush on his orange grove. One of the most pleasant features of the trip will be a reception to the party by the Canadian of Pasadena. Those in the party are: F. G. Young, Lennox county, Ontario; Joseph Lavie, Chincoteau county, Quebec; Joseph J. Cox, Perth county, Ontario; Clayton Hamilton, Norfolk county; Duncan McDonald, Huron county; S. K. Moriarty, Welland county; J. J. Matheson, Oxford county; J. H. Marshall, Algoma district; C. M. Crosby, Norfolk county; Allen Becker, Westchester county; R. H. Porter, Richmond county; Walter Cronan, Wentworth county; Henry Tracy, Simcoe county; L. J. W. Wainwright, W. C. Reeve, Middlesex county.

ASBORNINE has proved so successful in curing many horses that have been affected with thoroughpin, or have lame, sore and stiff or otherwise, without removing the hair or laying up the horse, that it seems to give a certainty that can be cured. Pay particular attention to the shoeing. A low heel and long toe give constant sore on the hocks, so change the angle of the foot by using away the toe at the bottom so that the front of the foot stands at an angle of 53 degrees. Apply the foot stands at 53 five times a day, light applications.

ASBORNINE several years and always with good results. I have used it on a mare that I have used it on a 1700 lb. spavin, and in a few days had her going under treatment. Send for booklet, giving detailed information regarding ASBORNINE. If not to be obtained express prepaid upon receipt of \$2.00. W. F. Young, P.D.E., 123 Temple Street, Springfield, Mass. Canadian agents, Lymans Ltd., 300 St. Paul St., Montreal, Que.

Don't put off seeing your friends and getting a club of subscriptions to Farm and Dairy.



of the price being obtained as yet, although considerable business has been done today at around 24%.

CHEESE BOARDS

Utica, N. Y., Nov. 21.-Sales reported as follows: Cheese, 24 lots, of 1572 boxes at 11%.

E. H. FOSTER BANQUETED.

E. H. Foster of the past 19 years has been connected with the International Stock Food Co., was intended for a banquet at the Kaiserhof Hotel...

AYRSHIRE NEWS

Farm and Dairy is the official organ of The Canadian Ayrshire Association, all of whom members are readers of the paper.

AYRSHIRE NEWS

J. G. Clark writes from Montreal: I have just completed the selection of 40 head of Ayrshires for shipment to Alberta.

FOR SALE

THE JERSEY BULL, ROSDALE REV. ELLER, A J. C. 7691; solid fawn color, two white legs, smooth front.

MISCELLANEOUS

FAWORTH AND BENSHEIRE SWINE—Borns and sows for sale. Founders, Corinth, Ont. Maple Leaf Stock Farm.

SUNNYSIDE STOCK FARM

Chester White Swine, Shropshire Sows and Mammoth Bronze Turkeys of the choicest breeding.

PONIES—AYRSHIRES

FOR SALE—Twenty Canadian, Exmoor and Welsh Ponies, 11 to 14% hands in weight.

FOR SALE.

Two fine French-Canadian horse colts, five months old, chestnut, well matched; one eligible for registration.

HAMPSHIRE SWINE

First established herd in Canada; for sale now. Exceptionally fine herd of hand-somely trotted stock from Imp sires.

AYRSHIRES

AYRSHIRES.—Record of Performance work a specialty; young bulls from B. of P. cows, and cows that will go on their feet.

AYRSHIRES

"Le Bois de la Roche" Stock Farm Here are kept the choicest strains of Ayrshires, imported and home bred.

SPRINGHILL AYRSHIRES

Imported and home bred stock of Ayrshires for sale. Write for catalogue showing this fall. Write for price.

ROBT. HUNTER & SONS

409 Distance Phone—47-1-10

IMPORTED AYRSHIRES

Having just landed with 50 head of choice Ayrshires, mostly purchased at the great Barboursville sale...

AYRSHIRE CALVES FOR SALE

RECORD OF PERFORMANCE COWS

PRICE—\$35 when one month old

GUS. LANGELIER

4-9-10 Cap Rouge, Que.

CHEERY BANK STOCK FARM

FOR SALE.—Full calves, sired by Northcote Milkman, the champion bull of Canada.

AYRSHIRE BULL FOR SALE

Ipswich Norman—21005—sired by Walesh checks, calved Sept. 12, 1905, bred by N. Greenhill, Danville, Que.

HOLSTEINS

MAPLE LEAF STOCK FARM

GORDON H. MANHARD

Breeder of Choice Holstein-Friesian Cattle.

LAKEVIEW HOLSTEINS

Herd headed by Count Hengerfeldt Payne De Kol, son of Peterrie Hengerfeldt's Herd De Kol, who has five daughters averaging over 20 lbs. butter in 7 days.

FOR SALE

Two fine French-Canadian horse colts, five months old, chestnut, well matched; one eligible for registration.

FOR SALE

Two fine French-Canadian horse colts, five months old, chestnut, well matched; one eligible for registration.

FOR SALE

Two fine French-Canadian horse colts, five months old, chestnut, well matched; one eligible for registration.

FOR SALE

Two fine French-Canadian horse colts, five months old, chestnut, well matched; one eligible for registration.

FOR SALE

Two fine French-Canadian horse colts, five months old, chestnut, well matched; one eligible for registration.

FOR SALE, HOLSTEIN BULL CALF

Born, Dec. 31, Dam's official record at three years old, 456 lbs. of milk, and 21 lbs. of butter.

RIVERVIEW HERD

FOR SALE, 2 Bull Calves, sired by Sir Augustus, one of King Regis, one of the world's greatest 5-year old sires.

SUNNYDALE

OFFERS BUTTER BOY HERBIVEL, calved April 8th, 1909. He is a good individual and well marked.

LYNDALE HOLSTEINS

Head your Herd with a son of Sunbeam. This is the one you want.

HOMB-BRED AND IMPORTED HOLSTEINS

We must sell at least 45 cows and heifers at once, to make room for the natural increase of our herd.

HOLSTEIN CATTLE

If you are thinking of trying a choice young cow or heifer in calf, come and see our fine stock.

HOLSTEINS

WINNERS IN THE RING

Gold Medal Herd at Ottawa Fair

and

WINNERS AT THE PAIL

See Our A.R.O. Records

Just the kind you want. They combine CONFIRMATION

PRODUCTION

Bull and Heifer Calves for Sale from Our Winners

"LES CHENAUX FARMS"

Vaudreuil, Que.

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

Brooksidge Ayrshires for Sale

AYRSHIRE BULL CALVES, sired by Scotch—19718—a son of Royal Imp., with record of over 15,000 lbs. in less than 10 months.

H. and J. McKee, Norwich, Ont.

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

# Turn to the Phone

## When you are in Doubt as to the Selling Possibilities

Ring the market station. **Instantly** you are brought in direct contact with the people who can most aid you.



## When you Think it is Going to Rain and the Reaper has been very Busy all Day

Ring the weather man. **Instantly** you know whether you must take to the fields with all hands, or sit down and smoke the pipe of peace.



## When Your Barn is on Fire

Ring your nearest neighbors. **Instantly** you know that as fast as animals can travel, fellow tillers of the soil will come to your aid.

Every day you will find your phone "a friend indeed," and it will prove to be a "payer" too.

Booklet 1516 is Free for the asking. Tell us we ought to send it to you.

# THE NORTHERN ELECTRIC AND MANUFACTURING CO. LIMITED



Manufacturers and suppliers of all apparatus and equipment used in the construction, operation and maintenance of Telephone and Power Plants.

**MONTREAL**    **TORONTO**    **WINNIPEG**    **VANCOUVER**    **REGINA**  
 Cor. Notre Dame and Guy Sts.    60 Front St. W.    424 Seymour St.    918 Pender St. West