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VOL. XXX.

NUMBER 39

FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

SEPTEMBER 28

1911.



THE PRIDE OF ITS OWNER—THE PICK OF THE JUDGE

The Peterboro Industrial Exhibition each year puts up a real strong showing of horses, being strongest in the classes for the lighter types. At the recent fair the horse here illustrated was picked for first place in its class. It is owned by Mr. Jas. Bushnell, of Victoria Co., Ont., and has been a winner at the Cobourg Horse Show, and at other fairs. This animal affords a first-class study of the desirable type in roadsters, and the popular gentleman's driver.

—Photo by an Editor of Farm and Dairy.

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Two Leading Features

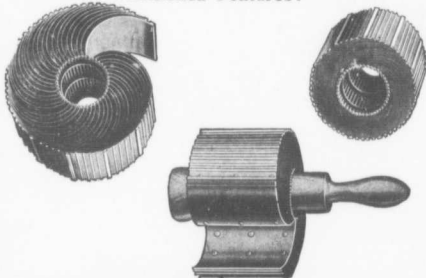
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5. The device, being much more efficient, is a great deal lighter and smaller in order to do the same amount of work, making it still easier to handle, and requires less power to run than other devices of same capacity.

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Hardwood Imported into Canada

Canada is dependent for its lumber supply on the soft woods of the forest much more than is the United States, as seen from the 1910 Forest Products report compiled by the Dominion Forestry Branch and shortly to be published. Of the 1910 Canadian lumber cut, amounting to nearly five billion feet, only one-twentieth consisted of hardwoods or broad-leaved trees, worth barely five million dollars; on the other hand, almost one-quarter of the lumber cut in the United States consists of hardwoods which country had far greater hardwood forests than ever did Canada.

Canada is already feeling a shortage of the hardwood supply and makes up the national deficiency by importing annually from the United States hardwood lumber to the value of seven and a half million dollars. Thus the value of the hardwoods imported into Canada during 1910 exceeded by 50 per cent. the value of the hardwoods manufactured into lumber. Nearly all of these imports are from the United States and consist of the most valuable species such as oak, hickory, tulip or yellow poplar, chestnut, gum, walnut, cherry and a large amount of hard pine which is so frequently used as a hardwood.

From the foregoing figures it is seen that we are becoming more and more dependent upon the United States, whose available supply for export is surely and rapidly decreasing. Whatever can be done to improve the resources of Canada by the elimination of wood waste, and particularly by the development of the small wood lots of Ontario, Southern Quebec and the Maritime provinces, should be done with all possible speed.

Truisms Demonstrated by the Season

N. C. Campbell, Brant Co., Ont.

We farmers are not so helpless as we have led ourselves to believe.

Drought can be effectively fought by intelligent cultivation.

A harrow following the plow will conserve tons of water for use in times of drought.

Surface cultivation and a dust mulch will blanket and retain the subsoil moisture in the corn field.

Harrow work on grain fields and corn fields will seal the stores of moisture and keep them for a time of need.

We farmers need not sit down and simply take what comes. We are far more the arbiter of our fortunes than we often imagine.

We can fight drought by accumulated soil moisture for the crop we can carry our stock over with accumulated supplies of fodder.

The Breeders' Gazette charges that the dairy farmer that has not learned the value of alfalfa and the summer silo has yet to learn the fundamentals of his business.

No other plant will fight a drought as alfalfa will. No other crop will so easily, cheaply and effectively carry the farmer over a scorching summer as will ensiled corn.

The winter silo is only half the possible provision for the economic feeding of farm animals. The summer silo is coming to be part of the other half.

The more progressive dairymen are hitching up to the summer silo. One silo is not enough. Most dairymen can make good use of two.

It is not uncommon to find two silos on many of our progressive dairy farms. Our up-to-date dairymen now recognize that the season of barren pastures must be met with the summer silo.

It has been established that no high-priced land can yield in grass the value it will produce for the silo. The fact ought to be ingrained in the con-

sciousness of every farmer, even if drought did not frequently cut his profits short.

Alfalfa and the summer silo will fight the fight against drought and come out with a glorious victory; no dairymen cannot too soon hitch ear wagons to these stars.

Possible to Overcome Drought

Farmers of the United States needlessly threw away 8,896,000 bushels of winter wheat this year, not to mention an enormous loss in other farm products, simply because they failed to prepare against drought by taking steps to keep moisture in the soil. This is the declaration of Secretary John T. Burns, of the International Dry-Farming Congress, who is now preparing to conduct the Sixth Congress, which meets in Colorado Springs next October.

Mr. Burns had just read the report of the United States Department of Agriculture for 1910, showing that the loss under the 1911 crop. Before he lay a sheaf of wheat raised by J. M. Bradshaw of Peyton, Colo., who has just threshed an average of 20 bushels an acre from 100 acres of patches which ran as high as 57 bushels. On the Bradshaw land only four inches of moisture fell from the time this wheat was planted, September 2, to the day it was cut, July 15, and there was a live stream within 25 miles. This land was summer tilled, that is carefully cultivated, and the weeds kept down the summer before it was planted.

This is one of the tenets of scientific dry-farming as taught by the Congress. It is applicable to every part of the land, says Mr. Burns. The average of all wheat in the United States, according to the Government is only 14.5 bushels, and the quality is 92, as against 92.6 last year. So there is nothing wrong with the 1911 wheat but lack of moisture. "Every farmer in the land could have done as Mr. Bradshaw did with his little four inches of rainfall, had he been intelligent enough to study dry farming methods and willing to do the necessary work," declares Mr. Burns. "Some day they will prepare to meet drought as they do all other adverse phenomena of nature, and overcome it, too."

Was it Poisoned Milk?

It has been reported here that people have been poisoned in a neighboring town by drinking the milk of cows that had eaten poisonous weeds. Is this a possibility?—J. M.

This query was submitted to Prof. J. E. Howitt, Ontario Agricultural College. He gives the following reply: "When I first thought of the subject I was of the opinion that it might be possible for people to be poisoned through drinking milk from cows which had been feeding on poisonous weeds, and it seemed reasonable, in so much as it is a frequent occurrence for the milk to be tainted through eating such weeds as Garlic and Stinkweed. However, after consulting several veterinary surgeons, and they say that it would be impossible for such a thing to happen as, before the cow had taken sufficient poison into the system to taint the milk, she herself would be destroyed by it."

Split Log Drag.—I used the split log drag on two miles of road this season, and it gave excellent satisfaction. The first time we used it we went over the road four times and pulled the mud from the ditches and into the middle, where it was levelled off. I find that the best time to use the drag is after a rain, and when the frost is coming out of the ground.—Jas. Christie, Colchester Co., N.S.

I like Farm and Dairy very well and get good news from it which helps me out greatly.—W. McC., Black Cape, Que.

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FOR WEEK ENDING SEPTEMBER 28, 1911.

No. 39

HIGH PRICED LAND RETURNS PROFITS AND WINS FIRST PRIZE*

Winter Dairying and the Right Kind of Management Bring Satisfactory Returns to Mr. W. F. Bell on His Land Worth Over \$1,000 an Acre. How it is Done and a Brief Description of This First Prize Farm is Here Set Forth by One of the Editors of Farm and Dairy.

WELL stocked, well tilled and well managed. In brief this is a description of Lakeside Farm, the home of W. F. Bell, Carleton Co., Ont., the first prize farm in District No. 2 of the Interprovincial Dairy Farms Competition conducted this year by Farm and Dairy. The buildings and crops are excellently adapted to their purpose—the production of milk for the city market. It would be difficult to select any one department of this farm and say, "This is the outstanding feature." All features are outstanding at Lakeside Farm. Mr. Bell won his premier place in the competition on the uniform excellence of all departments of his farm.

Situated on a first-class stone road five miles from the city of Ottawa, served with convenient railroad and trolley connection with the city, Mr. Bell's farm is splendidly situated for carrying on a city milk business, and he is therefore enabled to carry on profitably dairy farming on unusually high priced land. At the time the farms were judged one of the editors of Farm and Dairy, who was along as one of the judges, made note of some things about this farm which are here set forth for the benefit of Farm and Dairy readers.

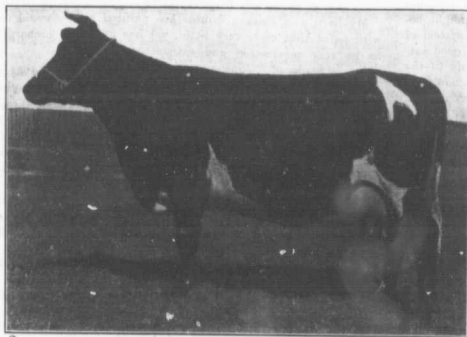
In Mr. Bell's home farm there are 121 acres of land varying from a heavy clay to a sandy loam. The farm is one and one-quarter miles long and is cut into two equal sections by the road alongside which the buildings are situated. The buildings are very conveniently located, the shape of the farm being considered, and permit of drawing in the crops with the least amount of labor.

All of the home farm is under cultivation with the exception of 15 acres of swamp pasture and a few acres of muck back of the buildings. The farm is very conveniently laid out, all of the fields being reached by well kept lanes. Mr. Bell has leased an additional 50 acres at a distance in which he pastures young stock and dry cows.

Good cows are the foundation of successful dairying, and Mr. Bell has laid his foundations

*This article is the second of a series of over 30 articles descriptive of the prize winning farms in the Interprovincial Dairy Farms Prize Competition, which will be published in Farm and Dairy. The first article of the series appeared in Farm and Dairy, Page 5, August 31, and dealt with the 2nd prize farm in Oxford Co., Ont., owned by Mr. Isaac Holland. Draw these articles to the attention of your friends and neighbors. They will like to profit from them and will probably subscribe to Farm and Dairy in order to get these articles. You can tell them also that each of the prize winners are to write for these columns three essays on some phase of their farm work with which they have been particularly successful. These will make most valuable reading.

well. He has the best dairy herd on any farm competing in his district and size of farm considered, he has the greatest number of cows as well. At the time of our visit there were 57 head of cattle on the farm, half being pure bred Holsteins of choice breeding, the rest being high grade Holsteins. Thirty cows were milking, seven were dry. In the months of April and May, 27 of these cows had averaged 1,000 lbs. of milk a day. Most of them had freshened in the fall and winter, and 12 of them had then been milking five months or more. Eight of the cows are run-



A High Producer Just One Degree Removed from a Mongrel

The dam of the cow here illustrated was a very common cow of mixed breeding; the sire was a richly bred registered Holstein. It is worthy your special notice that this fine type of a cow resulted from just one cross of pure blood. In one year she produced over 11,000 lbs. of milk. She is owned by W. F. Bell, Carleton Co., Ont., whose farm is described in the adjoining article.

—Photo by an editor of Farm and Dairy.

ning in the Record of Performance test. Dairy records are kept of the production of individual cows, and all that will not make a good showing are forthwith gotten rid of.

Mr. Bell does not follow the plan common to milkmen around Ottawa and other cities of going out and buying the cows he needs. He raises his own. "Our two-year-old heifers," said he, "will give as much milk as the best of the cows I can buy."

WINTER DAIRYING PREFERRED

Mr. Bell believes in producing milk when it is high in price; therefore he has most of his cows come in during the fall. The City Dairy, to which Mr. Bell supplies his milk, pays an additional eight cents a gallon in the winter months above the summer price, which latter is 20 cents a gallon for 3.5 per cent. milk. Mr. Bell has to deliver his own milk in the city of Ottawa on Saturdays only, the dairy wagons

call at the farm on the other days of the week.

With 57 head of cattle, 37 being milk cows, and feeding as heavily as he does on a small farm, it naturally follows that Mr. Bell buys a good portion of his concentrated feeding stuffs. Last year he purchased 12 tons of bran, 15 tons of gluten and five tons of oil cake. He feeds his cows well, and they treat him handsomely. Mr. Bell's milk cheques average around \$400 a month. The basis of the ration for winter feeding is corn ensilage and a mixture of clover and alfalfa hay. Swede turnips as well are fed, the rules of the City Dairy not prohibiting the feeding of turnips.

PRACTISED SUPPLEMENTARY FEEDING

Green feed is fed to supplement the pastures. By the first of July this year, at the time when the farms were judged, an acre of oats had already been fed, and the start had been made on three acres more sown at the same time as the corn was seeded. For later feeding still, three acres of a mixture of oats, sorghum and tares, is seeded, and Mr. Bell states that this mixture gives excellent satisfaction. All of this that is not needed for green feed is cured for hay. One and one-half acres of Stowell's Evergreen corn carries the cattle over until ensilage is fed again. One acre of Greystone turnips also is used for fall feeding.

Six horses are kept, all but one being of the heavy draught type. Two of these are brood mares, one being a pure bred registered Clyde. Occasionally Mr. Bell has a horse for sale. As all of the milk is sold from this farm, hogs are not popular with Mr. Bell. At the time of our visit there were five pure bred Yorkshires in the piggery, one being a brood sow.

The poultry kept on the farm are pure bred Orpingtons, the foundation stock having been purchased from Mr. J. W. Clark's famous flock in Brant Co. The hens are Mrs. Bell's special care; Mr. Bell also takes an interest in them and admits that they make a very profitable sideline. In the flock are 60 hens and 80 chickens.

PARTICULARS ANENT FARM MANAGEMENT

Weather conditions have been very favorable in the Ottawa district this year. But this alone could not account for the splendid crops on Mr. Bell's farm; they bore testimony of more than favoring natural conditions. The crops were what might be expected on a farm where such a large amount of stock is kept, where so much feed is bought, and where everything fed on the farm goes right back into the soil.

Mr. Bell follows a three-year rotation of corn, oats and clover. Very seldom does he take more than one crop of hay off the land before it is broken up for another crop. The fields near the barns are pastured, the hay being taken from those more distant. This year 33 acres were in

Marked Results in Favor of Alfalfa

John Clark, Grey Co., Ont.

I have fed alfalfa to cattle and sheep for several years, and this last season I used it in feeding hogs.

In feeding my cattle, straw and coarse hay has



Alfalfa of This Year in Thunder Bay District

Alfalfa is being successfully grown in the Slate River Valley near Fort William, Ont. The crop here shown is on Mr. J. B. Hutchison's farm. Mr. Hutchison, who appears in the illustration, sowed 6 acres more last spring to alfalfa. By the middle of August it was over 12 inches in height and a splendid crop.

—Photo by J. G. Collins, B.S.A.

always constituted half of the ration. Fed in this proportion, milk cows, leaf cattle and stockers all showed better results than when other clovers were used.

For feeding sheep I usually had a little coarse hay mixed with the alfalfa, but no straw. My sheep have been in better condition than I ever had them before (and I have been feeding sheep for 50 years). Alfalfa is the best fodder I know of for sheep.

For feeding hogs I gathered the leaves that accumulated on the barn floor as I was forking the alfalfa to the other stock. I mixed these leaves with meal at the rate of half a pound a day for each pig; with this mixture I made a mash (using warm water), allowing it to soak a few hours before feeding. I fed three times a day.

Results: I fed 12 hogs under winter conditions without any milk. The pigs were weaned at two months old on the 2nd day of November, 1910. They were sold March the 27th, 1911. Their average weight was 236 lbs. I fed 689 lbs. of grain product for each hog. They were more sprightly than I ever had my hogs in the winter. There were no signs of crippling.

I have concluded that for hogs alfalfa, fed as above, was of more value than the same weight of grain, as it was not only a feed, but a regulator.

Why is Paint Not Used on Our Barns?

S. J., Oxford Co., Ont.

Nature has done much for our fair province of Ontario. Down here in Oxford county, the slightly rolling land and the beautiful maples that are found everywhere in abundance give the country a park-like appearance that is the delight of visitors, and to my mind quite as beautiful to the eye as the more rugged section of Northern Ontario of which we hear so much.

But what have the people of Oxford done to increase the attractiveness of the landscape? And from my observations I should judge that what I shall say regarding Oxford applies to the greater part of Ontario. We find splendid farm homes surrounded by well-kept lawns and splendid trees. The outbuildings, however, are a blot on the landscape. In comparison with the buildings to the lack, some of our splendid stone residences look little else than ridiculous. Most of the outbuildings have never been guilty of paint,

even on the door casings, and in winter particularly they present a most forlorn appearance.

A few years ago I took a trip into Eastern Canada with some cattle. While I know that comparisons are odious, yet they also may be helpful, so I just wish that some of my neighbors would take a trip down through those Eastern provinces and note the neat appearance of the buildings of the Maritime farm. White-wash is used there in abundance. I have been told that in some sections the farmer who will not white-wash his buildings is considered a disgrace to the neighborhood. Some Ontario men to whom I have mentioned white-wash have smiled in a very superior manner, but did they know what a neat appearance some of those Maritime farmsteads make they would be apt to follow their example and go and do likewise.

The West I find is a land of paint. While going through some of the sections in Manitoba, one of the first things to catch my eye was the splendid appearance made by the farm buildings in their coats of red paint with white trimmings. The Maritime Provinces are the oldest section of Canada. The West is the newest section. Ontario is in between. I hope that in the matter of painting farm buildings Ontario will either retrogress to the standard of the old provinces in this regard or progress to the standard of the new. Either will be a great improvement on our present lare, weather-beaten structures.

How Much Seed Corn to Select

Few farmers save enough seed corn. One bushel of shelled corn will plant from seven to eight acres. One hundred to 120 selected ears will make a bushel of shelled corn. At this rate it will take from 12 to 15 ears to plant one acre. It should be remembered, however, that the first selection is not always perfect; and oft-times, upon second selection and germination test, half of the first selection will be thrown out.

Thus it is seen that there should always be



Strings of 10 Heavy Horses at the Canadian National Exhibition

The strings of 10 make one of the most popular events of the horse judging. As placed by the Judges at Toronto the horses shown in the illustration are, reading from left to right, Clydesdales, Graham, Renfrew Co. and Smith & Richardson; standing third are the Belgians and Percherons of the Hearts' Dright Farm, from New York State.

—Photo by an editor of Farm and Dairy.

selected in the fall at least twice as much seed as one expects to plant. There is little danger of getting too much seed corn. Any surplus, if the seed is good, can usually be sold at a fair price.

Favorable Experience With the Silo

David E. Summers, Dundas Co., Ont.

We erected our first silo last fall. We shipped cream through the winter months, and the ensilage never had any bad effects on the quality of the cream. The time we fed the ensilage was directly after milking.

We are well pleased with the silo and find it a great saver of feed. The cattle came out in fine order last spring, and we found that they gave a larger quantity of milk when fed ensilage than when the old dry corn method was followed.

How Best to Bleed Poultry

Aside from the common and most objectionable method of bleeding poultry, that of chopping or wringing the head off, two methods are followed by those who place poultry on the market dressed. One method is the dislocation of the neck and allowing all the blood to remain and be sold with the bird, the other is that of bleeding in the mouth, leaving the head on the bird with every appearance of being unharmed.

In the practice of these two methods, the former has been the more common. There is some objection to it. The birds killed by this means are unsightly about the head and neck when dressed, and sometimes discoloration of the whole neck is in evidence. There is a growing favor towards dressed poultry that has been bred.

In the United States, the pure food laws compel the bleeding of poultry. One needs only to see birds killed by each of these methods to decide in favor of those that have been bred. The sooner that we in Canada awaken to the fact that poultry should be bled, the better it will be for the industry.

Before killing by the method now recommended as the best the birds are hung up by the legs for a few minutes before being bled. Then the incision is made with a small knife, which severs the jugular vein. The blood for the most part comes away almost instantaneously and is caught in a small tin, which is hooked into the bill of the bird. The knife is then inserted into the brain through a small groove between two bones in the upper part of the mouth and given a slight twist. Braining the bird lets the feathers go and they then come away readily.

This method then is to cut the jugular vein, wait a minute until the blood is out, then turn the knife and brain the bird. If the chicken squawks and gives a little quiver on the knife being inserted into the brain, one knows that he has touched the brain. If done right, every

muscle in the body relaxes, and as feathers are held by little muscles, they naturally let go; two draws, one down and one up on either side of the breast, the same on the back, legs and neck, and the feathers are practically all out.

When through plucking, it is well to let the bird hang for a little time. Then when it is taken down, give it a little snap; there will be a little gurgle and a "spit" of blood will come away and the bird will be perfectly clean.

We like free rural mail delivery fine. One feature about it that appeals to us most is that of having our postoffice right at home. The Government would be justified in extending the service to all farming centres as well as to those who are fortunate in living along rural mail routes.—Nehemiah Allison, Pince Edward Co., Ont.

The Feeders' Corner

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

Silage is Good Feed

W. G. Johnson, Peterboro Co., Ont.
I consider silage equal to roots for feed. We have fed it to our cattle, horses and hogs and they all like it. It is much preferable to corn fodder, which we fed before we had a silo at all. Silage is great stuff to mix with

straw. It gives the whole mass palatability and makes a very cheap bulky feed. To our milk cows we feed it in combination with alfalfa or clover hay.

We have had no trouble with the silage freezing. In removing the silage, the centre is always kept a few inches higher than the outer edges and then there is no thin circle of silage around the edge to freeze easily.

For filling we have our own blower and one of our neighbors has a corn husker and we cooperate in filling our silos. Filling the silo may make a rush of work for a short time, but it is not nearly as much trouble as was hauling in the shocks of corn through the deep snow in the winter, and there was no avoiding this latter operation.

for we found that when the corn was packed in the barn it heated and the mice got the best of the cob. I believe the time is coming when every man who calls himself a farmer will have a silo

Queries on Sheep Feeding

I wish to feed 500 western sheep next winter. What breed or crops would answer our purpose? How many bushels of oats would be required? For roughage we have oat and wheat straw cut. Would oat at one cent a pound be a cheap food or producing mutton at a profit? Elevator screenings would have to be freighted in and probably would be very foul. Would screenings make good feed? Particulars as to amount to feed per head per day and any information required would be gladly received. The idea is to feed from now to June.—S. L. Man.

Sheep feeding may be of almost any breed. The cross between the Shropshire and the Merino, as bred on the western plains, in Alberta and Saskatchewan, is very satisfactory. The mixture Shropshire blood in any cross where the lambs are to be used for feeding is important, for the reason that it lends a length and closeness to the wool that is conducive to comfort under almost any weather conditions, as well of course, as improving the fleashing qualities.

To feed 500 sheep from November to June, where the main roughage will be made up of oat and wheat straw, would require from five to seven bushels of oats a sheep, or in the neighborhood of 3,000 bushels for the 500 lambs. I would suggest, however, that an effort be made to use some roughage other than the straw mentioned. The addition of a certain proportion of hay to the ration would be found very profitable, even though a comparatively high price had to be paid for the same. If a few tons of alfalfa or clover could be secured, the problem of successful feeding would be greatly simplified.

THE MEAL RATION

As to the meal ration, I would suggest that instead of feeding pure oats, a mixture of four parts oats, two parts wheat bran and one part nutted oil cake be used. If no roughage other than straw can be secured, then I would suggest two parts oil cake meal to two parts bran and four parts oats. It is not necessary to crush the oats. The meal ration should be fed about as follows: First week, one-half pound a day a lamb, which for the bunch of 500 would mean 250 pounds a day. The second week, increase to 300 pounds; the third week, 30 pounds; and then keep going up at the rate of 30 pounds a week until the sheep are getting all they will eat, which will probably be when they are receiving 1 3/4-4 pounds a day each, or about 850 or 900 pounds a day for the lot.

Weed seeds might take the place of oats, but I am unable to speak from experience in this matter; that is, I am unable to say whether weed seeds would be found as satisfactory as oats in the mixture as described above. Weed seeds are, of course, a fairly satisfactory feed for sheep, but they must be bought at a low price if they are to prove profitable.

In conclusion, I may say that I am of the opinion that selling the lambs about the end of March or somewhere around Easter will be more profitable than holding them until June. However, local market conditions around Winnipeg might be such as to make the June sale more profitable. The great trouble is the expensive feeder where no hay or roots are handy.—J. H. Bridale, Director, Experimental Farms.

Farmer Silow—Do you alternate your crops?

Farmer Timothy—Yep. Have 'em killed by one thing one year, and another the next.—Puck.

Wetting the Silage.—When the filling of the silo is finally completed, the top should be wet down at the rate of one quart of water per square foot of surface, and thoroughly tramped. This aids greatly in compacting the silage near the top and

Satisfied? Well, Rather!

Editor, Farm and Dairy.—In July I received a letter from Messrs. John Morrin & Son, of Petite Brule, Que., stating that you had purchased a pure bred Ayshire heifer calf from them for me, as my premium for securing 16 new subscribers for Farm and Dairy. Messrs. Morrin kindly requested me to visit them and make my own selection out of six pure bred heifers. As far as my knowledge and judgment goes, I think I picked out a very fine calf. Although I am certain she will never make an Evergreen March I have every reason to hope that she will make a Snowflake. Messrs. Morrin have a fine herd of 30 pure bred Ayshires. They have one pure bred aged cow worthy of special mention; she has never been beaten in her class in two counties of Ontario and Dairy readers may keep a watch for a photo of this cow in the near future.

Mr. Miller, I thank you very much for this premium. Taking Mr. Mor. er's sale into consideration, this is a very valuable animal.—Andrew Boa, Argenteuil Co., Que.

Our live stock premiums have always been popular and like all our premiums they have most liberally repaid our friends for the little effort required of them to secure the new subscribers necessary to entitle them to the premiums they sought.

Should you feel that you would like to start with pure bred stock we'll give you a start with stock that you will be proud of. Write to our Circulation Manager stating what kind of stock you wish, and enquire as to how many new subscribers you will need to obtain to win as a premium the stock you want.

Now is an excellent time to get a club of new subscribers. Therefore, if you are interested, write us at once, and get busy seeing your friends and neighbors and getting them to subscribe to Farm and Dairy and help you to get your club.

reducing the depth of the spoiled material on the surface. In many communities it is a practice to run in a quantity of straw or chaff after finishing with the silage, and the planting oats or other small grain. Where this is done there is seldom any loss of silage worth mentioning and the growth on top is generally fed to the cattle.

Really the whole subject of alfalfa might well be treated under the two heads, "Seeding" and "Harvesting" so very inclusive are these two phases of the subject. Without careful seeding one silage worth mentioning and without careful harvesting it might almost as well not have a crop. Both call for intelligence and painstaking farming, and much patience and hard work. But the rewards of these virtues and labors are heavy yields from the most valuable forage plant. If it is worth nine times as much as timothy, it can well stand a little more time and labor than its average crop.

It pays to advertise. Try it.

FARM M

What to do

I sowed half a bushel this last experiment. I h it was no use t only a waste of g row in this silo only proved twic and is not in a view of course as was fairly high the land was quite the horse would be tedious.

I sowed 10 lbs. to the Agricultural silo, sufficient to inocu or 30 lbs. I used 10 lbs. and sowed and I have as fine one could wish for for the alfalfa w of the last 7. I also sowed 2 lb culture, and that year.

Now, it is a que to do with it, planted and from high, whether it



The Jersey or Canadian National Meadow Grass, Ont. owned by

have over for sent to me it is left on. I cannot unless the wheat with it or will it and rake it o get another light

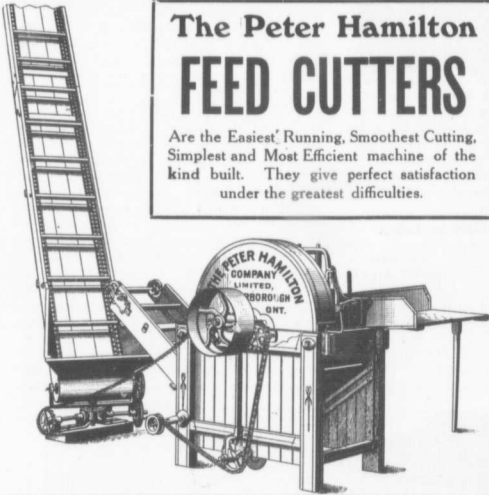
Can you advise with it or will it have had exper Dutch me thro the necessary in a reader of your some time, and I lightened on diff a great deal of in its columns.

Out.

From a some- ence with alfal that it is much appears like to rather than to a little for winter a piece of alf winter-killed fr top; on the other common thing to get it from his protection.

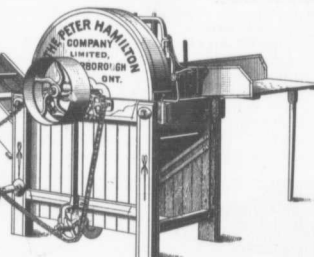
After the har the alfalfa grow you cut it now or not it would prefer to be tured off (ther this practice i then to the growth is should consider to lose any in might come fr the sake of o for the sake of ing through the shade.

A heavy to the winter will



The Peter Hamilton FIELD CUTTERS

Are the Easiest Running, Smoothest Cutting, Simplest and Most Efficient machine of the kind built. They give perfect satisfaction under the greatest difficulties.



LARGE AND SMALL FOR ALL PURPOSES
See our Agent or write for Catalogue
The Peter Hamilton Co. Ltd., Peterborough, Ont.

WESTERN LAND FOR SALE

In areas to suit purchasers, from 160 acres upwards, situated on or near railways in the **Best Wheat, Oat and Stock Growing Districts of SASKATCHEWAN and ALBERTA** 250,000 Acres to choose from

Prices low. Terms generous and helpful. Special inducements given actual settlers, and those requiring blocks for colonization purposes.

Write for particulars. Reliable agents wanted in every county.
F. W. HODSON, & CO., TORONTO, ONT.
Room 100 Temple Building

Branch Office:—North Battleford, Sask.
During 1910 we sold over 133,400 acres; during the past four years we have sold over 400,000.

FARM MANAGEMENT

What to do with his Alfalfa

I sowed half an acre of alfalfa with after this last spring. I sowed it as an experiment. I had been told repeatedly it was no use to sow it, that it was only a waste of money, it would not grow in this country. My land is newly plowed twice, and in this country land is not in good condition with two plowings of course. The soil I sowed it on was fairly high, but on one side of it the land was quite soft, so much so that the horse would sink in it above their knees.

I sowed 10 lbs. of seed. I sent to Guelph to the Agricultural College and procured the micro-culture, which they told me was sufficient to inoculate one bushel of seed, or 50 lbs. I used the whole of it on the 1/2 acre and sowed it over my half acre and I have as fine a looking stand as any one could wish for. When I cut the barley the alfalfa was as high as the straw of the barley, reaching up to the heads. I also sowed 2 lbs. alongside without the culture, and that is nearly as good as the other.

Now, it is a question, in my mind, what to do with it, as it is thick on the ground from eight inches to one foot high, whether it will be too much top to

protecting the stand against undue freezing and thawing from day to day in the early spring and after the snow has melted it will afford protection.

Anent Maturity in Corn

Feeders have long recognized that it is difficult to feed immature corn and keep their stock from getting "off feed." Immature corn is not as high in feeding value as mature corn. It is surely much harder to store and keep. A field of mature corn will yield more pounds of solid corn per acre than a field of immature corn.

In poor corn years corn is worth more per bushel than it is in good corn years; so one is especially interested to have corn in unfavorable years. It is more encouraging and more satisfactory to get 40 bushels an acre every year than to get 50 bushels an acre four years out of five, and the fifth year get nothing because the crop failed to mature. In either case one would get the same number of bushels of corn in five years; but with the sure-crop variety he would have corn for his stock every year, and would have it on the poor years when it is high in price. Furthermore immature corn is low in

Our Legal Adviser

RIGHT TO LAND—A recent provincial survey cut off part of A's land, showing it to be on B's side of line. Two acres of this, half of which has been under cultivation 18 years, has been enclosed with the rest of A's farm for 18 years. If B cuts clover on this and A seizes it, also cuts and removes wire fence B erected by way of claiming it, what can B do? If the council claims the right to use an old side road through my farm in lieu of real side line, on which they spent \$60 and paid for survey of, are they not bound to fence one side of it, or compensate me?—M. M.

1. The enclosure and cultivation by "A" of the two acres in question for 18 years would give "A" a possessory title as against "B," and "A" would have a right to assert his rights in the way spoken of, provided that by doing so he did not actually commit a breach of the peace. A judicial opinion as to the rights of the parties could be obtained in an action brought by either party alleging trespass to his land by the other.

2. If the Council are using a forced road through your farm, they should compensate you, and in considering

the amount of compensation the arbitrators or others determining the amount of your damage should take into consideration the extra amount of fencing to be done by you, but the Council is not liable to do any fencing in such a case.

I received the pure bred Chester White Boar pig sent me by Farm and Dairy for securing nine new subscribers to that paper, and am very much pleased with him. He is bred by Mr. Tyler Leeson of Springfield, Ont. He is certainly a dandy.—R. E. Wheeler, Norfolk Co., Ont.

Ontario Provincial

WINTER FAIR

GUELPH, ONT.

December 11 to 15, 1911

Horses, Beef Cattle, Dairy Cattle, Sheep, Swine, Seeds and Poultry

\$16,000 IN PRIZES

For Prize List apply to—
A. P. WESTERVELT, Sec'y, TORONTO



Under the Scrutiny of Dean Sovell at Toronto Exhibition

The Jersey cows, aged class, as they appeared lined up in the ring at the recent Canadian National Exhibition, are here shown. The first individual is Mrs. Meadow Grass and Ivernia's Queen, from Kirkfield; 3rd is Lady's Primrose, of the exhibits from the Brampton herd.

Photo by an editor of Farm and Dairy.

have over for the winter or not, it seems to me it will amount in winter if left on. I cannot save it for hay this fall unless the weather clears up; it is very wet now here. I have thought to cut it and rake it off the ground and let it get another light growth for the winter. Can you advise me what is best to do with it or will some of your readers who have had experience along these lines furnish me through your columns with the necessary information? I have been a reader of your very valuable paper for some time, and have been very much enlightened on different subjects, and find a great deal of very interesting reading in its columns.—W.E.K., New Liskeard, Ont.

From a somewhat extensive experience with alfalfa we would conclude that it is much safer to leave what appears like too much top on alfalfa rather than to cut it off and have too little for winter. We have yet to see a piece of alfalfa that smothered or winter-killed from having too much top; on the other hand, it is a very common thing for the alfalfa to winter-kill from having too little top or protection.

After the hard freezing nights come the alfalfa grows but little and should you cut it now it is doubtful whether or not it would be for the best. We would prefer to have it partly pastured off (there would be danger in this practice if the soil is wet), rather than to cut it, although unless the growth is exceedingly heavy we should consider it well worth while to lose any immediate returns that might come from the hay or pasture for the sake of ensuring the crop coming through the winter in the best of shape.

A heavy ton on the alfalfa through the winter will hold the snow, thereby

vitality, and often will not grow at all.

A common practice is to select ears that are too large. It is much better to grow three medium-sized mature ears to the hill than it is to grow three larger immature ears per hill. As a general rule, the larger the cob and the deeper the kernel, the longer it will take for the ear to mature. The size of the cob and kernel will naturally have to be decreased from the southern to the northern part of the state.

Indications of immaturity are looseness of kernels on the cob, high percentage of moisture, chaffiness (or thin, poorly developed kernels), adherence of the tip cap to the cob, and generally a large amount of white starch.—Andrew Boss, Minn. Agr. College.

Flushing the Ewes is a practice followed out by the best English shepherds. This practice is also followed by some American farmers. As high a percentage of lambs as possible is desired. Flushing tends to make the ewes more sure as breeders, and also results in more twins. The breeding ewes usually run on pasture after their lambs are weaned, and thus do not maintain a high condition. Two or three weeks before breeding time an extra allowance of feed is given. This feed is such that it will rapidly increase the weight of the ewes. Alfalfa or clover hay, together with corn silage, and some of the concentrates, such as oats, barley, dried brewers' grains and the like, are usually fed. This extra feeding to improve the condition of the ewes just before breeding is known as flushing.



SAVE THE RAIN, YES, EVEN THE DEW

Every drop of water is precious around the farm. You would always have plenty of water if your roof shed every drop that fell. Do you realize how much good water the average roof wastes. Notice how the steam rises as soon as the sun strikes the roof after a rain-fall—what is not absorbed by the spongy wooden shingles evaporates—very little reaching the reservoir—in a light rain, practically none. How different with a metallic roof—it is perfectly dry a few minutes after the rain ceases, for as fast as it falls, almost every drop runs to the reservoir—no absorption, no evaporation.

A Metallic Roof is not only valuable in saving rain water but a heavy dew will some times bring a barrelful of clean, fresh water off the metal roof of an ordinary house or barn—every drop, a clear gain—meaning so much to you in the summertime when the creeks are dry.

How the farmer's wife appreciates the clean, soft water that flows from a metallic roof—so different from the murky, brown fluid, made so impure from draining through the old moss, dust and dirt that quickly collects on the ordinary wood shingle roof.

Eastlake Metallic Shingles

not only make a clean roof but are absolutely **Lightning, Rust, Fire and Weatherproof**. They can be laid by yourself or anyone cheaper and quicker than any other shingle, and will last a lifetime. Roofs shingled with **Eastlake Steel Shingles** 25 years ago are in perfect condition to-day—as actual test—the best guarantee.

Write us for measurements of your roof for estimates of cost. We quote you on rat and mice proof sheet metal gutter lining.

"A Metallic Roof and Galvanized Corrugated Iron Siding on your barn make it positive proof against fire from outside sources, and greatly reduce your insurance rate."

—The Philosopher of Metal Tone.



160 ACRES OF LAND

FOR THE
SETTLER

Large areas of rich agricultural lands, convenient to railways, are now available for settlement in Northern Ontario.

The soil is rich and productive and covered with valuable timber.

For full information regarding homestead regulations, and special colonization rates to settlers, write

The Director of Colonization
Department of Agriculture,
TORONTO

Well DRILLING MACHINES

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

WILLIAMS BROS., ITHACA, N.Y.



SYNOPSIS OF CANADIAN NORTH-WEST LAND REGULATIONS

Any person who is the sole head of a family, or any male over 18 years old, may homestead a quarter section of small land in Manitoba, Saskatchewan or Alberta. The applicant must appear in person at the Dominion Land Agency, or sub-Agency, for the District Entry by proxy may be made at any agency, on certain conditions, by father, mother, son, daughter, brother or sister of intending homesteader.

Duties—Six months residence upon and cultivation of the land in each of three years. A homesteader may file within nine miles of his homestead on a farm of at least 30 acres solely owned and occupied by him or by his father, mother, son, daughter, brother or sister.

In certain districts a homesteader of good standing may pre-empt a quarter section adjoining his homestead. Price \$5 per acre. Duties—Must reside upon the homestead or pre-emption six months in each of six years from date of homestead entry (including the time required to earn homestead patent) and cultivate fifty acres extra.

A homesteader who has exhausted his homestead right and cannot obtain a pre-emption may enter for a purchased homestead in certain districts. Price \$5 per acre. Duties—Must reside six months in each of three years, cultivate fifty acres and erect a house worth \$200.

W. W. OOEY,

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

Our Latest Booklet on

RUBEROID RIFLING

Trade Mark Registered. Pronounce it RUE-BER-OID.

is entitled, "RUBEROID—Why?"

There's nothing dry or heavy about it. It's a breezy little story of some of the adventures of "The Ruberoid Man."

But at the same time you'll find it just as full of sound, common-sense roofing information as it is of interest.

Write to-day for a copy of "Ruberoid—Why?" (No. 2)—it's free for the asking.

Have you ever seen "SOVEREIGN" Sheathing Felt? If you haven't, ask for a sample of it, too.

THE STANDARD PAINT CO. OF CANADA, Limited

286 St. James St., Montreal
178 Bannatyne Ave. East, Winnipeg
25 Pender St., West, Vancouver

HORTICULTURE

Harvesting and Marketing Onions

Fred Smith, Brant Co., Ont.

The method we have followed for over 20 years in harvesting our onions has been to pull them by hand or run a knife attached to the cultivator under them. The latter is the quicker and easier way, but the ground has to be clean from weeds.

After loosening the onions from the ground they are pulled together in windrows, usually six rows in one. They are allowed to dry down thoroughly before topping operations begin, which is generally within about 10 days. The number of days depends upon the condition of the crop when it is pulled. If the tops wilt down naturally without being rolled, they will be ready to top within that time.

Some use shears to top with, but I prefer an old case knife with a blade four inches long with a rounded, blunt end to prevent backing of the fingers. Onions topped in the forenoon are better sacked up in the afternoon when they are dry and then removed to shelter.

Onions should never be picked up wet under any circumstances as it makes them dirty and is apt to discolor them. Years ago it was the practice to allow the onions to remain on the ground for several days after topping to cure in the sun. This is a great mistake. The sun not only makes them strong but badly discolors them. The side exposed most will turn green which is undesirable from a market standpoint.

ANOTHER METHOD

In 1909 I followed a different method and in my judgment a far better one. In the winter of 1909 I made 1,000 bushel crates with slotted sides, ends, and bottoms. The measurement of the crates was 12 inches high, 13 wide, and 18 long. The slats were nailed to three-cornered posts, leaving an inch space between each slat. The slats were three-eighths of an inch thick.

The onions were cut loose with a half round knife attached to the cultivator and allowed to dry for a few days. They were then raked into windrows of 12 rows each, a wooden rake being used. They were then

crated with the tops on and removed to shelter and allowed to cure for two weeks or more if necessary before being topped.

I find that onions handled in this way are a better color and splendid keepers. An advantage gained by using the crates is that if bad weather comes and you cannot work outside your help loses no time.

These crates are made by being topped with a topping machine run by a gasoline engine. We have a topper here, made by a local man, that with a few improvements will be a money-maker success. It is made with two inch steel rollers six feet long and has six rollers. The rollers run in pairs and are set on a slant. The onions are piled in one end and as they run over the rollers the tops are pulled off and the onions run out into a bag.

I always sell my onions in cartons. One last week they were topped up in 80 pound sacks. Now the buyers want the 75 pound sack, which is the standard sack. I run all my onions over a wooden screen with one inch and a half apert which removes all the dirt and picking

Great For So Little Work

The fountain pen I have just received for securing one new subscriber to Farm and Dairy in 1911 is a premium for so little work. I am very much pleased with it. I hope to get more new subscribers for Farm and Dairy in the future, and wish it every success.—Arthur Nelson, Northumberland Co., Ont.

Onions. Grown or spoiled ones are picked out. I never ship out a car of onions without sorting them over the screen and every onion only been sacked up for a few days.

To Grow Trees From the Pits

Please state in Farm and Dairy the best way to raise "peaches" and "plums" from the pit. Which will it be in the fall, or take them up in the spring and crack them, or will they come up in the spring? Which is the best kind or kinds of fruit to bud in both cases?—A. F. D., Norfolk Co., Ont.

Under ordinary conditions a large percentage of peach and plum pits will germinate in spring if planted the fall previous. Those which the frost does not split can be cracked in spring and will then germinate satisfactorily.

The best commercial peachers are Yellow St. John, Early Crawford and Elberta. Crosby and Fitzgerald are harder and might be more suited to your correspondent's locality.

Some of the best plums are Bradshaw, Shipper's Pride, Lombard, Grand Duke, Reine Claude, Prof. J. W. Crow, O.A.C., Guelph, Ont.

British Columbia's Example

W. A. MacIntosh, Birmingham, E.C. British Columbia has set an example which the rest of Canada would do well to follow. The boxes of British Columbia fruit are beautifully decorated and as the fruit itself is always most carefully selected, these boxes have established a reputation second to none in Great Britain. The only complaint ever heard is that so few of them are put up.

There may be many reasons why British Columbia is not able to export larger quantities of choice fruit heretofore than offered in the nearby provinces of Alberta and Saskatchewan, but such reasons do not apply as obstacles to eastern Canadian shippers adopting the methods of the West. It will be quite easy to lose money through lack of care in selec-

tion or in packing the fruit, but there is every reason to suppose that any who undertake the matter seriously and ship to this country 40-lb. boxes neat and attractive looking on the outside, and containing nothing but choice fruit, will undoubtedly reap a rich reward.

Dimensions of a Box Package

Kindly let me know the size of a box that will hold a bushel of apples or pears, and containing nothing but choice fruit, will undoubtedly reap a rich reward.

The standard bushel apple box is 20 inches long, 11 inches wide, and 10 inches deep. There is no standard half-bushel box for apples, although pears are marketed in what is called a half box.

The standard full size box for pears is 20 inches long, 11 inches wide, and eight inches deep. The half box for pears is the same size as standard box, but only four inches deep. A box to hold a half bushel of apples would require to be 20 inches by 11 by five.—Prof. J. W. Crow, O.A.C., Guelph, Ont.

A Talk on Renting Orchards

(Concluded from page 4)

evaporator and cider mill. Of course, we also plan to have a larger percentage of No. 1 apples by practicing good methods of orchard culture. "But where does the farmer come in?" was asked. "Would it be better for him to go to work and improve his own orchard?"

"WHEN THE FARMER comes in," I asked, "it would?" was the answer. "But the fact remains that he does not do it. By giving his orchard to us he is getting the much of it as he ever did. The orchard is getting better care and is being made more valuable every year. In addition we are giving him a good lesson in spraying and in orchard culture. Had the orchards been rented to us, we are not so sure previously it is a question whether or not they would have had an orchard at all in 10 years. We are not philanthropists but just really care and are doing some good." Farmers are not all leaving to us, and our work will be an object lesson to this class. The mere fact that wealthy men are willing to put money into the same project, that we have been trying to teach to them through our demonstration orchards, will give them some confidence in demonstration orchard methods."

"Speaking of their work this present year, Mr. Metcalf said that they had been hampered by being unable to spray in the district of spraying materials. They lost part of the spraying when the trees were in a dormant condition, but for the last of the season they had 40 power sprayers, and all of the orchards had been thoroughly sprayed.

Next winter it is planned to have the district superintendents at least take the best course of the year at the Ontario Agricultural College.

DESTRUCTIVE METHODS NOT PRACTICED
"This year we have endeavored to get the dead wood and the thick stuff trimmed out of the trees. Some were in bad shape. We do not intend to butcher the orchards for immediate results, as has been feared by some. The main object is to get the trees as well as we could be advocated by Professor Crow or any other horticulturist."

In regard to the fruit crop in Ontario, Mr. Metcalf is looking for a light crop. "Duchess" and "Waltham" will be lots of Wealthys. Some of our Wealthy orchards in Prince Edward county have had to be pruned. They will be very few Baldwins and only a medium crop of Spys. Ben Davis and Greenings will be a fair crop. The north shore of Lake St. Lawrence has the best apple crop of any part of the province."

POULT

Warm Houses

J. H. Clark,

Too many of our hens must be wintered. We are out that fresh in winter and do not get into a poultry house \$200 that I would see I have this nicely laid out. It was absolutely ideal of a poultry house is open in the fall. Experience has shown that the birds will lay in the fall.

Some years ago I noticed that the chickens out of here seen on the 25th of the month. I was very glad to see the eggs. I was very glad to see the eggs. I was very glad to see the eggs.

Extensive Poultry

A bulletin of Poultry, describing of fattening, and some of the data on the feed birds, has just been published by the United States Department of Agriculture. It gives information on so far as known in connection with the raising of the birds.

The successful poultry raiser gives instructions on so far as known in connection with the raising of the birds. The successful poultry raiser gives instructions on so far as known in connection with the raising of the birds. The successful poultry raiser gives instructions on so far as known in connection with the raising of the birds.

"Crude feeding method employed in most of the large farms, with six crates. Birds fed on concentrated feeds, or they may need a greater variety."

MILK HAS IMPROVED
"Milk seems to have been influenced by the process, keeping condition under the best is not as good as some fine flocks should be two or three feed the amount on all the birds. The main object is to get the time have been fed as they can feed a small amount of a greater one. The milk will remain in the milk."

The conclusion investigation shows some flocks should be in fattening. The main object is to get the time have been fed as they can feed a small amount of a greater one. The milk will remain in the milk."

POULTRY YARD

Warm Houses Not Necessary

J. H. Clark, Brant Co., Ont.

Too many of us have the idea that hens must be warm to give winter eggs. We are just beginning to find out that fresh air is necessary even in winter and that a hen sitting in a warm house does not go together. I was in a poultry house recently costing \$800 that I would not exchange for one I have that cost \$60. It was nicely lathed and plastered, but there was absolutely no ventilation. My ideal of a poultry house is one that is open in the front and moderately cheap. Experience teaches us that hens will lay in winter.

Some years ago when at North Bay I noticed that the hotel keeper kept chickens out of doors altogether. I saw that his hens were laying in the snow when the temperature was 45 degrees below zero. And those hens were laying too.

Extensive Poultry Fattening

A bulletin entitled "Fattening Poultry," describing successful methods of fattening poultry on a large scale and giving complete data on the feeding of over 100,000 birds, has just been issued by the United States Department of Agriculture. It gives information of operations on an extensive scale and so far as known is the first publication showing the cost of producing a pound of gain in poultry.

"The successful feeding of poultry depends on the ability of the feeder to notice the condition of the chickens on feed." is one of the fundamentals laid down by the bulletin. The common practice in poultry raising is to feed once in 15 days or less. Most of the milk-fed chickens are fed 14 days. Practically all of the special feeding in this country involves the use of milk, which produces the "milk-fed" chickens of the market. Milk while the least expensive, seems to be the most essential constituent of the ration, and when a feeder cannot get milk in some form he generally does not attempt to fatten poultry commercially.

"Rate feeding from troughs is the method employed in this country by most of the large fattening establishments, with six to 10 fowls in a cage. Birds fed only for a short time may be forced on highly concentrated feeds, whereas if they are fed for a longer time they may need a ration containing a greater variety and less concentrated.

MILK HAS IMPORTANT INFLUENCE

"Milk seems to have a very important influence on the digestive process, keeping the fowls in good condition under forced feeding. Beef tallow is used to some extent, but it is not as good as milk. At the beginning it should be fed lightly for two or three feeds, gradually increasing the amount until they do not clean up all that is given to them. The main object should be to keep their appetites keen and at the same time have them consume as much feed as they can assimilate. By feeding a small amount often they will eat a greater quantity and their appetites will remain keener."

The conclusions reached by the investigation show that general purpose fowls make more economical gains in fattening than the Me-Hirons fowls. The average response will get better results in fattening by feeding three times rather than twice daily. It was found that the average gain for a large lot of poultry was 9.00 cents and the cost of the feed

alone was 7.10 cents. It was also observed that hens made less gain than chickens, in crate fattening, and that soft grit fattening was a more economical feed than oat flour at the present prices of grain.

The Use of Grit

Poultry keepers, in whatever line of the industry they are engaged, whether they are breeding prize winners or table fowls, raising turkeys or producing commercial eggs, should be that the supply of grit does not run short. Grit is as necessary to poultry and all birds as teeth are to animals. Both are used in grinding food, the only difference being that animals grind it in their mouths and birds in their gizzards. Without grit the gizzard cannot grind food any better than the gums that are toothless.

In some parts of the country natural grit is abundant, but if poultry are kept on the same ground from year to year for a considerable time they use up all the sharp grit, and it becomes necessary to supply them with artificial grit. In order to ascertain whether fowls have sufficient grit or whether the gizzard should be examined whenever an opportunity occurs, when a bird dies or is killed for the table. If the gravel in them is sharp it is known that the grit is good, but if you find a lot of soft grit, a quantity of little use as an aid to assimilation, and some sharp grit should be provided. Fowls, chickens, turkeys, etc., are often kept by unthinking poultry keepers in grass runs, where a particle of grit, sharp or otherwise, is not to be picked up, and under those conditions they are expected to thrive, when it is difficult for them even to live.

There are many materials that may be manufactured into grit. Flint and limestone are among the best, as they are very hard, and remain sharp for a long time. Soft materials, such as little use, as they cannot be properly broken without going into dust. Such materials as earthenware, and china, broken into small, make excellent grit. Sharp pit gravel may be used as grit, but sea gravel is of no use, being blunt. Broken oyster shells old mortar and several other rubbishy materials are used as aids to digestion, but cannot entirely take the place of sharp grit.

Killing and Bleeding Poultry

If dressed poultry is to reach the consumer with the best flavor and wholesomeness, the most attractive appearance and in the best possible state of preservation, it must be properly raised, killed and dressed. Granting that the chicken has been bred and fed to be a good eating chicken and that it is ready for slaughter, the first step in the preservation of its good qualities is to starve it for 24 hours, allowing, however, a liberal supply of fresh, clean water during this period. The intestines of the bird having been emptied of food, the next step in the dressing of market poultry is the proper killing and bleeding of the fowl.

Dr. M. E. Pennington of the U. S. Department of Agriculture, after several months of research, has given the following directions as the best method of killing and bleeding poultry:

- (1) Grasp the chicken when killing by the bony part of the skull. Do not let the fingers touch the neck.
- (2) Make a small cut with a small, sharp-pointed knife on the right side of the roof of the chicken's mouth, just where the bones of the skull end.
- (3) Brain for dry picking by thrusting the knife through the groove which runs along the middle line of the roof of the mouth until it touches the skull midway between the eyes.

(4) Use a knife which is not more than two inches long, one-fourth inch wide, with a thin, flat blade, a sharp point, and a straight cutting edge.

Dr. Pennington says: "At least 30 per cent. of all the poultry coming into the New York market is incompletely bled. Much of it is so badly bled that it results in a loss of two cents to five cents a pound, as compared with the corresponding poultry which is well bled and in good order. Aside from the appearance of incompletely bled chickens, their keeping properties are very inferior. The flesh loses its firmness sooner; its flavor is not so good; the odor of stale flesh and finally of putrefaction come sooner, and in every way the product is more perishable."

Guelph Winter Fair Notes

In a little over ten weeks, or on Monday, December 11th, the Ontario Provincial Winter Fair will be in full swing at Guelph. Exhibitors who have been successful at fall fairs should at once get a copy of the prize list from A. P. Westervelt, Secretary, Toronto, to see what large prizes they can compete for. They are in the all probability, decide to carry on their exhibits and win their share of the money at the Winter Fair. In all, over \$16,000.00 are offered in prizes for the leading kinds of horses, beef and dairy cattle, sheep, swine, poultry and seeds.

Horse exhibitors will be glad to learn that a new building is being erected this year with stalls for 100 horses. The Fair buildings will now provide comfortable quarters for 250 horses, 250 beef cattle, 50 dairy cattle, 500 sheep, 500 hogs, 6,000 birds and 2,000 bushels of seed grain. This will make a great show, worthy of the best efforts of breeders and feeders of high class stock.

Special attention is directed to the prizes offered by various county councils with competition confined to amateur exhibitors from the respective counties. The following is a list of the counties donating prizes: Brant, Wellington, H.ilton, Lambton, Ontario, Peel and Norfolk. Exhibitors for county specials may also compete with the same animals for

regular prizes both in the open and amateur classes.

Ottawa Winter Show Prizes

There is probably no Exhibition in Canada which is making more rapid growth than the Eastern Ontario Live Stock and Poultry Show, the great educational show held each January in Ottawa. In recent years, the attendance has been increasing over 10 per cent. annually, while the gain in the number of exhibits has been almost as great. This success is largely due to the generous prize list which is sufficient to bring out very high quality exhibits in large numbers. The different departments and the total of prizes offered in each are as follows:

Horses	.....\$3000.00
Dairy Cattle	.....1400.00
Beef Cattle	.....1600.00
Sheep	.....850.00
Swine	.....850.00
Poultry	.....2750.00
Seeds	.....550.00
Poultry	.....550.00
Total	.....\$11,000.00

There are in all 748 sets in the prize list representing 197 breeds and varieties. The individual prizes are large and in a great many cases more than one prize may be won by the same animal.

A new feature of the prize list this year is the introduction of several classes open only to exhibitors who have never won a first prize at exhibitions held in Ottawa, Toronto, London or Guelph. These will offer special inducement to new exhibitors as they may also show in open classes.

The dates for the next show are January 18 to 19, 1912. Farm and Dairy readers may secure lists by sending a request by post card to D. T. Elderkin, Secretary, Ottawa, Ont.

LAND PLASTER

Car Lots or Any Quantity.

WRITE FOR PRICES

TORONTO BALT WORKS

G. J. OLIFF, Manager.

ELM GROVE POULTRY FARM

FOR SALE—Good Cockerels, Single Comb Black Minorcas, S. C. White Leg-horns, Rose Comb Brown Leg horns and Rouen Ducks.

Long Distance Phone.

J. H. RUTHERFORD

Box 62

Caledon East, Ont.

All ready
for
Galt
Shingles



Don't buy roofing from
force of habit. Be progressive.

Make your new barn better than your old one—make your present one better than ever before—by putting on a roof of "Galt" Steel Shingles. The wood shingles of today can't give you satisfaction and are a constant expense. "Galt" Steel Shingles make a permanent, storm-proof, fire-proof and lightning-proof roof that saves your money for every year in protecting barn and stock, and in doing away with repairs.

"The Kids from Galt" will stick in your mind until you send for a free copy of our book "Roofing Economically." Better write for it today and get it off your mind. We'll send it by return mail.

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

PUBLISHER'S DESK

Subscriptions Coming in Nicely

As a result of the efforts of our friends, the circulation of Farm and Dairy is growing rapidly. Clubs of new subscriptions are pouring in from all parts of the country. Men and women, boys and girls, all seem to be helping us in our effort to increase the circulation to 10,500 by October 15.

Have you noticed the big increase that has taken place during the past week as shown on page four of this issue? By it you will notice that our circulation is now 9,737. This is 363 short of 10,000, and 763 short of the mark that we desire to reach. If we are going to gain our goal it means that everybody must bend to it, we will during the next three weeks. We are not engaging any paid canvassers this week as we are relying on the loyal support of our subscribers to help us to introduce Farm and Dairy to their friends and neighbors, and thus obtain their subscriptions.

A SUCCESSFUL CANVASSER

Mr. MORRISON, of Brockville, who is trying to win our big premium of \$1,500 by securing 1,000 new subscriptions to Farm and Dairy, at \$1 per year, is meeting with most gratifying success. He has done far better than any other person who has ever attempted to win this prize, and he seems almost certain to achieve success. So confident is Mr. Morrison that he will win the prize that he has asked us if we will agree to give him a similar prize if he secures us an additional 1,000 new subscriptions. This week Mr. Morrison sent us over 100 new subscriptions. This makes a total of 372 subscriptions that Mr. Morrison has sent us to date.

A new list has been received during the past week came to hand from Mr. E. Burns Stansell, of Kingslake, Ont., who sent us 24 new subscriptions. Mr. Stansell has not informed us as yet what prize he is working for.

THE WOMEN WORKING

Our women readers seem to be taking a great interest in the contest. Mrs. Rattray, of Hillier, Ont., sent us one new subscription, and took as her prize five patterns. Miss Libbie Tolles of Pakenham, Ont., has won a camera as her premium for securing three new subscriptions. Miss Fanny Tully of Reardon, Man., has shown that Farm and Dairy is popular there. She has sent us the new subscription and claimed as her prize an embroidery stamping outfit.

OTHER AWARDS

Others who have sent us new subscriptions include Mr. A. R. Mallory, of Clarina, who has sent us five, without yet stating what prize he wants, and Mr. John G. Carter, Jr., of Bonquads, Ont., six new subscriptions for a young pure bred Yorkshire sow, Messrs. G. Metzinger, Westneath, Ont., and W. E. Watson, of Pine Grove, Ont., have each sent us one new subscription. Mr. T. Munworthy of Osborne, Ont., has won a fountain pen for sending us one new subscription.

If you have not already started to work to help us in this campaign will you not look over our list of very liberal premium offers that appears on page 11 and start to work without delay. Anything you do to help us increase the circulation of Farm and Dairy will be most appreciated and thus you will help to increase the influence and prestige of this paper, which is doing so much to advance the farming interests of Canada.

Dominion Fruit Crop Report

The dry weather of July and August has continued in all parts of Eastern Canada. The effects of the drought upon the fruit is felt with especial severity in the main fruit districts of Ontario, according to the September report of the Fruit Division, Ottawa. Quebec seems to have suffered less and the injury in Nova Scotia will be apparent largely in the size of the apples. The fruit crop, however, has suffered the usual shortage relatively as is to be noted in pastures and roots. Several very severe storms of wind, accompanied in some cases by hail, are reported, which, added to the effect of the earlier wind and hail storms, will account for a large depreciation of the plum and grape crop particularly.

The prospect for apples as a whole has depreciated slightly. All Duchessa and other first early varieties yielded medium crops which have been harvested in good order and sold at fair prices. Spys are reported to be particularly scarce except in districts 2, 3 and 6, and Baldwins are not quite a medium crop. Greenings are specially abundant. Peaches and pears will be a medium crop. Tomatoes and canners' crops generally will be short. Depredations of insects have not been as serious as in some former years. In the States apple crop will be larger than last year though only medium. England will have a medium crop. The continental crop will be fairly good.

Utilization of Feed by Cattle

It is a fact of common knowledge that marked differences exist between individual animals as regards the returns which they yield for the feed consumed. A current statement is that a good feeder has a greater digestibility than poor one, or that the power of assimilation of the one animal is superior to that of the other, and it has been assumed that the advantage of the better type of animal lay in his ability to produce more flesh or fat from a unit of feed than could the poorer one. It has also been commonly taught, and seems to be generally accepted by animal husbandmen, that the established fact, that young growing animals not only make actually larger gains than more mature ones but likewise more economical gains.

The influence of type and age upon the utilization of feed by cattle has, therefore, been investigated by officials of the Department of Agriculture, and the results published in Bureau of Animal Industry Bulletin No. 128, 1000 TYPE VS. SCRUB.

Two steer calves were selected as the subjects of this investigation, one a pure bred typical beef animal of one of the well known best breeds; the other a "scrub" of mixed breeding. Exhaustive feeding trials were carried out with these animals, including 24 experiments with the respiration calorimeter. Finally the steers were subjected to the slaughter test, whereby the quality of the meat and the relative size of the various cuts were accurately determined. The work is therefore important alike to the practical feeder and the agricultural scientist.

The feeding stuffs used were of the same kind for both animals in all the periods, and of different grades. The were mixed throughout in the same proportions for each steer. At intervals during the time the digestibility of the total ration and the nitrogen balance were determined for each animal.

During each of the three winters covered by the investigation four experiments were made on each animal by means of the respiration cal-

orimeter in order to determine the percentage availability of the energy of the feed consumed. During the first winter, that of 1904-05, the fine stuff used differed from those employed during the ordinary feeding. In the succeeding two winters the grain feeds used were the same, only the amount differing.

While the results fail to show any material difference between the physiological processes of food utilization in the two animals, they do show the pure bred over the scrub steer, due, first to his relatively smaller maintenance requirement and, second, to his ability to consume a larger surplus of feed above the requirement. Both of the facts tend to make the actual production of human food in the form of meat and fat per unit of total feed consumed by the animal notably greater by the pure bred animal.

In the case of the pure bred animal especially, and to a less degree in that of the scrub, it must be recognized less available energy and notably less digestible protein than the amounts called for by the current feeding standards for growing cattle, produce entirely satisfactory gains in live weight.

AGE COUNTS IN GAINS

A distinct influence of age upon the maintenance requirement was observed between the ages of 14 and 39 months, the requirements decreasing relatively as the animals matured. The gain in weight of the scrub as compared with that by the pure bred was costed on the basis of the protein with its accompanying water and to a smaller extent of fat, and therefore represented a materially smaller storage of fat energy. This was also indicated by the results of the block test.

The animals were killed on January 4, 1908. The scrub was rated as "common," and the pure bred was graded "fine." From the total dressed weight and the weights of the several wholesale cuts show the considerably higher percentage of dressed weight in the case of the pure bred which is characteristic of the beef animal, and likewise the predominance of the loin cut over the less valuable cuts of the forequarter in the beef animal as compared with the scrub. The above facts, when taken with the retail cuts show that the proportion of more valuable cuts was notably greater in the pure bred.

Changes in Seed Control Act

During the recent session of Parliament, important changes were made in the Seed Control Act respecting the sale of clover and timothy seed. Under the old Act the inspector sometimes found it difficult to prove violations, though misrepresentations were frequent. As a result of the sale of clover and timothy seed. Under the old Act the inspector sometimes found it difficult to prove violations, though misrepresentations were frequent. As a result of the sale of clover and timothy seed, containing as many as 92 noxious weed seeds an ounce and an unlimited number of other weed seeds such as Foxtail, represent it as his best grade and charge the result that farmers as well as retail merchants who wanted to buy pure seed, have gotten badly contaminated seed and paid high prices for it.

Under the new Act such misrepresentations will be impossible and both farmers and retail merchants will be able to buy their seed more intelligently. Four grades are fixed by the Act for red clover, alfalfa, alfalfa and timothy seed, and all seed sold for seeding purposes by seedsmen must be plainly labelled with the grade. Any seed not grading No. 3, which is a higher standard than the

old prohibitive line of five noxious weed seeds per thousand of good seed, is prohibited from sale. The following are the standards for freedom from weed seeds:

	Red clover,	alfalfa,	Timothy	Alfalfa
	Noxious	All	Noxious	All
	weed	weed	weed	weed
	seeds	seeds	seeds	seeds
	per	oz.	per	oz.
	oz.	per	oz.	per
	oz.	oz.	oz.	oz.
Extra No. 1	30	.....	30
No. 1	100	.....	100
No. 2	200	.....	200
No. 3	400	.....	400

In addition to the standards for freedom from weed seeds, standards for purity in other respects and general appearance are fixed for extra No. 1, No. 1 and No. 2. Double the number of noxious weed seeds are allowed to make an account of the greater difficulty in cleaning the seed. Farmers and seed dealers should have their seed tested and graded before offering it for sale. Samples will be taken from the mails and tested without charge if addressed to the Seed Commissioner, Department of Agriculture, Ottawa.

Any future increase in production and in the profits of farming may come largely from better methods of farming. The soil must be cultivated more intelligently; its fertility must be promoted by the addition of manure, by the destruction of weeds at the season when they may be made useful as fertilizer, and by the complete prevention of such as chas, and the prevention of the growth and development of field crons. The cultivation of more land will not solve the question of more profits. The pure bred costed on the basis of the protein with its accompanying water and to a smaller extent of fat, and therefore represented a materially smaller storage of fat energy. This was also indicated by the results of the block test.

I am much pleased with Farm and Dairy and would not care to be without it.—Clarence F. Elliott, Hastings Co., Ont.

FOR SALE

A Six Horse Power Gas or Gasoline Engine in good running order. Call on Shapley & Muir Co.'s make.

R. B. MOORE, GALT, ONT.

FARM FOR SALE.

150 Acres. West half of lot 15, Co. 1, Smith township, adjoining the territory dairy farm for 30 years. Good state of cultivation. For price and terms apply JAMES STOTHART, Peterboro, Ont. R. R. No. 4.

Any little girl can do the churning with
MAXWELL'S
Favorite Churn.

It makes the smoothest, richest, most delicious butter you ever tasted.

The roller bearings—no hand and foot labor, no creaking at each stroke, even for a child.

All sizes from 1 1/2 to 30 gallons.

Write for catalogue if your dealer does not handle this churn and roller bearings "Cameron" Washers.

David Maxwell & Sons, St. Mary's, Ont.



A Successful

Wm. Turner, I find that our best food stuffs just a basis of success. Each of the inches each cow in the two cows be fed. Regularity in We have our and when they their feet look forward to and will take unity by a in feed at six t season and 5.30 the summer, w June, when we than to the elementary feed at We consider cheapest food w with other grain be fed alone. W the whole year a few in our her cows do not c growers' grain I and in good co ensilage all the v ter part of May

THE CH

The ensilage manager in front of of grains on and then the ad consisting of o parts out cho, wheat and th timothy. A small we usually fed given morning a The noon feed is

Mr. Wm. Turn S. Turner, th slightly with his noted cows. Mr. his standing Farms Compositio

AM
DURING
Dairy

FREE FOR Subscription
Each year a fine pr working for
Repeating
the Two
Lines. Sent

A Successful Feeder Talks*

Wm. Turner, Wentworth Co., Ont. We find that our cows fancy different foods just as people do, and the basis of successful feeding is the study of the individual preferences of each cow in the herd. Barely can two cows be fed alike.

Regularity in feeding is important. We have our regular feeding hours, and when the cows get used to having their feed at certain hours they look forward to being fed at that time and will take notice of any irregularity by a decreased milk flow. We feed at six in the morning, 11:30 in the evening, and 5:30 in the evening. In the summer, with the exception of June, when grass is good, we bring them to the stable and give supplementary feed at noon.

We consider brewers' grains the cheapest food we use when fed along with other grain, but not much can be fed alone. We feed brewers' grains the whole year round. Most of the cows in our herd like this feed, but a few do not care for it. We find that brewers' grain keeps the cows healthy and in good condition. We also feed ensilage all the year except in the latter part of May and in June.

THE GRAIN RATION

The ensilage is first put in the manger in front of a cow, the brewed grains on top of the ensilage, and then the additional grain ration, consisting of one part barley, two parts oat chow, one part peas or wheat and then bran in varying quantities. A small quantity of oil cake we usually feed as well. This feed is given morning and evening in winter. The noon feed in winter consists of a

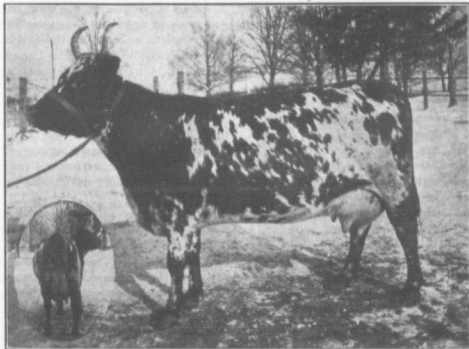
*Mr. Wm. Turner is the son of Mr. A. S. Turner, the Ayrshire breeder who along with his son has developed several noted cows. Mr. Turner's farm took a high standing in the Interprovincial Farms Competition.

ration of chop and bran, and when that is eaten up clean, alfalfa or clover hay is given in such quantities as will be eaten readily. Mangos are fed night and morning after milking. Salt and water are before the cows at all times.

We do not state the amount we give each cow. We consider it impossible to give a general rule. We can, however, give a record of the feed consumed and the milk produced by each individual cow in the herd.

We aim to feed our cows plenty but always to keep them on the hungry side. If when feeding we notice a cow not anxious to eat we take away the feed, and she will have an appetite for the next meal. We find that a cow that is always a little hungry will give more milk than a cow that is over-fed.

Be kind to a cow and she will be kind to you; abuse her and she will abuse you, and you will soon see a difference in the quantity of milk in the pail.



The Ayrshire Which Until Last Month Held World's Record as a 3 Year Old

Speck of Springbank, owned by A. S. Turner & Son, Wentworth Co., Ont., and shown in the above cut, gave in one year 10,355 lbs. milk, 47 lbs. butter fat, her average per cent. of fat being 4.2; this record until the 2nd of August stood as the world's record. The two-year-old Ayrshire heifer, Milkmaid 7th, has out-distanced her by a considerable lead.

Protect Cows from Flies

Spray the cows before they are turned out to pasture in the morning with a mixture of equal parts of coal oil and fish oil. One gill, applied with a spray syringe, will cover the neck, shoulders and legs of one cow.

The following mixture is recommended by the Wisconsin Experiment station: Resin, one and one-half lbs.; common soap, two cakes; fish oil, one-half pint, and water, three gallons. Dissolve the resin by boiling in one gallon of water and the soap out first. When dissolved add the fish oil and the remainder of the water. Stir thoroughly before using. Apply with syringe or brush. This is an excellent fly repellent, cheap and effective.

Why Corn Runs Out

J. O. Duke, Essex Co., Ont.

Many corn growers find that when using the same seed year after year that their corn will "run out." They think that great improvement can be obtained by changing seed occasionally and getting their seed corn from a crop grown on a different kind of soil. A change of seed is good, if one can get seed that has been properly selected. But there is the trouble. Most farmers never think of their seed until they have the ground fitted for planting, when they will hunt through some they happen to have left or will run over to some neighbour who they know had a good field of corn the year before.

This practice is wrong and will give but indifferent results. This is what causes corn to "run out." Now is the time to prepare for next season's corn crop. If we have a good field of corn, let us go through it just before it is cut and select the kind of corn we want.

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

AMPLE REWARDS FOR LITTLE LABOR

FARM AND DAIRY'S LIBERAL PREMIUM OFFERS

DURING the next few weeks while our campaign is under way to increase the circulation of Farm and Dairy to 10,500 by October 15, we are making some unusually liberal premium offers. For instance, instead of asking for Nine new subscriptions to win a pure-bred young pig,

A PURE-BRED PIG FOR ONLY SIX NEW SUBSCRIPTIONS

More complete details of this offer are given elsewhere in this issue. We will also give

A PAIR OF PURE-BRED FOWL FOR ONLY THREE NEW SUBSCRIPTIONS

Premiums that hitherto we have offered for Two new subscriptions, we now offer for only One. Here are some of our great offers:

FOR ONLY ONE NEW SUBSCRIPTION

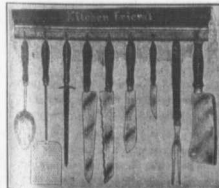
WE WILL GIVE

- A Buck Saw.
- A Fountain Pen, 14 Kt. Gold Point (worth \$1.00)
- Gardener's Knife (Extra Heavy).
- Pruning Shears (Eleven-Inch).
- Books on Agriculture, Horticulture and Dairying (Your Choice of 4).
- Embroidery Stamping Outfit.
- ANY FIVE PATTERNS Shown in Farm and Dairy
- The Canadian Horticulturist for One Year (Published Monthly, 60 cents a year).



FREE for only One New Subscription to Farm & Dairy. Perfect time keeper, a fine premium, worth working for.

Repeating Alarm Clock for Two New Subscriptions. Sent post paid.



FOR ONLY TWO NEW SUBSCRIPTIONS

- A Repeating Alarm Clock.
- Boy's Nickel Plated Watch.
- Ten-Inch Tented Dairy Thermometer.
- Woman's Kitchen Friend.

FOR ONLY THREE NEW SUBSCRIPTIONS

- Roll Film Camera (See Illustration).
- Combination Repair Outfit.
- Bissell's Brunswick Carpet Sweeper.
- 10-Piece Toilet Set.
- Fish Net Lace Curtains, 52 Inches Wide, 3/4 Yds. Long.

FOR ONLY SIX NEW SUBSCRIPTIONS

English Semi-Porcelain Dinner Set of 25 Pieces. (Hitherto we have asked 9 subscriptions for this set.)

FARM & DAIRY CAMERA



It is the best made camera for the price. We know of it. It is a Roll Film camera of the fixed focus box type, taking pictures 2 1/2 x 3 1/2 inches. For three New Yearly Subscriptions to Farm & Dairy at \$1.00 each.

BOY'S NICKEL PLATED WATCH



FREE, post paid, for only two New Subscriptions to Farm and Dairy. Good time keeper, any boy will please every boy. Every boy should have one.

EXTRA SPECIAL—\$15.00 Cash for 25 New Subscriptions each taken at only \$1.00 a year.

Many other premiums, including Books, Household Utensils, Furniture and Live Stock, will be given to you in consideration of the help you render us between now and Oct. 15th.

Start in right away; others will start To-Day.

Subscriptions may commence with our Special Exhibition Number and Illustrated Supplement out next week.

FARM AND DAIRY, Peterboro, Ont.

FARM AND DAIRY AND RURAL HOME

Published by The Rural Publishing Company, Limited.



1. FARM AND DAIRY is published every Thursday. It is the official organ of the British Columbia, Manitoba, Eastern and Western Ontario, Quebec, Dairy and Great Britain, Dairymen's Associations, and of the Canadian Holstein, Ayrshire, and Jersey Cattle Breeders' Associations.

2. SUBSCRIPTION PRICE, \$1.00 a year, strictly in advance. Great Britain, Eastern Ontario, Quebec, Ontario, Canada and Great Britain, add 50c for postage. A year's subscription free for a club of two new subscribers.

3. REMITTANCES should be made by Post Office or Money Order, or Registered Letter. Postage stamps accepted for amounts less than \$1.00. On all checks add 10 cents for exchange fee required at the banks.

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

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

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

CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed \$300. The actual circulation of this issue, including copies of the paper sent subscribers, and copies sent by its agents, and sample copies, varies from 9,000 to 11,000 copies. No subscriptions are accepted for less than the regular subscription rates. Thus our mailing lists do not contain any dead circulation. Several 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 are dealing with our advertisers with our assurance of our advertisers' reliability. We try to admit to our columns only the most reliable advertisers. Should any subscriber have cause to be dissatisfied with the treatment of his orders from any of our advertisers, we will investigate the circumstances fully. Should we find good reason to believe that any of our advertisers are unreliable, even in the slightest degree, we will discontinue immediately the publication of their advertisements. Should the circumstances warrant, we will expose them through the columns of the paper. Thus we will not only protect our readers, but our responsible advertisers as well. In order to be entitled to the benefits of our Protective Policy, you need not include any special letters to advertisers the words, "I saw your advertisement in Farm and Dairy," but a bona fide order must be made to Farm and Dairy within one week from the date of any unsatisfactory transaction. No proofs thereof, and within one month from the date that the advertisement appears, in order to take advantage of the guarantee. We do not undertake to adjust trifling differences between readers and responsible advertisers.

FARM AND DAIRY PETERBORO, ONT.

THE COUNTRY'S VERDICT

By voting against reciprocity last Thursday thousands upon thousands of Canadian farmers showed how needless it is to expect farmers as a class to unite, after only a few months of educational work, in support of any measure, no matter how strongly in their interest it may be, when once the politicians are turned loose in the country. And yet we feel assured that the defeat of the proposal to enlarge the markets for our farm products is not so serious as an erstwhile thought might seem to be the case. Instead, we look forward with the utmost confidence to the outcome that the next few years are likely to produce.

For fifteen years the farmers have been without a champion as regards either of the great political parties. In 1896 the Liberal party was returned to power, largely through the farmers' vote, pledged to seek another market in the United States for the

products of our farms. They were further pledged to lower the tariff by means of which the protected interests were enabled to charge us more than they otherwise could or practically everything we bought. An unsuccessful attempt was made to carry out the first pledge, but practically nothing was done as regards the second. In fact, in this connection, the Liberals adopted the policy of the Conservatives. Since then, until so far, the alliance of both political parties with the manufacturing and protected interests has been of the closest possible character. As farmers we have seen one concession after another inimical to our welfare, granted to the great, well-organized financial interests by the Liberal party, but being unorganized we have been unable to effectively protest.

In the election contest just completed the Liberal party, while still endeavoring to take tender care of our manufacturers, did strive to fulfil the pledge it had given to the farmers of Canada fifteen years before. As farmers we, or many of us, will, when our eyes are opened, have only ourselves to blame for having allowed ourselves to be misled by the waving of the flag and other side issues into voting against a measure that was planned to promote our interests.

Nothing is ever settled that is not settled right. Time will be on the side of those who favor the securing of a wider market in the United States for our farm products. Free farm land in the United States is a thing of the past. Within the next few years the population in the towns and cities of the United States will increase by many millions. The farming population will remain stationary, if it does not decrease. Thus the value of farm products in the States, and of our markets to us, will enhance vastly.

In Canada reverse influences will be at work. Free of our millions of acres of free farm land, the population on our farms will increase far more rapidly than in our cities.

Sir Wm. Whyte, of the Canadian Pacific Railway, estimates that within eight years Saskatchewan alone will produce enough wheat to supply all the home demand and that of Great Britain as well. Within about that time also we are likely to have upwards of one hundred thousand farmers on the farms of New Ontario competing with us in our home markets.

Soon the surplus of our farm products will be so enormous we will be at our wit's end to know what to do with it. Then the folly of our action last Thursday will become apparent even to the most obtuse.

The manufacturing and financial interests were mainly responsible last week for the defeat of the Liberal Government. Almost every citizen in town in Canada pronounced against its policy. In the light of this fact we may expect to see the Liberal party cut loose from the influences that caused its downfall and come out in the open with a policy that will be certain in due time to gain the support of the great majority of the far-

mers in Canada. This, because farmers comprise approximately sixty-six per cent. of our population, will ensure ultimate victory. This policy, of necessity, must include not only the securing of wider markets for farm products, but the increasing of the British preference until we shall have complete free trade with the mother country—as was asked for by the farmers at Ottawa. In addition, it must include a general lowering of the duty on manufactured products, especially those used on the farm, that will serve to draw the fangs and render harmless numbers of the iniquitous combines and mergers in Canada. These, as many of our farmers are beginning dimly to realize, are bleeding us white through the prices they are enabled to charge by means of the tariff favors they enjoy. Thus a clear distinction will be drawn between the two great political parties in Canada that has been lacking during the past fifteen years.

Reciprocity, we believe, would have increased vastly the prosperity of the farmers of Canada. The fact that it has been defeated temporarily does not mean that there will be any break in our present prosperity. This we may expect to continue as long as immigration continues to pour into Canada, drawn by the magnet of our free lands. We can, therefore, suffer the loss that the defeat of reciprocity will mean to us—through many of us could not realize it—much better than we could were our vacant farm lands more fully occupied.

The reverse our farmers' organizations have suffered need not prove as serious as might be expected. Instead of being over the fight for larger markets, and the other reforms that are required, is only commencing. We have suffered hitherto because we have lacked enough competent leaders, especially from among the ranks of the farmers themselves. These, we expect, will now be forthcoming in greater numbers than ever before.

The campaign must be one of education. It must be prosecuted with vigor, week in and week out, from now on. The demand for a great increase in the British preference will effectively dispose of the cry that we are lacking in loyalty to the motherland. It will, at the same time, reveal the hollowness of the lip loyalty of the protected interests which shouted during the recent campaign that it was disloyal to increase our trade with the United States, but which can be depended on, for selfish reasons, to resist any movement to increase the preference to Great Britain. The fight that is ahead calls for the best that is in us. We must bend to it with a will knowing that ultimate victory—and that on a broad scale—is assured.

Did a creamery patron suspect that the merchant whom he patronized used weights and measures that were incorrect, he would see the injustice of it immediately, and the merchant would be prosecuted. The pipette, for cream testing, is an unjust measure, and in the eyes of the law should go in the same class as the incorrect scale or measure.

WHAT WE HAVE LOST

After the heat of the election campaign has disappeared we will have plenty of time in which to discover how great is the loss we have sustained through the defeat of the reciprocity measure. We are going to lose both at the selling and buying ends of our business.

The comparative market quotations, as published in Farm and Dairy during the last few months, give an indication of the enormity of our loss in the marketing of our produce. We have also sacrificed an opportunity to get our implements cheaper.

On page thirteen of this issue we publish a statement made by Mr. H. W. Hutchison, a manufacturer of farm implements, in which he affirms that the proposed reductions in the duty on farm machinery, slight as they were, would have meant a saving of \$1,000,000 annually to Canadian farmers.

A greater advantage yet that was lost along with reciprocity was the certain increase in land values in Canada. The New England Homestead, a most influential weekly farm journal published in the United States—a paper that, like the farmers of the United States, waged an unrelenting war against reciprocity—in a recent editorial, predicted that under reciprocity Canadian farm lands would double in value. The Canadian Pacific Railway Company also predicted a 100 per cent. increase in our farm values. It is therefore evident that reciprocity would have meant untold millions to us on land values alone.

The loss is not irreparable. A skirmish does not determine a battle. This reciprocity battle was but one of many that characterize this age. In time the masses will come to realize the nature of this fight against the privileged classes, and when they do the victory will be won.

It is not at all pleasant to think you are being taken advantage of, and there is nothing that one tries harder to keep from his neighbor than the fact that he has been taken in by some cheap advertising scheme. The only safe way to protect yourself from being worked by a fake advertisement is to write only to those concerns that advertise in reliable journals. Farm and Dairy's Protective Policy as published in this editorial page assures you of the reliability of all our advertisers.

It may be all right under some conditions to have the apples picked and placed in piles in the orchard, then to be gone over later.

Under Cover by "the gang" and Under Cover packed into barrels. It is much better, however, to have the apples placed in barrels tree run as they are picked and carted to a shed or barn, there to be packed as meets the convenience of those who are mutually concerned. The culls have a real value. They are often allowed to go to waste when sorted out in the orchard. When the barn they are surer of some good

itale disposition not forget that barrels while he is in a pile out of it will not keep—especially short apples packed in dry. The upside of getting or as speedily as they are picked.

It is a low-down deliberately wait it in to the chock ac
Dishonest than up
Patrons up
livered. There men with us, at reason action has er Ontario in charged with ad
The temptation come by water (or some patron cheese factories are pooled and weight alone. A readily be removed milk according to tation ought so each patron proceeds and the tentative on this is dishonest.

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A Simp (Hoard
Two farmers farmer number
"Why don't y herd of cows; their main pro which are pow which are not? The reply of those strange wonder once in "Why" he a keep the poor will I have to Then again, if killed off the pter and cheese the poor people get none of it. "My dear si ber one, "either self man in fail entirely to fast. Here you reason why vot self and family unprofitable co keep the poor you have to w ed folder on. farmers don't poor will have I wonder if answers you y cord of your you really have ahead and save less?"
Then the cor

table disposition. Then, too, we must not forget that apples placed in the barrels while heated, as they will be in a pile out of doors on a hot day, will not keep well. They are surprisingly short lived compared with apples packed while cool, unbruised and dry. The advantage is all on the side of getting the apples under cover as speedily as possible after they are picked.

It is a low-down character who will deliberately water milk and then pass it in to the cheese factory and coolly accept his division of

Dishonest the proceeds based **Patrons** upon the weight of milk (and water) delivered. There are still some such men with us, and during the current season action has been taken in Eastern Ontario in regard to 32 patrons charged with adulterating their milk. The temptation to increase their income by watering milk is too strong for some patrons who patronize those cheese factories where the proceeds are pooled and divided according to weight alone. This temptation may readily be removed by paying for the milk according to its test. The temptation ought so to be removed. Then each patron may receive his honest proceeds and there would be no incentive on this score for a patron to be dishonest.

Why bother about the expensive work of subsoiling with implements when they only go down at best a couple of feet? Let alfalfa do your subsoiling for you. The great silent forces of nature working through the alfalfa plants will, if you do your part by growing the crop, subsoil your land to the depth of five and six feet and more. Let alfalfa do this work for you.

A Simple Question

(Hoard's Dairyman)

Two farmers were conversing. Said farmer number one to number two: "Why don't you investigate your herd of cows; take a year's test of their milk production and find out which are paying their keep and which are not?"

The reply of number two was one of those strange things that make you wonder once in a while. "Why?" he said, "some one must keep the poor cows. Besides, what will I have to eat up my fodder? Then again, if all the poor cows were killed off the price of milk and butter and cheese would go so high that the poor people in the cities would get none of it."

"My dear sir," said farmer number one, "either you are the most unselfish man in the world or else you fail entirely to see your own interests. Here you are giving me three reasons why you should sacrifice yourself and family on the altar of a poor, unprofitable cow. 1. Some good milk will keep the poor cows. 2. What will you have to waste all your hard earned fodder on. 3. If you and other farmers don't keep cows at a loss the poor will have to go without milk."

"I wonder if those are the true answers why you do not keep a record of your cows, or is it because you really haven't got the push to go ahead and save yourself this constant loss?"

Then the conversation subsided.

One Important Thing We've Lost

Speaking in Winnipeg on August 22 on the subject of reciprocity, H. W. Hutchinson, general manager of the John Deere Plow Company, one of the biggest implement concerns on the continent, said:

"I have a few thousand dollars invested in three Canadian implement factories in Ontario, and I am willing to stake my money invested in those plants if this reciprocity pact is adopted and stand by the consequences. If the manufacturers of Ontario who supply the northwestern farmers cannot stand up under a reduced tariff of 5 per cent., then I say they should fall, and I am prepared to fall with them."

"I think the manufacturers of Ontario see a very large phantom staring them in the face as far as the reciprocity pact is concerned. Five per cent. is not going to mean the destruction of any vested interest or industry in Canada to-day. But what is it going to do for the farmers? I say that for the company of which I am a member; that we are prepared, in the event of the adoption of this pact, to reduce our prices to the farmers \$5 on every harvester, \$3 on every mower, \$1.50 on every rake, \$5 on every seeder, \$5 on every American wagon, and other things in about the same ratio.

"Now that is a plain benefit in which the farmers are going to share, and what my company will do my competitors will be obliged to do also, because competition is the life of trade. In every case that benefit will not only apply to the goods which the company I am identified with markets or offers for sale, but it will also extend all down along the line to other importers of American-made machinery. It will also extend to Canadian implements, because the spread between the price of Canadian and American implements must be so much, and if the prices of American harvesters, plows, drills and wagons are reduced to the extent to which I have stated, then my company all through their lines must follow suit. The farmers will save in the way, as near as I can reckon, \$1,000,000 per annum."

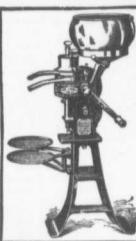
Another Important Thing We've Lost

One of the most influential weekly farm journals in the United States, the New England Homestead, commenting editorially on the probable effects of reciprocity on land value in Canada, in their issue of Sept. 2, 1911, says:

"It would seem to be a foregone conclusion that reciprocity will win in the Canadian elections by a vote of two to one. Why? Because this measure will enormously stimulate Canadian agriculture without in any way injuring Canadian manufacturers. Canada has absolutely everything to gain and utterly nothing to lose by approving reciprocity. It is not too much to say that should reciprocity be indorsed at the Canadian elections September 21, the ultimate result thereof will be to double the value of every acre of good land and timber and of every town or city lot in the Dominion."

Plenty of exercise is important for the pregnant sow; it should be insisted upon, and provided in the way the breeder finds best adapted to his situation. The breeder may secure results by arranging the house at one end of the hog lot and the feeding floor at the other end, or by giving the sows water in such a way that to procure it they will be compelled to walk some distance a number of times each day.—From Coburn's "Swine in America."—Price through Farm and Dairy, \$2.50.

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Better get after the Subscribers at once before someone else in your district has canvassed them all.

FARM AND DAIRY, Peterboro, Ont.

Creamery Department

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

New Express Rates on Cream

The Board of Railway Commissioners have recently issued a new schedule for express rates on cream. In all previous express tariffs sour cream and cream for butter making purposes has been subjected to lower charges than cream for city consumption. Under the new orders a uniform express charge has been established for all grades of cream, which change will meet with the approval of the majority of cream shippers. The provisions of this new order of the Board are as follows:

1. The maximum express charges for the shipment of cream and the services connected therewith shall be as set forth in the following tariff: Cream in cans, with or without jackets, plainly and distinctly sterilized and tagged (not in tube) applying between all points east of Port Arthur, Ontario; also between the said city and points east thereof.

Miles	5 gal. cans each	5 gal. cans 25 cents	10-gal. cans 30 cents
25	20 cents	25 cents	30 cents
50	23 cents	31 cents	36 cents
75	27 cents	36 cents	41 cents
100	31 cents	41 cents	46 cents
150	39 cents	51 cents	56 cents
200	47 cents	61 cents	66 cents

(a) The above charges include the delivery of filled cans and the collection of empties for the dealer at all points where the Express Company furnishes a collection and delivery service for other goods.

(b) In the case of shipments by a dealer, if filled cans are collected by an Express Company and shipped to a place where the said company does not furnish a collection and delivery service for any kind of goods, the above charges shall apply.

(c) In places where a collection and delivery service is not furnished by the Express Company, the charges—except as in subsection (b)—shall be 5 cents per can less than the above rates.

(d) There will not be any reduction on smaller or partially filled cans.

(e) Two 5-gallon cans will not be charged at the rate of a 10-gallon can.

(f) Returned empty cans which, when filled, were carried under this tariff, will be charged at the rate of five cents each for return carriage on the railway.

2. The terms and conditions set forth above shall be the only terms and conditions imposed or exacted by any Express Company in or in connection with the shipping of cream.

excepting conditions as to the making out of way-bills and the loading of cans at flag stations.

3. Every Express Company shipping cream—

(a) Shall see that its messengers and other employees handle the cans with due care.

(b) Shall deliver the cream (as a perishable commodity) with the least possible delay, especially in hot or very cold weather.

(c) Shall arrange so that cans containing cream shall not be exposed to the sun or subjected to excessive time in unloading from the car and delivery to, or removal by, the consignee.

4. The provisions of this order shall become effective on the 1st day of November, 1911.

Questions on Cream Testing

How should composite cream samples be kept and prepared for testing? Is there any need of duplicating tests in cream testing here often and why?—W. N. Victoria Co., Ont.

Composite samples should contain a preservative of some kind. The writer has always used corrosive sublimate tablets. Special tablets are prepared for this purpose, which contain a red coloring substance. Some use potassium bi-chromate. Others again prefer to add a drop of formalin to the composite test bottle. Each time that the composite sample is supplemented the whole contents of the bottle should be well mixed by giving it a rotary motion without getting the cream all over the inside of the bottle. The bottle should be well covered between sampling, so that they do not dry out. The composite samples should be kept in a locked box so that no one can tamper with them. This is rather unnecessary, but in some instances it is advisable. It is also well to not expose them to too much sunlight.

Composite samples should be tested at least once every two weeks. When ready for testing the bottles containing the cream should be set into warm water, at a temperature of about 110 degrees F. The bottles will soon cool the water down to 100 degrees. At this temperature the cream will become quite liquid, and before sampling each should be mixed by pouring it from one bottle into another two or three times, then the necessary amount is weighed out for the Babcock test. Cream should never be measured out for the Babcock test.

TEST EACH DAY

Your correspondent does not say anything about obtaining correct composite cream samples. This, I think, is the important question. I don't believe it is possible for any creamery operator working under any of our creamery conditions to obtain a proper and correct composite sample of cream. The creamery receiving cream from patrons should test every can of cream as it is delivered, or at least take a sample from each can and test all at one time at the close of the day. It is practically impossible to secure a correct composite sample of cream, due to proportion and various conditions of the cream which are apparent, and I need not mention here.

2.—Generally sneaking the writer would say that there is no need of running duplicates in cream testing. This, however, greatly increases the work and in many creameries duplicate tests are not made. If the same man does the testing from day to day he becomes so familiar with conditions that he can modify his methods to correspond with the changing conditions, and be sure of a good, clear test every time. If the man who does the testing and who does not duplicate gets a test that is not absolutely clear, this sample should be tested again. Tests, which show

impurities of various kinds in the fat column, should never be accepted, and if the man who does the testing is not entirely sure of correct and clean tests, duplicates should be run every time.—Prof. C. Larsen, S. Dakota State College.

Separators as a Side Line

All creamery men would like to get a high testing cream at their creameries, but there are so many poor separators in many districts that the patrons cannot supply a rich cream if they would. How are we creamery men to induce our patrons to buy only the best makes of separators? Here and there we will find a creamery man who has as a last resort taken an agency for a good make of separator himself in order to keep out cheap, poor-looking separators. This plan has been discussed many times at meetings of creamery men and for the most part does not meet with the approval of our most successful creamery men. Here are opinions from three of our creamery men on this subject:

I would not advise a creamery man himself to sell separators, but I believe it a good plan to have someone interested in the best makes of separators to the patrons. My Lookkeeper has a separator agency and in addition to supplying the patrons with good separators he keeps a list of one in every district, and therefore he does good work for me.—Wm. Newman, Victoria Co., Ont.

When a patron buys his separator from his creamery man he expects the creamery man to keep it in repair over afterwards. For this reason I do not consider it advisable for the creamery men to sell separators. I can, however, use his influence in inducing the patrons to buy separators from those who do good work for them.—Mack Robertson, Perth Co., Ont.

The test at our creamery used to be 22 to 23 per cent. By directing the patrons to buy separators and the advantage of rich cream, we have worked the test up to 28 per cent.—H. W. Parry, Oxford Co., Ont.

The Maker—His Position

A. H. Halls, Ganston, S. D.

The butter maker should know his business thoroughly. There are lots of them who do. He should be given every chance to make good butter. He should have all the necessary equipment on that score. He should reject any and all milk or cream that will not make a good article. If the board of health will be so kind as to stand with him there will be very little trouble about the rejections of such products. He should be courteous to the patrons. There should be confidence between the manager and himself and the rest will be easy. He should be paid good wages and if he is a good man do not be afraid to increase his pay because he is worth just as much, if not more, to you than to the other creamery that is trying to get him. Remember that it takes the right kind of people, as well as the right kind of cows, and enough of them to make a creamery run smoothly and successfully.

"Farm Dairying."—Farm and Dairy readers, many of whom are personally acquainted with Miss Laura Rose, and the great service she has rendered in the dairy world, will be pleased to know that her recent book, "Farm Dairying," is selling well. It is so far in demand that the book was placed on the market and her publishers are now busy on a second edition. The book may be had by mail for \$1.35 from the author, who resides at Guelph, Ont.

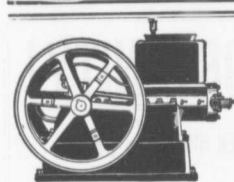
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Cheese

Makers are invited to contribute to this department, to ask questions on matters relating to cheese making and to suggest subjects for discussion. Address letters to Cheese Department.

A Cheese

We cheese use more and need of taking care of our factories. I am going to do paid for.

One of the that most of our testing, interested one of our patrons to see position than the mal the facts and and see getting for the and the cap hardly keep in mind in asking milk and better.

There is no unprofitable cases can be the cottage farming of record reading out. The time is a for our cheese farm milk by the that have had herds will be 30 and have not leading cattle as well as you.

Cow testing is spent conduct for a Reports go to has resulted cow testing has three or four cheesemakers not want to do it.

A Curing

Frank Heras,

The cool cur- man Union of Co. has been one and the p

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Cheese Department

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

A Cheese Maker Boosts Cow Testing

B. A. Reddick, Northumberland Co., Ont.

We cheese and butter makers can see more and more every day the need of taking an interest in things pertaining to dairying outside of our factories. I do not feel that I am in my factory only to make the cheese or butter or that that is all I am going to do or that it is all I am going for.

One of the branches of outside work that most of my patrons appreciate is cow testing. Every maker should be interested enough in his work and in his patrons to carry this work on in his factory. There is no one in a better position to see the need of it than the maker. When we take all the facts and figures into consideration and see what some farmers are getting for their work they are doing and the capital invested, we can hardly keep from abirking from our duty in asking for better care of their milk and better sanitary conditions.

There is no one way in which the unprofitableness of farming in many cases can be helped more than to encourage farmers to take up the keeping of records of their cows and the weeding out of the useless boarders. The time is not far distant when all our cheese factories will be paid for milk by the test. Then those farmers that have had this help with their herds will be years in advance of those that have not had this opportunity of weeding out that produce quality as well as quantity.

Cow testing is a work our Government is spending a lot of money to conduct for the benefit of dairymen. Reports go to show that great good has resulted to the farmer when cow testing has been carried on for three or four years. It is up to us cheesemakers to push it at home and not wait until someone is sent to us to do it.

A Curing Room Remodelled

Frank Hens, Chief Dairy Instructor, W. Ont.

The cool curing room in the German Union cheese factory in Oxford Co. has been remodelled from the old one and the particulars of the work I

pass on for the benefit of Farm and Dairy readers who may be thinking of remodelling the curing rooms in their own factories. The work cost \$800 and the directors as well as Mr. Newb, the maker, are well pleased and well invested. Since the cool curing room has been in operation a saving in shrinkage on the weight of cheese has been effected and a smoother textured cheese obtained during the hot weather.

The floor in the curing room and ice house is constructed of four inches of cement over a solid foundation. In the ice house 10-inch joists were laid on edge over the cement one foot apart and filled in between with cinders, then one ply of matched lumber, two ply of damp proof building paper and one ply of matched lumber were put down and over this 28-gauge galvanized iron was laid flushed up the side of the walls 12 inches. Over this were the ice racks.

WELL INSULATED WALLS

The walls of the old room were of frame, lathed, plastered and boarded. These were studded and finished with two ply of diamond proof building paper, six inches of dry mill shavings, two ply of paper and one ply of matched lumber. The ceiling in the curing room has eight inches of mill shavings, two ply of damp proof paper and one ply of matched lumber on top and the same on the bottom of the joists. The walls and ceiling of ice house were one inch of space between the lumber and the wall received two ply of damp proof paper and one more ply of lumber. The ceiling is similar to that of the curing room except that there are two extra ply of lumber.

There are double windows, three feet from the floor and three feet from the ceiling. The curing room door proper is constructed the same as the new walls—two boards, four ply of paper and six inches of shavings, the door made wedge shape.

A COMMODIOUS ROOM

The size of the curing room is 45 feet long, 24 feet wide, nine feet eight inches high. The ice house is 11 ft. eight inches long, 24 ft. wide and eight feet eight inches high. The ante-room is 36 ft. long, 18 ft. wide and 11 feet 6 inches high.

The walls and ceilings are all oiled and very little trouble has been experienced with mould. The shelves were well scrubbed with caustic soda and when dry they were again washed with one part of corrosive sublimate to 1,000 parts of water. The shelves standers were oiled and the arms painted.

Avoid Turnip Flavors

The total cuts on cheese and butter last fall, due to turnip flavor, represented a large loss to patrons. We know of one cheese factory in Eastern Ontario where all of the cheese made for two months in the fall was cut one-half cent a pound because, as it turned out, a very small percentage of the patrons had been allowing turnip plants to run in the turnip fields. These cheese after they had been in the curing room only a short time had developed such a strong turnip flavor that their selling value was almost ruined.

Certain sections particularly in the East have now a reputation for producing turnip flavored cheese and buyers avoid them. A cut in price is now taken as a matter of course. There is no need of us farmers delivering a can of turnip flavored milk. In corn ensilage and manure we have feeds that are just as economical as turnips and they produce the flavored cheese or butter. Cheese makers will do well to reject all turnip milk.

Care of the Starter

D. J. Cameron, Victoria Co., Ont.

Some cheese makers carry their starter from early spring to late fall in good condition, while others have theirs in off condition in a few days. Care and cleanliness only are necessary to keep the starter in good condition. I have found that some makers will be very careful in the selection of milk, for a starter, heating it properly and then cooling. They then make the mistake of allowing it to stand around until four or five o'clock in the afternoon before setting the starter. We must remember that heating does not kill spores. They are at work while the cool milk is standing around and when the culture is added it has that much more to overcome.

I would advise heating the milk immediately it is received. If I could not see seed with starter until the afternoon I would keep the milk hot until then to avoid injurious growths. When seeded the temperature will depend on the starter. An active starter in warm milk will create too much acidity. With such a starter I would cool the milk lower or add less mother culture. The first plan is preferable. We must study our cultures and find out just what is needed. I would advise carrying the starter as near 65 degrees as will give best results. A starter will become accustomed to a certain temperature and will soon give better results at that temperature than at any other.

Encourage Larger Production

"When I was actively engaged in the cheese business, if any of my patrons wished to keep records of the milk and butter fat produced by individual cows in their herds, I was always willing to test as many samples of milk as they wished to bring," said Mr. J. R. Hutchison, B.S.A., now of Thunder Bay District, Ont. when talking of dairying to one of the editors of Farm and Dairy some months ago. "This made a lot of extra work for the maker, but we got our returns in the greater interest taken by our patrons. It induced them to discard poor cows, and the output of the factory was increased sufficiently to pay for the expense of testing."

"A good annual meeting in which our patrons brought up all questions which they wanted discussed, and were given all the information they were desired not contained in their monthly statement, did much to encourage a

spirit of cooperation between makers and patrons, and to increase the interest of the latter in the work of the factory.

"Before a maker can do really good work, he must get the confidence of his patrons. This is not a matter of means more milk and better milk."

A Complaint Re Green Cheese

Weddel & Co., London, E.C.

The quality of Canadian cheese during the season of 1910 was not only well maintained, but a further general improvement in condition took place. This was noticeable in the manufacture of the article as well as in the transit arrangements between the factory in Canada and the ports in this country.

There is one thing, however, that might be done to make Canadian cheese more suitable to our trade during the months of June to September, and that is, to delay shipping them until they are more mature. During these months they arrive in far too "green" a condition, and this of course depreciates their value. The reason for shipping them so early is easily understood; but there is no doubt whatever that the makers have to pay a penalty by realizing lower prices than they otherwise would.

If cheese buyers would encourage patrons to supply better milk to the cheese factory they might start to pay a higher price for superior quality cheese.—Frank Hens, Chief Dairy Instructor for Western Ontario.

In large factories the expense and time necessary to test milk can readily be met. In small factories with a small supply of help, testing cannot very well be done, and the makers have not the experience. We should have official testers for these small factories.—Prof. H. H. Dean, O.A.C., Guelph, Ont.

The big end of the improvement in cheese work in Peterborough County is due to the good work of Instructor Ward—J. J. Hogan, Peterboro Co., Ont.

CHEESEMAKER WANTED

For Elma and Mornington cheese factory. Maker to furnish supplies and help. Box cheese and elevate why. Make last season, 15 tons. Market renders received up to noon Oct. 15, 1911. The lowest or any tender not necessarily accepted. Address

MRS. ANDREW ALEXANDER, SECY BRITTON, ONT.

FOR SALE AND WANT ADVERTISING

TWO CENTS A WORD, CASH WITH ORDER

HARDWOOD ASHES—Best fertilizer in use.—George Stevens, Peterboro, Ont.

FOR SALE—Iron Pipe, Pallers, Pests, Balls, Chain Wire, Pencils, Iron Boxes, etc., all sizes, very cheap. Send for list, stating what you want. The Imperial Waste and Metal Co., Dept. F.D., Queen street, Montreal.

SELF-FILLING FOUNTAIN PEN. Agents Wanted. Send 25c for sample, or Six for Dollar.—Andrew Speciality Co., 23 Scott St., Toronto.

LADIES, to do plain and light sewing at home whole or spare time; good pay; work sent any distance; charges prepaid; send stamp for full particulars. Montreal Manufacturing Company, Montreal.

REPRESENTATIVE WANTED AT ONCE for work in your locality. Will guarantee \$2.00 to \$3.00 per day. Opportunity to advance rapidly. Will pay liberally for spare time. Work not difficult. Experience not required.—International Bldg. Press, Toronto, Ont.

PROUD OF THEIR

SHARPLES

Tubular Cream Separators

Ask those who are discarding disk-filled and other complicated cream separators for Tubulars why they do it.


They will tell you how much more Tubulars make for them. There is cash value in the fact that Tubulars have twice the skimming force of others, and therefore skim faster and twice as clean.

They will tell you of the unequalled durability of Tubulars. A regular, hand-driven Tubular recently finished work equal to 100 years' service in a five to eight cow dairy—and the total cost for oil and repairs was only \$1.15. Tubulars wear a lifetime. Guaranteed forever by the oldest separator concern on this continent.

Dairy Tubulars contain neither disks nor other contraptions and are self oiling.

When you see why others are discarding less modern separators for Tubulars, you will realize that you, yourself, will finally have a Tubular and that you will get it now. Ask any other, for Tubulars repeatedly pay for themselves by saving what others lose.

You can see a Tubular for the asking. If you do not know our local representative, ask in his name. Write for catalog No. 253



30

years

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

OUR HOME CLUB

Sunday on the Farm

If there is one thing more than another that gets me out of tune with the boss and dairy work generally it is the immense amount of work that is always piled up to be done on Sunday. As far as I can see, Sunday is much like any other day on too many dairy farms. We have been rushed this summer, first getting in the crops, then fighting the weeds. This was followed by harvest, and now comes fall plowing and silo filling. Of course, my boss is too good a man to do any work like this on Sunday, but every small chore that can be slighted at all is lost sight of six days in the week, and just as sure as life if I take an idea that I would like to rest when Sunday comes, there is all kinds of work sticking all over the place to be done on this "the day of rest." As a result, with the exception of a couple of hours that we are off to church, we chore around all Sunday.

The average farmer's wife has no more time to rest on Sunday than the husband. She gets three meals a day, for more that work hard on Sunday must be well fed. Often with milk utensils to wash, poultry to care for, and her house to set in order, Sunday is about the same to her as other days of the week. Both the husband and wife spend the most of the day in their working clothes, engaged in the same round of chores and work as on other days.

There is of necessity a lot of work that has to be done on the farm on Sunday and perhaps more on the dairy farm than on any other kind of a farm. It seems to me, however, that there is something wrong when we have to work all of the days of rest. Perhaps it is that dairying is not profitable enough to enable the farmer to employ all the help he needs. Perhaps reciprocity would have helped this.

I would like to know what the Home Club readers think about this Sunday work problem. Have any Farm and Dairy readers any suggestions that would help towards making the Sunday a real day of rest not only for the hired man but for the boss and for the boss' wife.—"Another Hired Man."

The Mother Doctor

Every mother should educate her children on the subject of taking medicine and having their little wounds dressed. In some homes it takes the whole family and all the pills that can be mustered to induce the little one to swallow some simple dose, and often the mother must prepare medicine five or six times because the naughty child manages to sneak it with his kicking and struggling.

All children, even very small ones, can be taught to think they are little soldiers if only parents take a firm, decided stand. If a child must take a nasty dose, explain just what it is without a bit of deception, and encourage him to have it over quickly. A lump of sugar is all right, but the coaxing and buying some mothers in-

dulge in is calculated to spoil the children utterly.

A little care will often ward off trouble amongst the little ones, and the mother should always be on the alert to keep her little flock healthy. Simple remedies for constipation should be found in foods rather than medicines as fruit and certain vegetables will keep the bowels in good condition if properly used.

The mother doctor must keep her eyes about her and be calm and cheerful, for the child is then easily managed, and the little disorders incident to childhood do not upset the whole household when they come.—Mrs. Mary E. Underwood, in Indiana Farmer.

The Friendship of Books

To fall in love with a good book is one of the greatest events that can befall us. It is to have a new influence pouring itself into our life, a new teacher to inspire us, a new friend to be by our side always, who, when life grows narrow and weary, will take us into his wider and calmer and higher world.

Whether it be biography, introducing us to some humble life made great by duty done; or history, opening vistas into the movements and destinies of nations that have passed away; or poetry, making music of all the common things around us and filling the fields and the skies and the work of the city and the cottage with eternal meanings—whether it be these, or religious books, or science, no one can become the friend even one good book without being made wiser and better.—Henry Drummond.

Truims about Consumption

Dr. Woods Hutchinson

It is as great a disgrace to have flies in the house as to have bed bugs. Both breed only in dirt, and are the "joy-ride" automobiles for disease germs of all sorts.

Don't put things in your mouth. It was not intended for a pencil-holder or a pin-cushion or a nail-cleaner, let alone a ticket pocket, or a purse. Be clean, just clean, and you will side step two-thirds of your risks of infection by tuberculosis.

The bulk of the fighting against tuberculosis is to be done not with microscopes or germicides—though these are invaluable and indispensable in their place—but with food, fresh air, healthy houses, shorter hours, longer sleep, good wages and more play.

In fighting tuberculosis we are merely going to turn all the forces of civilization against the disease instead of, as in the past, fighting it with the right hand while feeding it with the left. We need no new weapons or new troops, only new tactics, directed by a new and immensely improved intelligence department.

The death rate from consumption has declined practically 60 per cent. in the last 75 years and 30 per cent. in the last 30 years. As Osler graphically puts it: "We to-day run rather less than half the risk of dying of consumption that our grandfathers did and barely three-fourths the risk that our parents did."

Every one jumps on a coward, and with consumption as with everything else, attack is the best defense. Do not live in fear of infection from tuberculosis; just hate dirt, and everything that promotes its accumulation or prevents its escape and you will avoid practically every risk of infection and keep up your fighting courage as well.

We always did hate dirt and the reeking air of crowded rooms, and damp, and darkness, and spitting on the floor, and poor food and too little of it and over work; and, behold! these are the very things we have to fight.

We have always loved cleanness and freshness and sunlight and fresh air and plenty of elbow-room and plenty of work that called for the best that was in us to get it done, and plenty of good things to eat—real food with a taste to it, not fodder or mere filling—and a proper allowance of play.

And it is under these signs that we shall conquer tuberculosis. All we have to get rid of is our traditions, our inherited fears, born of the murk and the fog, our Puritanic economy, and the rich 30 per cent. of our selfishness.

If the world had more sense and the poor more money, and both more public spirit, consumption would soon be a thing of the past. Extracts from "The Conquest of Consumption" price through Farm and Dairy \$1.00 net.

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

THE CONNOR BALL-BEARING WASHER

is the Perfect Washer, the Washer that gives satisfaction, and that is guaranteed. Easy to work, runs on Ball Bearings, and washes everything from handkerchiefs to heavy articles with rapidity and thoroughness. You will be astonished to see how perfectly clean every article will be. Do not do another washing in the old "Back-breaking" way when you can supply you with a washer that will cut wash-day in half. Write for booklet.



J. H. CONNOR & SON, LIMITED, OTTAWA, ONT.

It is True Economy
to use the highest grade of sugar like

St. Lawrence Sugar

It is brilliantly white and sparkling—looks dainty and tempting on the table—and goes further because it is absolutely pure sugar of the finest quality. Make the test yourself. Compare "ST. LAWRENCE GRANULATED" with any other.

The St. Lawrence Sugar Refining Co. Limited
MONTREAL 33

More bread and Better bread
—And the Reason for it

A STRONG FLOUR can only be made from strong wheat. Manitoba hard wheat is acknowledged the strongest in the world—and that is the kind used for Purity Flour.

But that's not all. Every grain of this wheat contains both high-grade and low-grade properties. In separating the high-grade parts from the low-grade the Western Canada Flour Mills put the hard wheat through a process so exacting that not a single low-grade part has the remotest chance of getting in with the high-grade.

Of course this special process is more expensive to operate but it means a lot to Purity flour users—that's why we use it.

It means that Purity Flour is made entirely of the highest-grade flour parts of the strongest wheat in the world.

It means a high-class, strong flour and therefore yields "more bread and better bread."

Purity may cost a little more than some flours, but results prove it the cheapest and most economical after all.

PURITY FLOUR

WESTERN CANADA FLOUR MILLS COMPANY, LIMITED
MILLS AT WINNIPEG, GODFRICH, BRANDON

CAPABLE OLD COUNTRY DOMESTICS

carefully selected, arriving weekly. Apply now. The Guild, 71 Drummond Street, Montreal, or 36 Pembroke St., Toronto.

The Upward Look

Overcoming Our Faults No. 26

Submit yourselves therefore to God. Resist the devil and he will flee from you.—James 4:7.

What most of us feel we want our religion to do for us is to save us from our special faults of disposition or character. We realize clearly what our chief weaknesses are. It may be that we have prayed for strength to overcome them but without much apparent success. We wonder why this is the case and how it is that God does not answer our prayer more speedily.

The explanation is simple. We have not gone the right way about it. The true Christian life is one of victory over sin. We can each of us have this life if we are sufficiently in earnest.

To overcome some or any sin that is marring our life, such for instance, as a bad temper, several things are necessary. First, we must recognize that every time we allow our temper to gain the mastery over us we are sinning against God. Second, we must realize that the spirit of anger is sent into our hearts by Satan, and that only the Spirit of God is strong enough to drive it out. Our will power and good resolutions are

powerless before it. Third, it is necessary, if we are to gain the victory, that we shall be desperately in earnest. Half-hearted, lazy, spasmodic prayers are answered only in part. God delights to answer our prayers to overcome sin, but He reads our hearts and inmost thoughts, and He knows exactly how much in earnest we are. He knows this far better than we do ourselves. If he sees that we are not sufficiently repentant for our sin each time it overcomes us, and anxious to overcome it in the future. He knows that we are not ready to receive the blessing He has in store for us.

It is necessary also that we shall recognize that the fight will be a long, hard one. Satan will not relinquish his hold upon us without many a struggle. We will fall again and again, but if we will only persevere the time will soon come when we will be able to look back and see victory after victory that we have gained and thus we will be encouraged to persevere until Satan is put completely to rout.

We must next recognize that it is not sufficient that we shall pray say, once or twice a day, for the necessary help and guidance. Instead, we must be in the constant spirit of prayer. Our first waking thought in the morning should be in the form of a petition for help, and of thankfulness that we can thus appeal to God for it. Thus we foil Satan at the very outset. From moment to moment, thereafter, throughout the day we must constant-

ly be on our guard. The second we find our tempers mastering us we must commence to pray. It is not absolutely necessary that we shall go away by ourselves to do this. Should it be impossible to do so, we can utter a silent prayer from the heart direct to God, without even closing our eyes, for strength and help to overcome the evil one. If we feel that the evil spirit is still with us we can sing or whistle or hum, putting our whole soul into it, thus making it an earnest prayer, such a hymn as "Yield not to Temptation," or "I need Thee every hour." If we will but do this and will hold fast to that attitude of mind, Satan will soon give up the fight and retire discomfited for the time being.

But Satan has a habit of jumping out on us when we are off our guard, and when we least expect him. Thus our tempers burst out before we have time to pray or do anything to prevent it. True, but perseverance in the fight will soon teach us to be on our guard for even such moments as these, and thus we are enabled to foil Satan even then. A tired mother, for instance, finds her temper gains the mastery over her every time the children come home from school and track mud in on the clean kitchen floor. Therefore, before they come she begins to pray for strength not to give way to her sin. She finds that every time the fire goes out when she is busy with other things that the spirit of anger surges up in her heart. Therefore, before she lifts the lid or opens the door to see how the fire

is she pauses for a moment to ask for grace not to give way to her temper should the fire be out or low. And thus the fight goes on. Soon we are astonished to find how the Lord reveals to us where Satan lies ambushed, and thus enables us to foil him. In the course of a few weeks or months, after numerous failures it is true, we are delighted and grateful to find that certain things which formerly invariably caused us to fall, have lost their power to lead us to give way to our sin. Thus encouraged becomes easier every day to gain the mastery for we have found out how true it is that if we will but resist the devil he will flee from us.—I. H. N.

A Thought From Day to Day

Just to be tender, just to be true,
Just to be glad the whole day through,
Just to be merciful, just to be mild,
Just to be trustful as a child;
Just to be gentle and kind and sweet,
Just to be helpful with willing feet,
Just to be cheery when things go wrong,

Just to drive away sadness with song,
Whether the hour is dark or bright,
Just to be loyal to God and right;
Just to believe that God knows best;
Just in His promises ever to rest—
Just to let love be our daily key.
This is God's will for you and me.

Hang an ordinary tin funnel on a convenient nail in the kitchen, drawing the end of the twine through the end. It is a convenient little device.



Always the cookbook says:
"Sift Your Flour."

No lumps, you see. *Aerates* the flour, making it lighter.
Put FIVE ROSES in your sifter.
Never soft and sticky -- never lumpy, musty, woolly.
Never coarse.
Milled superfine from Manitoba's grandest wheat.
Fine, granular, very dry.
Nothing remains in the sifter—FIVE ROSES is free, heavy.
And your bread is more porous, more yielding, more appetizing.
And more Digestible.
Because the particles are finer, easier to get at by the stomach juices.
Use this very fine flour—superfine.
FIVE ROSES.

Five Roses Flour

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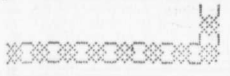
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Embroidery Designs

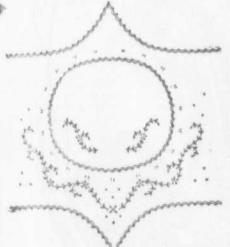
Designs illustrated in this column will be furnished for 10 cents each. Readers desiring any special pattern will confer a favor by writing Household Editor, asking for same. They will be published as soon as possible after receipt in reasonable time.



698 Design for an Embroidered Border in Cross Stitch Style.



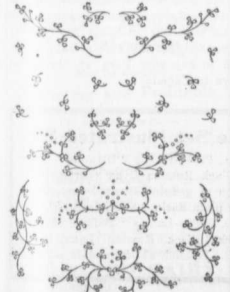
696 Design for Embroidered Towel Ends in Cross Stitch Style. Two ends are given.



595 Design for Embroidering a Low Neck Night Gown.



600 Design for Embroidering an Infant's Pillow, 17 Inches Square. Upper and Under Portions are given, the Under Portion with scallops and eyeslets only. The two are designed to be laced together through the eyeslets.



593 Design for Embroidery Sprays of Maiden-Hair Fern.

September

Brown hives begin to break the sea of green;
In all the valleys yellow tints prevail;
No more is heard the song of night-
ingale;
The leaves fall rustling now, the
boughs between.

Beneath the giant oak at morn and
e'en,
By limpid waters rest the spotted deer,
The horn stands upon the margin
near,
And her keen eye with hunger grows
more keen.

The timid hare starts up with sudden
fear
From the brown ferns that fill the
woodland vale;
And hazel nuts shake down at
every gale,
And thrifty squirrels store their winter
cheer.
The glory of the summer time is past,
And every day grows shorter than the
last.

J. T. WOLLASTON.

THE COOK'S CORNER

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

BREAKFAST RELISH

Put one dozen very thin slices of lean breakfast bacon in the frying pan. Cook for a moment, then add one-half dozen tomatoes sliced. Fry and serve very hot. Canned tomatoes may be used, reserving the liquor for a soup or sauce.

MARSHMALLOW PUDDING

Make a lemon jelly. Put a layer of sliced marshmallows in the bottom of the mold and when the jelly has begun to set spread a little over them. Continue with jelly and marshmallows until the mold is full, and put away to harden. Serve with whipped cream.

GOLDEN ORANGE CAKE

Cream one-fourth cup of butter, add one-half cup of sugar slowly, and continue beating. Add the yolks of five eggs, beaten until thick and lemon coloured, and one teaspoon of orange extract. Mix and sift seven-eighths cup of pastry flour with one and one-half teaspoons of baking powder, and add alternately with one-fourth cup of milk to the first mixture. Bake in a buttered and floured tin.

CRISP COOKIES

Cream together one cup of sugar and a big half cup of butter; add two eggs, a third of a teaspoon of soda in a tablespoon of milk, vanilla flavoring, or ginger if liked. Use as little flour as possible to roll. Sprinkle with sugar or cocoanut, or put three blanched almonds at equal distances around the edge after cutting in rings. Make very thin.

ENGLISH LEMON ZABT

Remove the pulp from one lemon and grate the yellow rind. Add to this grated rind and pulp one large cup of white sugar, three eggs, and two tablespoons of melted butter. Beat all well together. Line individual tart tins with a rich pie pastry, pinked about the edges, and fill with the mixture. Bake until the paste is done and serve soon after making.

FOUR OYSTERS

To one pint of light mashed potato add two tablespoons of butter, pepper and salt to taste, the beaten yolk of an egg and two tablespoons of grated cheese. Beat well, turn out on a floured board and roll into one-fourth inch thick. Cut into oblong cakes two by three inches, place on a buttered pan or baking sheet, prick thoroughly

with a fork, brush over with the beaten white of the egg, and bake to a golden brown in a hot oven. They should puff up, look tempting, and taste as good as they look.

Well, Well!

THIS IS A HOME DYE that ANYONE can use

I dyed ALL these DIFFERENT KINDS of Goods with the SAME Dye. I used

DIYOLA

ONE DYE FOR ALL KINDS OF GOODS

CLEAN and SIMPLE to Use.

NO chance of using the WRONG Dye for the Goods you have to color. All colors from your Druggist or Dealer. FREE Color Card and STORY Booklet in the Johnson-Richardson Co., Limited, Montreal.

Decorate Your Home with MURESCO

If your walls and ceilings are shabby you should use Muresco. In applying, all that is necessary to do is to mix it with boiling water. It dries quickly and shows no laps.

Muresco comes in many tints and pure white. We send descriptive literature on request.

MOORE'S House Colors

Preserve your property by keeping it spick and span with Moore's Paints.

These paints are made by the best paint-makers in the world. They are ready to use, being sold in sealed cans bearing their name and trademark.

The Linsed Oil in Moore's Paints is pure - It is chemically tested. When the price of Linsed Oil is high, adulteration is prevalent, and the individual purchaser (who is not able to subject the raw material to chemical test) is apt to be "stung."

MOORE'S Paints and Varnishes for every purpose.

Both Muresco and Moore's Pure House Paints are sold by Dealers everywhere.

Benjamin Moore & Co.
Brooklyn, N. Y. Carteret, N. J.
Cleveland, O. Toronto, Can.
Chicago, Ill.

The Sewing Room

Patterns 10 cents each. Order by number and size. Give bust measure for waists and bodices for skirts. Address all orders to the Pattern Department.

SHIRT WAIST, 718.

The plain manish shirt waist is one always in demand, for it is desirable for many purposes. This one is finished with soft cuffs and collar and is exceptionally smart. The back can be finished with or without the applied yoke.

For the medium size will be required 3 yards of material, 27 or 28 1/4 yards 36 or 38 inches wide. This pattern is cut in sizes 36, 38 and 40 inch bust measure, and will be mailed the Fashion Department, to any address by payment of this paper on receipt of ten cents.

THREE-PIECE SKIRT WITH UNDERLYING SIDE PANELS FOR MISSES AND SMALL WOMEN, 719A.

The skirt that is made with loose panels at front and back is a favorite one. This model also includes narrow underlying panels at the sides that are exceedingly smart and that allow exceptionally effective use of trimming and of striped material. The main portions of the wide skirt are lapped onto these side panels and can be finished flat to the side.

For the 16-year size will be required 4 1/4 yards of material 27, 31 1/2 yards 36, or 2 3/4 yards 44 inch wide, with 1 1/4 yards of additional material any width for the loose panels; the width of the skirt at the lower edge is 2 1/4 yards.

This pattern is cut in sizes for misses of 14, 16 and 18 years of age.

TUCKED PEASANT WAIST, 7167.

The peasant waist with straight back edges is one much in demand. This one is trimmed and tuckered on exceptionally becoming lines and is both attractive and at the same time that it is simple.

The quantity of material required for the medium size is 2 1/4 yards 27, 1 3/4 yards 36 or 44 inches wide, with 1 1/2 yard of wide and 7/8 yard of narrow binding, 1 1/2 yard of plaiting for the frill.

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

SKIRT WITH TUNIC EFFECT, 7167.

The skirt that gives a tunic effect, yet in reality is all in one, is eminent by fashionable and much to be desired. It is exceedingly smart and it is of less weight and bulk than the double skirt. This one is so practical as it is attractive.

For the medium size will be required 4 3/4 yards of material 27, 4 1/4 yards 36 or 38 1/4 yards 44 inches wide, width of the skirt at the lower edge is 2 1/2 yards.

This pattern is cut in sizes 22, 24, 26, 28, 30 and 32 inch waist measure.

Advice about Poison Ivy
Poison Ivy is very troublesome to any person easily affected who is unfortunate in coming in contact with the plant. The safeguard against this poison is for one to learn it and thereafter keep from touching it. Poison Ivy differs from the harmless Virginia Creeper, which it so closely resembles, in the number of leaves. The Poison Ivy has three leaves only in the cluster, while the Virginia Creeper has five. The symptoms of poisoning by ivy and how to treat it are given by the Women's World as follows:

At first there are clusters of minute pimples, changing the next day to blisters, with intense itching, and surrounded with vivid red, lasting from five to 10 days.

Washing the parts with a great deal of common cheap laundry soap has good results. Lime water or soda and water relieves. It protects the surface and prevents itching.

Poisoned wounds from stings and bites from bees and bugs are slight injuries unless irritating substances are carried in with the bite. When the skin around the bite turns black

and blue, or has small blisters, call a doctor. Apply cold compresses and zinc ointment for the alleviation of the trouble.

To Keep Sunshine in the Home

Don't show irritability over trifles. Don't keep constantly finding fault. Don't withhold praise when praise is due.

Don't make the most of trouble. Don't forget that health in the home is the best sunshine.

Don't forget that a little encouragement is always stimulating.

Don't get downhearted if the sunshine seems to disappear; remember, the sun can pierce the blackest clouds.

Deep Breathing.—When in the open air, acquire the habit of slow, deep breathing through the nostrils, filling the lungs comfortably with each inspiration. The extra quantity of oxygen thus taken in will prove of inestimable benefit to your health. Deep breathing improves the digestion. Practise it frequently during the day. More die of air starvation than of food starvation.



The Connecting Link Between Trapper and YOU

CANADA'S Largest Fur Factory is the connecting link between the trapper and YOU. Here we manufacture the famous PAQUET FURS, which are recognized as the Standard of Quality from Halifax to Vancouver.

And when we say "manufacture," we mean just that. We do not buy the skins, ready dressed and dyed, and make them up at an enormous expense which YOU must help to pay. If we did, we'd have nothing unusual to talk about. We buy the skins in the raw—dress them and dye them ourselves—and then make them up in our own workrooms. This is the ONLY Fur Factory in AMERICA where every process, from the dressing of the raw skins to the finishing of the Fur Piece or Garment is in operation under the one roof.

We employ only the most modern processes of dyeing and finishing. Every member of our vast army of workers is an expert in his line.

This is because Fur has been to their fathers and grandfathers what it is to them—a life study. It stands to reason that with all our advantages we

Examine Them Free

You don't need to send one cent in advance. Choose your Furs from our 80-page Fur Catalogue and we will send them PREPAID, for Free Examination to any Express Office in Canada. Pay the Express Agent our Catalogue Price and they are yours.



This Handsome Fur Catalogue containing 80 pages of illustrations and prices of PAQUET FURS, will be sent you FREE upon request. This is the most beautiful Fur Catalogue ever published in Canada. Write NOW!

THE PAQUET COMPANY LIMITED
Quebec - Canada

should turn out the very best Furs on the Canadian market, doesn't it? And that we do is testified to by thousands of Canadians who have spent to date more than EIGHT MILLION DOLLARS for PAQUET FURS. Quite a tidy little sum, isn't it?

And, what's more, every one of these purchasers is a satisfied customer.

In the past PAQUET FURS have been sold through the leading Fur Stores of Canada. The demand has now reached a point where more adequate distributing facilities are an absolute necessity. For this reason we have decided upon this new policy of selling direct to YOU at actual wholesale prices. This will enable us to keep our immense Fur Factory running at full capacity all the year round. It will also enable YOU to buy your Furs at the lowest prices ever known in Canada.

The Set Illustrated \$25

No. 6145—Lady's "Olympic" Stole in Black Russian Lynx (perfect imitation of genuine Black Lynx), lined with plain Satin. Special, \$12.50.

No. 2102—Lady's "Teddy" Muff to match, Black Russian Lynx, Satin lined. Special, \$12.50.

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MARKET REVIEW AND FORECAST

Toronto, Monday, Sept. 25.—Business has been somewhat quiet here since the close of the past week, but wholesale houses report a good volume of trade, circumstances considered. In effect, the selection on market prices was most notable in wheat, as United States prices advancing as much as six cents a bushel at Minneapolis and prices at Winnipeg breaking sharply. Other grains have not been affected to any great extent, and dealers anticipate that deliveries will be larger now that the fate of reciprocity has been decided. Barley, the principal market for which as well as the 30c date. The Canadian farmer, however, had reciprocity been adopted, would not be getting that 30 cents duty.

As for the stock market, milling issues have had a distinctly firmer tone since Thursday, and the steel companies sold their stock at considerable advances, as it is supposed that this latter industry will have a great deal more to expect from a Conservative than from a Liberal administration.

Many business men believe Canada has failed to take advantage of an opportunity for greatly increasing its trade and prosperity, the prosperity that we have enjoyed for years still can be obtained by an stream of emigration into our free lands is bound to keep business active until such time as these lands are taken up and then the securing of markets will be our main consideration, and we will then run the day when we re-ferend an opportunity of access to the markets of the United States.

A feature of the present situation that the produce men are not losing sight of is that reciprocity has been passed in the United States and still remains on their farm books. We may, therefore, want to obtain entry to the markets for our farm produce.

WHEAT

Hard wheat is down 3/4 cents from last week's quotations. The uneasy condition of politics in Europe would have caused a stronger tone in the wheat trade had not other features entered in. The defeat of reciprocity is altogether accountable for the decline in wheat prices in the face of otherwise bullish conditions. No. 1 Northern is quoted at \$1.86 and No. 1.10. The price of Ontario wheat remains steady at 85c to 86c outside. Deliveries are not large.

COARSE GRAINS

There is still little trade moving in coarse grains. Oats are down 1 1/2c; corn is weaker, and other grains are steady. Dealers look for large deliveries in the next few weeks. The demand from the United States dealers for barley has held the price steady at 70c to 75c. Feed barley is 56c to 58c. Quotations on other 1.40c; No. 3, 45c; Ontario No. 2, 41c to 41 1/2c outside, and 41 1/2c on track here; No. 1, 41c; No. 2, 38c; No. 3, 35c; No. 4, 32c; No. 5, 29c; No. 6, 26c; No. 7, 23c; No. 8, 20c; No. 9, 17c; No. 10, 14c; No. 11, 11c; No. 12, 8c; No. 13, 5c; No. 14, 2c; No. 15, 0c; No. 16, 0c; No. 17, 0c; No. 18, 0c; No. 19, 0c; No. 20, 0c; No. 21, 0c; No. 22, 0c; No. 23, 0c; No. 24, 0c; No. 25, 0c; No. 26, 0c; No. 27, 0c; No. 28, 0c; No. 29, 0c; No. 30, 0c; No. 31, 0c; No. 32, 0c; No. 33, 0c; No. 34, 0c; No. 35, 0c; No. 36, 0c; No. 37, 0c; No. 38, 0c; No. 39, 0c; No. 40, 0c; No. 41, 0c; No. 42, 0c; No. 43, 0c; No. 44, 0c; No. 45, 0c; No. 46, 0c; No. 47, 0c; No. 48, 0c; No. 49, 0c; No. 50, 0c; No. 51, 0c; No. 52, 0c; No. 53, 0c; No. 54, 0c; No. 55, 0c; No. 56, 0c; No. 57, 0c; No. 58, 0c; No. 59, 0c; No. 60, 0c; No. 61, 0c; No. 62, 0c; No. 63, 0c; No. 64, 0c; No. 65, 0c; No. 66, 0c; No. 67, 0c; No. 68, 0c; No. 69, 0c; No. 70, 0c; No. 71, 0c; No. 72, 0c; No. 73, 0c; No. 74, 0c; No. 75, 0c; 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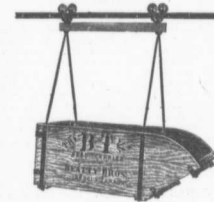
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