

# FARM AND DAIRY

## RURAL HOME

PETERBORO, ONT.

MAY 21

1909



ONE OF THE FINE FARM HOMES IN PETERBORO COUNTY, ONT.

The returns from modern methods of managing the soil make it possible for those in the country to live with all the comforts and luxury commonly ascribed to wealthy city dwellers. Mr. S. F. Redmond, whose farm home is illustrated, believes in all that is modern pertaining to the farm. Good farm buildings and under-drainage have had much to do with the success of Mr. Redmond. Clydesdale horses and Shorthorn cattle are kept. The Redmond dairy is noted for its butter, it having captured first prize at many local fall fairs.

DEVOTED TO  
BETTER FARMING AND  
CANADIAN COUNTRY LIFE



# WE ALL MAKE MISTAKES

Some mistakes are only of minor importance while others affect us as long as we live.

The greatest mistake dairymen are apt to make is to buy a Cream Separator, and continue to use it even if it does not give satisfaction. Did you ever stop to think how small losses amount up to large ones. A loss of one cent a cow each day in the year means a loss to you of \$3.65; with 10 cows the loss is \$36.50; with 20 cows your loss would be \$73.00 each year. It is a matter of great importance to you that your Separator should be a clean skimmer and as perfect in mechanical construction as a man can make it. The SELF-BALANCING DEVICE with which

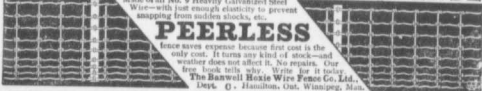
## The Simplex Link-Blade Separators

are equipped makes the loss of cream in the skimming almost impossible. You will make no mistake in buying one of these machines. Our illustrated booklet is free on request—it's worth reading.

# D. Derbyshire & Company

Head Office and Works: BROCKVILLE, ONT.  
Branches: PETERBOROUGH, ONT. MONTREAL and QUEBEC, P. Q.  
WE WANT AGENTS FOR A FEW UNREPRESENTED DISTRICTS

## THE FENCE THAT SAVES EXPENSE



Made of all No. 9 Heavily Galvanized Steel Wire—with just enough elasticity to prevent snapping from sudden shocks, etc.  
**PEERLESS**  
Fence saves expense because first cost is the only cost. It turns any kind of stock—wandering dogs and sheep, etc.—out without a word and without a strike. Our wire fence will last for years.  
The Beawill Electric Wire Fence Co., Ltd.,  
Dept. C, Hamilton, Ont., Winnipeg, Man.

## GET A FREE COPY

We have just issued a new book catalogue, giving the latest and most up-to-date books on Gardening, Dairying, and General Farming. A free copy will be mailed you on request.  
THE BOOK DEPARTMENT, THE RURAL PUBLISHING CO., LTD., PETERBORO, ONT.

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

## The Taxation Question

### Abolish the Improvement Tax

Editor, Farm and Dairy.—In the April 15th issue of your valuable journal is a letter from D. A. Graham, of Lambton County, advocating the freedom from taxation of improvements on farms. He has made out so good a case that it can't be successfully refuted. He shows clearly that the more a farmer does for his municipality, the worse the assessor does for him. He is fined, taxed, punished for the good he does in improving his place and in building up the country. The system is so absurd and ridiculous that it is more worthy of some heathen country than of an enlightened people like Canadians.

The moral law should govern us in government as well as in our private dealings. And if moral, is it right, is it just, to tax a man for improving his place? The people vote, but, as yet, government by the people is only an experiment. Our Municipal Government is nearer to it, so should not all good citizens aim to make our Municipal or Home Government as nearly perfect as possible? But, what kind of Municipal Government is it that fines people for improving their homes.

A STEP TOWARD WISDOM.  
Our Federal Government and Provincial Governments are far from being what they ought to be, but, it is idle to expect them to be what they ought to be till we get our home, municipal affairs conducted properly. Honest local taxation is not everything, but it is something. It is a step toward striving for heaven is not reached at a single bound, but rather, it is gained step by step. And this step, the freeing of improvements from taxation is one of tremendous importance. Think of what it means to our boys and girls who may settle in the future in New Ontario? That the future in New Ontario will be overrun with speculators, and hold up men, freeing improvements from local taxation will make those who hold land idle pay as much local tax as those who improve and develop the country. The curse of every new country is the Land Grabber, but honest taxation will put such out of business and give honest industry a chance.

LAND VALUES.  
The mistake with most people is in mistaking value of land for wealth. Right there is the stumbling block. People can see wealth, in buildings, fences, breaking, etc. Value of land, however, is not seen with physical eyes, but with the eyes of reason. See that vacant lot in your town? There is no wealth on it, or no buildings, no improvements, but yet, from its situation it is valuable. Try to buy it and test this point for yourself. See that wild unimproved place surrounded with improved farms? It is not wealth itself. There is no wealth on it, but yet it has value from its situation. The better the site the more valuable it is. And it is this value that nobody has worked for that the assessor should see, and he should see nothing else. And, if he can't see that value, then it is up to readers to make him see.

Let Farm and Dairy readers think over this matter and press it upon the attention of their M.P.'s, and Councils and Assessors. Those who make the present assessment act can easily amend it, but it is up to the people themselves to let their public servants know how they want it changed.—Yours truly,

### FAIR PLAY.

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

### Better Police Protection

Editor, Farm and Dairy.—Each day as we scan our papers and read accounts of the ever-increasing number of cases of murders, "hold-ups," horse-stealing, cattle maiming, etc., the necessity for more efficient police service is more clearly borne in upon our minds. It seems to be conceded on all sides that the only solution of this problem is to be found in the establishment of a rural constabulary, to act in conjunction with our present county constables. I read with a great deal of interest a letter from Col. Vance Gravelly, dealing with this subject, some time ago; and as I cannot at present lay my hand upon the paper containing it, I am sure he will pardon me, should I unwittingly appear to advance any of his theories as my own.

My idea is that we should have a semi-military rural mounted constabulary. The members of this corps should be picked men, of intelligence and education, as well as good physique. I should advise that they be governed by the same regulations as the North-West Mounted Police, excepting that they should be under the control, and paid by, the Provincial Government. In addition to the ordinary duties of county constables, they might report any glaring defects in roads, bridges, etc., to the Reeves which they passed through, through which they passed. I should also consider it advisable to have them equipped with small pocket telephones which they might attach to the wire at any point, thus rendering it possible for them to summon assistance, etc.

Now for the military side. In case of war, these men would form a simply invaluable corps of guides. With their minutely accurate knowledge of the country, they could give detailed descriptions of roads, the condition of rivers, at different periods of the year, the capabilities of bridges for the transportation of troops and, in short, would form the most valuable branch of the militia service. I have only to refer to the North-West Mounted Police, of almost world-wide fame, to see to what a height of perfection a constabulary force can attain; and, I believe, in our own case the mere existence of such a corps would have a salutary effect, and be largely deterring to the prevalence of crime, so deplorably marvellous at the present time.—R. E. Birdsall, Peterboro, Ont.

### Items of Interest

The next annual meeting of the American Association of Farmers' Institute Workers will be held at Portland, Oregon, August 16 and 17, 1909. At the same place and beginning August 18 will be held the annual meeting of the Association of American Agricultural Colleges and Experiment Stations. The Alaska-Yukon-Pacific Exposition will be in operation in Seattle at that time, and no doubt excursion rates with stop-over privileges will be granted by the transportation companies.

Nine-tenths of the hen manure produced in the State of Connecticut each year is robbed of more than one-half of its fertilizing qualities because of its being mixed with wood ashes. Did you ever stop to think how much ammonia there is in all animal and bird manure? How many farmers realize that the effect of wood ashes upon manure is to release the potential ammonia and suffer it to escape long before the blow and culmen of a bird has had an opportunity to bring it into contact with the root growth?

I think that Farm and Dairy is the best paper published in Canada. It is almost speaking paper I ever got hold of.—R. C. Billings, Oxford Co., Ont.

### Issued Each Week

Vol. XXV

### One Spraying, Districts

If we except Ontario, we may say is the cause of the province that than all other observations a in different part from this issue per cent. of districts not m apples are thus went. are thus grown into fold astray in saying failed last autumn lost the equivalent of the ravages of a

Such a state of the question we cannot to a large extent. Our experience of man show that this and that, too, of either time summer the orchards where plots were free orchards being are two broods in conversation with growers as Oak Grierison, of Har of Simcoe, and that all these ed districts had fight against thured an average and in some cases

But if we are methods of com study the life therefore try to much about the Worm as is necessary for the methods later.

THE LEFT Hibernation—winter in the little nest, or coo, such as a bark on the large around the base near the tree, but is of any kind houses.

When the weather of the sp

# FARM AND DAIRY

## RURAL HOME

### THE CODLING WORM, AND ITS CONTROL.

L. Casper, B.A., B.S.A., Ontario Agricultural College, Guelph.

#### One Spraying, if Done Thoroughly and at the Right Time, will Control the Codling Worm in most Districts. The Ravages of This Insect Cost Ontario Farmers about \$1,000,000 last year.

IF we except the few counties in South-western Ontario, where the San Jose scale is found, we may safely say that the Codling Worm is the cause of more loss to the apple growers of the province than any other insect, and, in fact, than all other insects combined. From numerous observations and inquiries made by the writer in different parts of the province the annual loss from this insect may be estimated at about 25 per cent. of the total crop; for while in a few districts not more than about 10 per cent. of the apples are wormy, in others as high as 75 per cent. are thus affected. If we change these figures into dollars we shall probably not be far astray in saying that at the prices which prevailed last autumn the farmers of the province lost the equivalent of about \$1,000,000 through the ravages of the Codling Worm.

Such a state of affairs naturally suggests the question whether this enormous loss cannot to a large extent at least be prevented. Our own observations and the experience of many of our best fruit growers show that this result can be brought about and that, too, without any great expense of either time or money. During the last summer the writer visited a good many orchards where fully 90 per cent. of the apples were free from worms, some of the orchards being in the district where there are two broods in the year. He also found by conversation with such well known apple growers as Harold Jones, of Matland, Mr. Grierson, of Oshawa, Mr. Jas. E. Johnson, of Simcoe, and Mr. D. Johnson, of Forest, that all these men in these widely separated districts had had excellent results in their fight against the Codling Worm, and had all secured an average of 90 per cent. of clean apples, and in some cases as high as 98 per cent.

But if we are to discuss intelligently the best methods of combating any pest we should first study the life history of that pest. We shall therefore try to give as simply as possible as much about the life and habits of the Codling Worm as is necessary to make plain the reasons for the methods of treatment that will be outlined later.

#### THE LIFE HISTORY OF THE INSECT.

**Hibernation.**—The Codling Worm passes the winter in the worm or caterpillar stage in a little nest, or cocoon under any sort of good shelter, such as a hole in any apple tree, the loose bark on the larger branches and trunk, rubbish around the base or on the ground beneath or near the tree, boards on the fence, or hiding places of any kind in storage buildings or packing houses.

**When the Moths Appear.**—When the warm weather of the spring is well under way the cater-

pillars in their cocoons pass through marvellous changes and about the first week in May some of them transform into pretty little gray moths or millers that fly about. (See Fig. 1.) All, however, do not become changed into moths at the same time, for almost two months elapse between the appearance of the earliest and the latest moths. The reason for this is that some cocoons are in warm locations where they receive the heat and light and so transform much more quickly than those situated in colder and darker places. It is important to keep this fact in mind when studying the Codling Worm as it will explain why we often find, say in July, full grown caterpillars in some apples, and very tiny, young ones in others on the same tree.

#### How Long the Moths Live; Number of Eggs

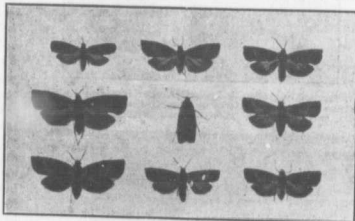


Fig. 1—Codling Moth, Natural Size

It is estimated that a loss of from 10 to 75 per cent. of the apple crop results yearly from the ravages of this pest. This loss has a money equivalent of about \$1,000,000. Read the adjoining article dealing with this insect and its control.

**and Where Laid.**—Each female moth lays an average of about 40 eggs. The eggs of these moths that is those that come from the over-wintering caterpillars, are laid for the most part on the leaves, and not, as is commonly supposed, on the young fruit, though a small percentage is laid there. From a number of observations it is estimated that on the average a moth lives only about five days; so we may say that she lives merely to lay her eggs and then dies.

**Appearance of Eggs and Length of Incubation:** The eggs look like tiny, circular, nearly flat, white specks. (See Fig. 2.) The length of time necessary for the eggs to hatch depends partly upon the weather, and averages about eleven days.

**Habits of the Worms.**—When the young caterpillar is hatched it sometimes feeds to a slight extent upon the leaves but its main object now is to find its way to an apple. Many doubtless perish before catching it, but those that succeed find it very difficult to work their way through the tough skin without some good prop, so about 80 per cent. of them crawl around to the blossom end or, as it is commonly called the calyx,

and easily work their way down along the little leaflets there into the cavity at the base. Here they feed for some time before entering the apple proper. (This habit of the first brood of entering the calyx end and feeding in the cavity should be carefully noted, as it is largely the secret of the success of the treatment recommended.) On entering the pulp the caterpillar makes its way to the core. After feeding from three to four weeks it is full grown and either makes its way out before the apple falls to the ground or does so soon afterwards. It then at once seeks a sheltering place where it can make its cocoon.

**Number of broods in the Year.**—In most of the province there is practically only one brood in a year, but the fact that there are sometimes nearly two months between the time when the first and last moths appear naturally results in our finding caterpillars in all stages as late as August, misleading many into the belief that this indicates a second brood. There is, however, a second brood in the south western part of the province, noticeably in the Niagara district. This brood is usually much more numerous and destructive than the first. Where the second brood occurs the caterpillars of the first instead of remaining in their cocoons over winter only remain about from 15 to 20 days, and then come out as moths. More of the eggs of this brood are laid on the fruit than of the previous one, apparently about 50 per cent. being placed here. The rest are laid on the leaves and twigs. Not so large a percentage of this brood enter the calyx end although from 20 per cent. to 50 per cent. usually do so. The rest enter the side of the apple especially where two apples touch, access at such a place being comparatively easy. Caterpillars of the second brood may be found entering apples from about the first week in August to the middle of September. When these become full grown they form their cocoons in the usual type of hiding place and remain there over winter.

By the following brief calculation it is easy to understand how this brood can be so destructive. One female in the early part of the season lays 40 eggs, about 20 of which may produce female moths. Each of these laying 40 eggs there would be at the end of the season, 20x40=800 caterpillars of the second brood. Of course, in reality there never would be this number for many eggs never hatch, and many caterpillars die from disease or are killed by parasites, birds or other foes before they can enter the apples.

#### METHODS OF CONTROL.

**Birds.**—We have very valuable friends in the birds, especially the Woodpecker, Chickadee and Nuthatches, which, if not molested, would frequently destroy many Codling Worms as well as numerous other insects. The writer has counted as many as 20 Codling Worm cocoons on the trunk of an apple tree from which the caterpillars had been removed last winter by Woodpeckers.

**Hogs or Sheep in the Orchard.**—Whenever hogs or sheep are allowed to run in an orchard they do much to keep down the number of Codling Worms by eating the fallen fruit before the worms



either small whole potatoes or cuttings of larger, but inferior tubers, many varieties that were originally excellent have deteriorated or run out until they are incapable of producing half a crop. When we realize the great difference between varieties in regard to yielding capacity and ability to resist disease, three or four varieties that have been placed in the front ranks by our Experimental Stations, should, as a rule, be tested in small plots side by side for a year or two and the most promising sort chosen for future use. Some simple system should be then introduced whereby the strain might be maintained in yield and quality from year to year.

In choosing a variety we should remember that the potato is grown for human consumption and that quality is of prime consideration. Generally speaking the following points should be kept in mind, viz.: (1) Cooking quality and flavor; (2) Yield; (3) Ability to resist disease; (4) Color of the skin; (5) Shape; (6) Date of maturity; (7) Trueness to type; (8) Vigor.

#### COOKING QUALITY

Cooking quality in a potato seems to depend upon the general structure of the tuber and the relative thickness of the different layers. The potato, being a part of the underground stem of the plant, is composed of minute cells, the contents of which should consist mainly of starch. In cooking a potato of desirable quality the cell wall will break down liberating their starchy contents and allowing them to unite with the contents of other cells in a floury mass. In potatoes of undesirable quality the cell walls do not give way when the tuber is cooked but remain intact retaining the contents, thus making the potato heavy and soggy. While the only sure way of testing the cooking quality of a potato is to cook it, yet a critical mechanical examination of the uncooked tuber will reveal certain characteristics that are indicative of either high or low quality. For instance, a cross section of a potato of poor quality will show a certain coarseness with well defined pith, the rays of which radiate towards the periphery. The cells in the pith are poor in starch which explains why a coarse pithy potato proves unsatisfactory when cooked.

The yield of potatoes is a most variable character and differs greatly not only between different varieties but between different plants within the same variety. In securing a variety the grower should ascertain if possible what its record is as a heavy yielder and should secure seed of that variety possessing the best record.

#### DISEASE RESISTANCE

The ability to resist diseases in potatoes is an interesting and important point. While no variety can be termed "disease-proof," yet some varieties seem better able to resist the attacks of disease than are others. Adaptability of the variety to the locality seems to be important since the further removed a variety is from the conditions peculiar to its natural habitation the more susceptible it seems to be to disease. The difference between varieties in regard to their attitude toward diseases suggests the possibility of developing disease resistant strains. What has already been accomplished along this line at our Experimental Stations is most encouraging. Full particulars regarding this work may be found in the annual reports published by these institutions.

The color of the skin of the potato is important only in so far as it affects the market. Some markets prefer a red-skinned potato, others a white. At present, the white-skinned sorts seem to be most favored. A somewhat rough and netted skin is regarded with favor by most authorities as indicating perfect maturity and good quality.

The shape of the tuber is an important point. The shape which is most desired is that which is termed "flat, round or oval." Such a shape presents a greater surface in proportion to the bulk and since the best quality of starch is found in those layers near the surface, potatoes of this

shape are likely to be of better quality. The surface of the potato should be comparatively smooth with shallow eyes so as to produce as little waste as possible in peeling.

#### POTATOES OF MEDIUM SIZE

Potatoes should not be too large. This is a very common fault in some of the large potato growing sections of the East. A medium sized potato is

#### Likely Prize Winners

Are there any farms in your neighborhood that are a credit to your Township and County? Are there not some up-to-date dairy farmers in your section that would stand a good chance of winning in the great Dairy Farms Competition being held this year in Ontario? Do they know about the competition? Make sure by showing them the big announcement that appears again in this issue. Enter your own farm in the competition. Encourage your neighbors to enter. Don't be sorry after the competition is over that you and your friends did not decide to compete. For full particulars write to Farm and Dairy, Peterboro, Ont.

preferred as being more easily cooked and generally of better quality. Furthermore, a larger yield is likely to be realized from medium sized tubers than from varieties or strains inclined to produce larger ones but of fewer number in the hill.

Vigor is a most important character in the potato plant. Some varieties tend to degenerate or run out much more quickly than do others. Many authorities claim that a normal variety propagated by root cuttings (sets) will reach old age at about 30 years. Others claim that by proper selection the vigor of a variety may be maintained indefinitely by continuous selections. The latter contention has the support of much experimental evidence and probably approaches more nearly the truth.

From a consideration of the foregoing it will be seen that "Choice of Variety" is an important feature in the potato growing industry, especially when there is such an enormous list to choose from and when the differences in quality and yielding capacity between them are so marked.

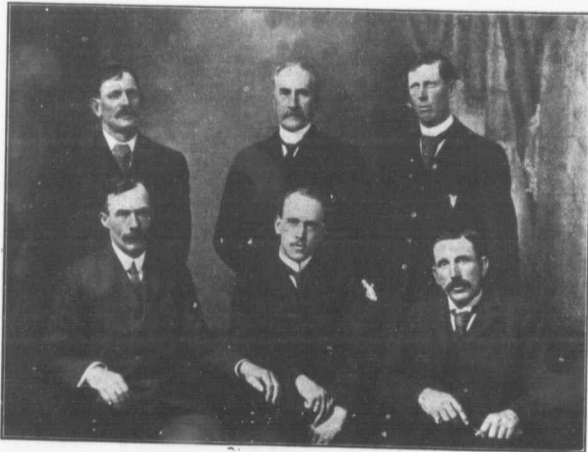
#### Replanting Maple Trees

T. Robertson, Victoria Co., Ont.

Maple trees should be replanted early in the spring. They are then sure to grow. The question may be asked why will they grow better by being planted so early? It is because the sap season is over and the buds are not yet started. It is advisable to transplant them in the growth of the moon. On most farms there is some corner or lane where trees could be planted. By the roadside in front of the farm is an ideal place for them. In the year 1884, we replanted 75 trees at a time when the moon was in its growth. By chance 73 of them are living. One was killed by cattle and one died because of being planted in a water hole. Last year and for two former years, we tapped these trees and got from them a good run of sap. Some of these trees are now 12 inches in diameter. This year we are having a lot more planted. The job is let by contract for 10 cents a tree. They will be planted in a corner of a field that is fenced in for a woodlot. We have over 150 planted before this year.

A tree from one and a half inches to two inches in diameter with a smooth trunk and bushy top is the best to transplant. Trim off the top so as to leave less for the roots to support. Mark the tree before removing it from the forest so as to replant it the same as it was planted in the woods; that is the north side to the north as in the bush. Dig the tree out with a good sharp spade. Leave the roots eight or ten inches from the tree. Two men can handle a good sized tree. Cutting off the centre roots will not do any harm if the remaining rootlets are not destroyed. Leave as much clay on the roots as possible. Dig the hole in which it is to be planted large enough and not too deep so that the tree when reset is no deeper than it was in the bush. Place a few stones on top of the ground around the tree to keep the roots solid. These will also act as a mulch.

In from 25 to 30 years' time one can, by transplanting trees from the bush, have a sugar orchard wherever it is wanted. By planting an acre of an acre in extent about one rod each way with hard maple trees, a good bush will result that will be a good sweet thing for the family that is coming after you. In our case we have it now.



Leading Municipal Officers who are Pushing the Forestry Question.

There are some 14,000 acres of waste land in the United Counties of Northumberland and Durham, and the United Counties' Council is becoming aroused on the question of reforesting this land. As described in Farm and Dairy, page 15, May 29th, members of the Council met recently in Cobourg, with the Editor-in-Chief of Farm and Dairy, to discuss this problem. Those shown in the illustration are as follows: Front row, reading from left to right, Warden A. A. Powers, of Orono, H. B. Cowan, Editor-in-Chief, Farm and Dairy; Reeve A. A. Colwill, of Newcastle, and Chairman of the committee of Agriculture of the Counties' Naughtan, of Cobourg, and Reeve Alex. Weatherston, of Warkworth.



their crop should communicate with the Secretary, C.S.G.A., Canadian Building, Ottawa.

**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.

**Dairy Cattle—Feed for Mare**

1. As beef has been low in price and milk pays well. I have gotten rather tired of my Shorthorn cattle. I feel that I should change them for a good milking breed. What dairy breed do you think there would be most money in: I would favor the Ayrshire or Holstein. My farm of 200 acres would make a good dairy farm.

2. I had a valuable Clyde mare in foal. Her time will be up the first of June. As there will be little grass till after that, will you let me know what is the best feed for her, till she has the colt. I have not much work for her till then.—J. M. Carleton Co., Ont.

1.—Either Ayrshires or Holsteins may be expected to give satisfactory returns as dairy cows in Carleton County, where first-class herds of either sort are to be found. For cheese making the Holstein as giving the largest flow of milk will possibly be the more satisfactory, but the breed that a man likes is the breed that will give the best results with him, other things being equal.

2.—Give mare as much exercise as possible. Keep digestive organs in good shape by feeding on bran and a few oats. Feed her on hay and give some straw. Keep in a loose box if possible and exercise regularly.

Give small amount of roots, carrots if available. See that she gets lots of good pure water.—J. H. Grisdale.

**Concerning Feeding Standards**

In the March 15th issue and on page 6, "Feeding for Milk Production," you say the maintenance ration for a 1000 lb. cow should be seven lbs. protein, seven lbs. carbohydrates and one lb. of fat. Is this not a mistake and should it not read 70 lbs. carbohydrates and 10 per cent fat?—Z. N. Galtier.

For dry cows, 1,000 lbs. weight, the German standards call for 2.5 protein, 31 carbohydrates and .5 fat digestible in each case.

Experiments in America seem to indicate that these standards may be materially deviated from with quite good results. The lines of variation experimented with have been particularly as to the quantity of protein. It has been found that a much wider ration will give about as good results as the standard ration, and generally speaking the wider ration is the economical or cheap ration. This fact, while of very great value to corn belt feeders, does not signify as much to Canadian dairymen, whose rough feeds are usually more nitrogenous in character than those of the corn belt states.—J. H. Grisdale.

**Oats and Peas—Tuberculosis**

Kindly let me know through your columns the feeding value of oats and peas sown mixed for horses, when sown and in what quantity? Also please give information as to how to test cattle for tuberculosis.—A. M. Fox, Warren, Man.

Oats and peas sown mixed at the rate of 8½ bus. an acre usually yield a good yield of forage excellent for horses, cattle or sheep. The oats and peas should be mixed about one bush. peas to two bus. oats. Sow early.

Testing for tuberculosis should be done by a qualified veterinary practitioner.—J. H. Grisdale.

A large portion of the corn grown in eastern Ontario is of little use to feed to dairy cows because it is left out in the fields too long after it is cut.—Senator D. Derbyshire, Brockville, Ont.

**Prize Farms Competition**

FARM AND DAIRY, Peterboro, Ont., the only farm and dairy paper published in Canada, has arranged for the holding of a great competition throughout Ontario during 1909, 1910 and 1911, to decide which are the best dairy farms and dairy farmers in the Province. During 1910 and 1911 a portion of Quebec may be included in the competition.

**60 GOLD AND SILVER MEDALS**

Ontario, excepting New Ontario, will be divided into four districts. This year (1909), five gold and ten silver medals and handsome diplomas will be offered for the best farms in each district. The districts will be approximately as follows:

DISTRICT No. 1.—That portion of Eastern Ontario lying East of a line running North of Kingston.

DISTRICT No. 2.—The counties in Eastern Ontario between Kingstons and Yonge St., Toronto.

DISTRICT No. 3.—Western Ontario, North of a line running from Hamilton to Goderich.

DISTRICT No. 4.—Western Ontario, South of a line running from Hamilton to Goderich.

These districts are subject to revision after the entries have all been received, to facilitate the judging of the farms.

**JUDGING THE FARMS, THE POINTS OFFERED**

The farms will be judged twice; once in July and once in December. All departments of the farm will be included in the competition. One thousand points will be offered, subdivided as follows:

House 150, vis., plan, finish and approaches, 25; lawns, 16; garden and orchard, 35; interior arrangement, 30; sanitation, 20; education, 25; total 160.

Farm buildings 150, vis., provision and size, 25; location, 25; condition, 20; neatness, 20; convenience, 25; light and ventilation, 25; yard, 10; total 150.

Live Stock 200, vis., number, 40; quality and condition, 40; breeding and methods of breeding, 40; feeding, 20; poultry, 15; horses, 30; swine, 15; total 200.

Crops 200, vis., yield and condition, 75; freedom from weeds, 75; suitability, 60; total 200.

Farm Management 150, vis., arrangement of fields, 20; rotation, 25; ice and water, 20; fences, ditches, roads, etc., 20; workmanship, 25; preservation of manure, 20; book-keeping and records, 20; total 150.

Machinery 75, vis., supply, 25; repair, 25; housing, 15; character, 10; total 75.

Permanent improvements, 75; total 75.

The farms in each district scoring the highest number of points will be awarded the prizes. During 1910 and 1911 the prize winning farms this year will be allowed to compete in a final competition to decide the best ten dairy farms in the Province.

**THE RULES**

1. Farms must contain at least 90 acres. The whole farm must be entered. Swamp, stony or poor land cannot be left out but the judges will have power to leave it out if in the use of their discretion they so decide.

**Our Veterinary Adviser**

**FATALITY IN CATTLE**—Two of my cows died only 24 hours apart. In the evening after feeding, they milked as well as usual, and in about 20 minutes one of them was dead. I opened her and examined her all through, everything appeared to be all right. I had three others more or less sick. Kindly let me know what is the matter and prescribe a cure. W. H. Stormont Co., Ont.

As you give no anti-mortem symptoms and according to your post-mortem all organs were healthy, I am unable to say what killed your cattle. The suddenness of death indicates poisoning by strychnine. All that I can suggest if you have any further trouble is to send for your veterinarian and he will hold a care-

ful post mortem and probably be able to determine the cause of death.

**BRONCHOCLE**—Calf when born had a lump in the throat. It looks like goitre. The calf is doing well but the lump is still there.—W. T. C. Halton Co., Ont.

This is an enlarged thyroid gland known as bronchocle or goitre. Get ointment made of 2 drams each of iodine and iodide of potassium, mixed with 2 oz. vaseline and rub a little well into the lump once daily.

**ECZEMA**—Pigs five months old are very itchy, but they have no lice. They did well for about 2½ months, and then they began to rub and scratch themselves, and have not done well since. Their hair seems dry.—J. G. Peel Co., Ont.

This is eczema. Give them a good washing twice weekly with a warm 4 per cent. solution of senoleum or creolin. Turn them out on grass during the day time.

2. Farmers with 90 acres of land must have ten cows, 200 acres of land, 15 cows; 300 acres of land, 25 cows; and over 300 acres, 25 cows. The competitors must be sending the milk or cream of that number of cows at least, to a cheese factory or creamery, or to the city, or making it into butter or cheese.

3. Only practical farmers will be allowed to compete. If necessary, competitors will be required to furnish proof that their chief occupation is farming, and that they have been engaged in farming principally, for at least five years previous to the competition.

4. To assist in defraying the expense of the competition there will be an entry fee of \$2.00, and competitors will be expected to join either the Eastern or Western Ontario Dairymen's Associations.

5. Entries must be sent to the Secretary, H. B. Cowan, Farm and Dairy, Peterboro, Ont., with the entry fees, on or before June 15th, 1909.

6. Successful competitors will be required, when asked to do so by the judges, to furnish essays on any two features of their farm work that may be called for. These, however, will not be counted in the awarding of prizes.

7. The committee of management reserves the right to refuse the entry or entries of farms, the acceptance of which it may deem would be unfair, owing to special conditions, to other competitors. These rules may be extended or amended if the committee deems such action to be in the best interests of the competition.

**CONTRIBUTORS**

The holding of this competition has been materially assisted by a contribution of \$250, that the committee of management has received from Dr. Jas. W. Robertson, principal of Macdonald College, Quebec by one of \$200, from the De LaVallee Separator Co., and by one of \$150, received from the Eastern Ontario Dairymen's Association. Other similar contributions will be appreciated.

**COMMITTEE OF MANAGEMENT**

The following well known farmers and dairymen have kindly consented to assist Farm and Dairy by acting on the Committee of Management that will have charge of the Competition: Chairman, Henry Glendinning, Manilla, Ont., and George A. Gillespie, Peterboro, Ont., representing the Eastern Ontario Dairymen's Association; D. A. Dempsey, Stratford, Ont., and S. R. Wallace, Burgessville, Ont., representing the Western Ontario Dairymen's Association; W. W. Ballantyne, Stratford, Ont., President Dominion Ayrshire Cattle Breeders' Association; B. Malory, Belleville, Ont., President Canadian Holstein-Friesian Cattle Breeders' Association; W. P. Platt, Toronto, Canadian Jersey Cattle Club; D. C. Flatt, Millgrove, Ont., President Dominion Swine Breeders' Association; Simpson Rennie, Toronto, Ont., gold prize dairy farmer; R. F. Hicks, Newtonbrook, Gordon Gooderham, York Mills, Ont., and W. G. Ellis, Toronto, Ont.

For further particulars, entry forms, etc., write the Secretary of the Committee, or

**FARM AND DAIRY, - Peterboro, Ont.**

**SCROTAL HERNIA**.—Newly born colt has scrotal hernia.—H. M. Peterboro Co., Ont.

In most cases nature effects a cure of this trouble without extraneous interference. Watch the colt and if the rupture is increasing, as you will have to employ a veterinarian to operate, but if it does not become larger leave it alone and in all probability it will disappear, probably by weaning time, possibly until it is a year old and in rare cases it appears periodically until two years old. Unless an operation for the hernia becomes necessary do not have him castrated until it ceases to show at any time.

An excellent substitute for meat foods is cottage cheese. You may feed it to f-wls of any age and will find it very nutritious. Give about three feeds each week of the cheese.

## HORTICULTURE

### Growing Strawberries for Profit

As the season for planting strawberries is near at hand, and as the time for harvesting from the old patch will soon follow, the following pointers on strawberry culture given by Mr. Farnsworth, a prominent grower in the state of Ohio, at a meeting of the Niagara District Fruit Growers' Association held last year, will be of value.

"The soil for strawberries should be well prepared," said Mr. Farnsworth. "It should be filled with fertility and thoroughly drained. This berry is a rank feeder. To give advice on varieties is almost impossible as a certain kind that do well in one locality may be utter failures in others. Consult successful growers in your neighborhood and take their advice on this point.

"Strawberry growers who use plow from their own beds for setting out their new plantations should have a bed set aside for this purpose. When planting time comes, dig the entire bed and select the best plants. When planting, clip off a small portion of the roots. A portion of the leaves should also be cut off. Set the plants at a proper depth neither too deep nor too shallow. Have the back of the plant at the surface of the ground. Pack the earth firmly about the roots.

"Start shallow cultivation at once, remove the fruit buds. When hoeing, place the runners along the rows at more or less equal distances apart. When the runners become too plentiful, cut some of them off. Sharpen the back of the hoe for this purpose. The plants should not be crowded. Thin out the heavy plant setting varieties in the fall.

"As soon as the ground is frozen late in the fall, mulch the patch with wheat straw. Do this off early in the spring and leave part of it between the rows. It does not pay to fruit a strawberry bed for more than one year.

"When harvesting the berries, handle them as tenderly as eggs. They will not stand rough treatment. Do not cap the top of the baskets with the best berries and do not put in the baskets green berries or trash. Berries should go on the market in such a condition that passers by will stop and look at them whether they intend to buy or not. Good berries well packed always command a good price. Have an honest package and guarantee the product from top to bottom."

### The Selection of Tomatoes

W. T. Macoun, *Central Experimental Farm, Ottawa.*

All over Canada it is desirable to develop the earliest strains of vegetables, that is for the great mass of the people; for this reason, we are working on early strains of tomatoes, beans, peas and corn. I should like

to give you some figures with regard to tomatoes. For the past six years we have been selecting each year from the plant which bore the largest crop of the most uniform early fruit and from the plant which bore the largest crop with respect to earliness. The seed from one tomato from each of these selections was sown each year and the results are very marked. Let me take the results in 1908. The seed from the plant selected for earliness gave a yield from 40 plants up to August 18, at the rate of 54 bushels an acre. The selection for uniformity and productiveness gave a yield from 40 plants up to August 18, at the rate of 27 1/2 bushels an acre. The total yield for the season for the plants that were selected for uniformity and earliness was 741 bushels and earliness in case of the plants selected for uniformity and productiveness the total yield for the season was 889 bushels, or an increase in yield of selecting at the rate of about 20 per cent. The average date of the first ripe fruit of the 40 plants we were selecting for earliness was July 27. In the case of the plants selected for productiveness the date of the first ripe fruit was August 15. Thus you see that, where selected for earliness, the fruit ripened 19 days earlier than where selected for productiveness and that where selected for earliness the yield up to August 18, was about double that where selected for productiveness; and the total yield for the season for productiveness was about 20 per cent greater than where selected for earliness.

"These results are striking and show that there is room for the production of Canadian grown vegetable seeds where it is practicable to do it on a commercial scale; and even where it is not practicable to do it on a commercial scale I believe every farmer should endeavor, as far as he can, his own seed on his farm. In that way he would soon make a wonderful difference both in his returns and in the kind of the plants he has.—Extract from evidence of Mr. H. A. G. before the Select Standing Committee on Agriculture and Colonization, 1909.

### Starting an Orchard

The factors governing the successful development of vigorous and prolific apple trees are now much better understood than formerly. The underlying reasons are now well grasped for many current horticultural practices concerning which but a few years ago the vaguest conceptions were held. The most important of these are site, soil, climate, tillage, fertilization, pruning and spraying.

#### CHOICE OF SITE.

A northeasterly or eastern exposure which is commonly suggested is less essential with the apple than with less hardy fruits. In almost any exposure other than a northern or western one on a steep slope will serve admirably. More attention should be paid to good air drainage than to slope; hence an apple orchard should be raised somewhat above the adjoining land at least on one side.

Due regard should be given to exposure to strong winds. Wind swept hillsides or knolls should be avoided, or, if such are chosen, wind breakers should be planted at once on the sides from which blow the strongest winds. White, cedar, Norway spruce, hemlock or white pine are the most effective hedges. The tree rows should be set far enough away from the hedge to insure them against injury from shading or from robbery of plant food.

#### CHOICE OF SOIL.

Generally speaking a gravelly loam or limestone soil is best adapted to apple culture. Light sandy or heavy clay soils should be avoided. Sandy loam

soils, if possessing a retentive subsoil, favor early maturity and higher coloration of the fruit. In any case, whatever soil is selected, it should be well-drained and well supplied with plant food, and, if possible, should be tillable. A clover sod or a hoed crop such as corn or potatoes is usually prepared a good precedent to a new orchard site. The preparation of the soil should begin with deep fall plowing, followed in the spring with as thorough a fitting as would be required for the growth of a good cover crop. Barnyard manure if used should be applied in the fall or winter and thoroughly incorporated with the soil in the spring preparation.

#### CHOICE OF VARIETIES.

This is an ever perplexing problem. The selection may vary according to whether the fruit to be grown is intended for home use or whether it is to be a strictly commercial orchard. Varietal adaptations to soil and climate deserve careful consideration. If a commercial orchard is to be planted, not over three or four varieties should be chosen, and two would no doubt be better.—From Bull. No. 141, Vermont Experiment Station.

### How to Plant a Tree

W. N. Hutt, *North Carolina Department of Agriculture*

It is not every man who can properly plant a tree. That this is true is evidenced by orchard and shade trees all over the country. One can scarcely take an hour's drive in any farming community without seeing trees that are suffering from improper handling at planting time. From my observations, I think it is safe to say that fifty per cent. of the trees sent out from nurseries never come to usefulness. This great loss is due to careless and unintelligent handling rather than to any other cause.

#### DELICATE STRUCTURE OF TREES

In the first place, trees are not the nondestructible organisms one would be led to think they were, from the way one so often sees them handled. On the contrary, trees are made up of delicate organs, which are very subject to adverse conditions and, like other living forms, readily show the result of favorable or harmful environments.

The part of a tree above ground because it is always subject to changing conditions of weather, has acquired the power of accommodating

itself to a considerable range of conditions. Hardy trees can resist and accommodate themselves to a very wide range of temperatures. The root system is selected in a very different manner from the conditions above ground. The more dense nature of the soil covering about the roots of trees makes them less susceptible to sudden changes than the air-exposed parts. For this reason, the roots are much more tender and easily injured than the branches of a tree. Branches cannot endure root environment, nor can roots endure branch environment—and yet we often see trees exposed at planting time, as if the roots would stand whatever the tops would.

#### ROOT HAIRS

In addition to these conditions of environment, roots have delicate organs, known as root hairs, that maintain their life only under conditions of moisture. These root hairs, as their name implies, are fine and hair-like—their size, indeed, that one needs a microscope to see them perfectly. They have exceedingly thin and delicate cell walls, and contain the active protoplasm on which the life of the tree depends. It is by the osmotic action of the delicate walls of the root hairs that the tree is able to get its food from the soil. As might be seen from their nature, root hairs are very easily injured and killed by drying.

Unless they are constantly in contact with moist soil particles, they die, and the leaves of the tree above ground quickly tell of the loss below the surface. When root hairs are exposed to the air they at once begin to lose moisture, and as the moisture dries away, their vitality diminishes proportionately. It is upon these delicate little organs that the life of a tree depends, and its growth and vigor is proportionate to their activity and numbers. Yet one would scarcely believe that there was anything delicate about the roots of trees, to see the way they are exposed by some planters.

(To be continued in next issue.)

## HORTICULTURAL BOOKS

Write for our NEW Free Catalogue of Horticultural Books to  
BOOK DEPARTMENT  
THE RURAL PUBLISHING CO. LTD.  
PETERBORO, ONT.

Send for  
Our  
FREE CATALOGUE

In other advertisements we have shown you many points wherein the "Bissell" Land Rollers and Disk Harrows are superior to other machines. But we would like to send you our catalogue so that you can study the whole detailed construction of these better-built, better-working, lighter-draft machines.

The "Bissell"  
Land Rollers,  
Disk Harrows.

Just send post-card request by first mail to Elora and we'll see that this interesting Catalogue journey to you by return mail. Address: Dept. II.

T. E. Bissell Co., Ltd., Elora, Ont.



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

## POULTRY

The Poul-  
Prof. F. C. E.

Though poultry what it has for what more for is quite safe for ment of the fact the money is very revenue from in a year. Mr. track of it are as good a bet on the farm.

better prospect when eggs went to dozen, farm to outrageous price would go into prices would We thought that dressed poultry people have the more and more and to go up, when every per cent, range from to quality of

What about even more st when we sold farm at several cent. At that time over 20 cents, Now we seldom get an egg down to the consoling anywhere frozen. These in continue, but if they will be unprofitable and numbers. Yet one would scarcely believe that there was anything delicate about the roots of trees, to see the way they are exposed by some planters.

At present pr produce the pays well. Here people have received: "I received chickens on the lb. I don't know price, they average I know of lb. live weight. I there is more pr mess."—R. E.

was unusually for Eastern Townsh about 40 hens an in every year at prices and return Poultry Depart where it receives tion with the to-day's price of

During the h very essential to lation in the po take pains not to

## POULTRY

TWO CENTS A WORD

SETTINGS OF EGGS return for two to Farm and Dair- ties. Write Circu Dairy, Peterboro,

FOUNTAIN PENS. return for one to Farm and Dair- Dept., Farm and

THIS IS ONE OF the best for hatching the cost is small.

NINETY-FOUR PER cent poultry. If you put a small column, and see h

**Black Watch**  
Black Plug  
The Chewing Tobacco  
of Quality.







**THE BEST LINIMENT**  
OR PAIN KILLER FOR THE HUMAN BODY  
**Gombault's**  
**Cautic Balm**  
IT HAS NO EQUAL

For all rheumatism, sprain, sore throat, neuralgia, sprains, strains, lumbago, diphtheria, sore lungs, rheumatism, and all stiff joints.

It is a potent and reliable remedy for sore throat, chest cold, backache, neuralgia, sprains, strains, lumbago, diphtheria, sore lungs, rheumatism, and all stiff joints.

REMOVES THE SORENESS-STRENGTHENS MUSCLES  
Gombault, Tex.—"One bottle Gombault Balm did my rheumatism more good than 100 pills in doctor's bill."  
Price 25¢ per bottle. Sold by druggists, or sent by express prepaid. Write for booklet B. THE LAWRENCE-WILLIAMS COMPANY, Toronto, Can.

**WINDMILLS**  
Towers Girted every five feet apart and double braced

Grain Grinders  
Pumps  
Tanks  
Gas and Gasoline Engines  
Concrete Mixers

Write for Catalogues  
**GOULD, SHAPLEY & MUIR CO., LIMITED**  
BRANTFORD, CANADA

**THE BEST PIGS**  
are  
**NONE TOO GOOD**

for  
**Farm and Dairy Readers**

Earn one FREE by sending us only Seven New Yearly Subscribers to Farm and Dairy.

A pure bred pig, with pedigree for registration sent in return for 7 New Subscribers.

Send name on application

Write—Circulation Department  
**FARM AND DAIRY**  
PETERBORO - ONT.

**Entries in Dairy Farms Competition**

Interest in the Dairy Farms Competition that will be held this year throughout Ontario by Farm and Dairy is increasing. A few more entries have been received. The first entry that has come to hand from District No. 4 in Southern Ontario was received last week from Edmund Laidlaw & Sons of Elgin Co., the well known Holstein breeders. In District No. 2 which includes the Counties lying between Kingston and Toronto, Mr. J. A. Cadley, another Holstein breeder, has seen to enter.

No many farmers seem to be afraid to enter the competition on account of lack of help or for some other consideration, there is a possibility that there will be but very few entries in a number of districts. So many are afraid also that they will be beaten by some person else, they are hesitating to take part in this competition with the possibility that when the entry list is announced they will be very sorry that they did not decide to take part. As we announced last week, the scores of competitors will stand lowest in the list will not be published. No farmer, therefore, need be afraid that if he makes a poor showing in the

**Buchanan's Swivel Carrier**

For unloading hay and all kinds of grain. For wooding track, rod and cable track. Made entirely of malleable iron, no springs. Fitted with our patent deadlock. 25,000 of our Haying Machines in use, the best guarantee that we build them in.

Write for catalogue of Carrier, Saws, Shanks and other tools and machinery to Buchanan & M. T. Buchanan, 100 Queen Street, Toronto, Ont.

**SECURE THIS NEW BOOK**  
ENTITLED  
**SWINE IN AMERICA**  
By F. K. COBURN  
Secy. Kansas Dept. of Agriculture

It will help you  
**MAKE MORE MONEY**  
Out of the Hog Business

This volume is handsomely printed on fine paper from large, clear type, and is profusely illustrated, containing a large number of magnificent half-tone illustrations and drawings, many of them full page plates which are printed on a special plate paper. Another marked feature is the franchise feature, this being an anatomical and physiological model of the hog, which appears in the book of this character for the first time. It is entirely new and original, and should prove of the greatest value to everyone—teacher, student, stockman, farmer, or general reader.

The work contains 704 pages (6 by 9 inches) bound in fine silk cloth, making a very handsome and attractive book. No one can claim to be up to date in swine matters unless he possesses a copy.

Price, prepaid to your address, \$2.50

**BOOK DEPARTMENT**  
**THE RURAL PUBLISHING CO., LIMITED**  
PETERBORO - ONT.

competition, this will be published.

One farmer while talking to Farm and Dairy did not think that he would stand any chance because his fences and some odds and ends of work on his farm have not been attended to. When it was pointed out by the score that the most he could possibly lose by poor fences would be eight or nine points out of 1,000, he admitted that that objection was not a serious one. The fact is, as we have continually stated, there are very few farms that are not lacking in several points. It is probable therefore that the prizes will go to those farmers who have enough courage to enter the competition in spite of the fact that they have several drawbacks.

**THE LOCAL COMPETITION**

As we were some time ago, Farm and Dairy has offered two gold and three silver medals for the best farms of any description in Peterboro Co. and similar prizes in Durham Co. In this competition farms may be entered. There is no restriction as to the number of cows that should be kept. It seems likely that the competition in Durham Co. will prove particularly interesting. J. B. Baker of Solina, the President of the Farmers' Institute, is likely to be one of the competitors, as also are Alexander Smith of Barton and Mr. Albert Tamblin of Oroon in Peterboro Co., Mr. John N. Telford of Bridgerton and Mr. Frank Birdsall of Birdsall, the Presidents of the Eastern and Western Farmers' Institutes have consented to assist Farm and Dairy in the management of the competition in Peterboro Co.

We would again like to urge the readers of Farm and Dairy to tell their neighbors about this competition and to urge the best farmers in their section to compete. Many farmers that would stand a splendid chance to win the competition may not hear about it until it is too late unless our readers draw it to their attention. Show them the advertisement about the competition that appears elsewhere in this issue in which the rules governing the competition are published. Get as many as you can to compete.

**FARM MANAGEMENT**

**Question on Silo and Corn**

- 1—What is the capacity in tons of a silo 12 feet in diameter and 20 feet high?
- 2—What number of 12 foot green silos would the silo winter and leave some to feed the milking cows when the pastures dry up in the latter part of summer?
- 3—What acreage of average corn would it take to fill this silo?—D. A. A. Maple Grove, Ont.
- 1—A silo of such dimensions fitted fairly carefully might hold about 60 tons.
- 2—Such a silo will winter eight or 10 dairy cattle and leave something over for summer feeding. Where much straw or hay were fed the number would of course be very materially increased. In any case from 1,000 to 1,200 lbs. of dry feed would be necessary to keep the cattle in good health and a certain amount of meal to help keep them in good shape.
- 3—About four and a half to five acres.—J. H. Grisdale, Agriculturist, C. E. F., Ottawa.

**Variety in Rape Seed**

"Is there not sometimes trouble in obtaining from seedsmen rape seed that flowers during the first year," was asked of Prof. C. A. Zavitz at the annual meeting of the Experimental Union last December. Professor Zavitz replied that there was and that when ordering rape seed, the variety should always be mentioned.

The Dwarf Essex rape is the one

which is commonly used throughout Ontario. It is biennial, furnishing leaf and stock the first year and producing seed until the second season after it is sown; thus an excellent pasture is furnished in the first season. If rape seed is ordered without mentioning the variety, there is a danger of obtaining the Bird Seed or the German rape, which produces flowers and seeds in the same year in which it is sown. This variety furnishes very poor pasture and is troublesome to seed. There have been several law suits in Ontario over this very matter. It is certainly advisable to always mention the special name of the distinct variety when ordering seed.

**O.A.C. Examination Results**

The final results of the O.A.C. examinations have been announced. Owing to the war it is impossible to give the results in full. The winners of scholarships and medals and the first ten in order of proficiency of the first, second and third year receive mention in the following:

**Governor-General's Silver Medal:** First in General Proficiency, first and second year work.—Wade Toole, Whitevale, Ont.

**Barton Ham Medal—**(Awarded December 1908).—N. D. McKenzie, Galt, Ont.

The Geo. Chapman Scholarship.—H. A. Dorrance, Seaford, Ont.

**Valdetyry Prize.—**W. W. Emmerson, Foxboro, Ont.

Prizes \$10 in Books.

First in General Proficiency, first and second year work.—Wade Toole, Whitevale, Ont.

Scholarship awarded for first year work, Theory and Practice. Twenty Dollars in Cash.

Agriculture.—P. O. Vansickle, Trinity.

Biological Science.—F. S. Reeves, Tewkesbury, Gloucestershire, England.

English and Mathematics.—R. Beckett, South Pelham, N. S. W.

Physical Science.—J. M. McLaughlan, Lanark, Ont.

- FIRST YEAR**
- 1, Vansickle, P. O., Trinity, Ont.; 2, McLaughlan, M., Lanark, Ont.; 3, Beckett, R. C., Peachland, B. C.; 4, Knapp, J. S., Merrickville, Ont.; 5, Palmer, E. B., Carleton, Ont.; 6, Weir, E. A., Randwick; 7, Kelly, W. A., Aldboro; 8, Beckett, R., South Pelham; 9, Reeves, F. S., Tewkesbury, Gloucestershire, Eng.; 10, Elliott, G. S., Tillsonburg, Ont.
- SECOND YEAR**
- 1, Toole, W., Whitevale, Ont.; 2, Clement, F. M., Virgil; 3, Strong, W. J., Haxby, Eng.; 4, Whale, I. B., Goldstone, Ont.; 5, Cohoe, D. P., New Durham; 6, Toole, A. A., Mount Albert; 7, Martin, L. R., Jordan Harbour; 8, Cogan, R. B., Corners, Ont.; 9, Broad, E., York.
- THIRD YEAR**
- 1, Ellis, F. E., Toronto, N.S.; 2, Todd, S. E., Toronto; 3, Tothill, J. D., St. Catharines, B. C.; 4, Whale, I. B., Goldstone; 5, Lloyd-Jones, J. G., B. C.; 6, Badcock, Cape Breton, N.S.; 7, Lloyd-Jones, J. G., Llandnam, Montgomeryshire, Wales; 8, Robinson, E. Guelph; 9, Faulds, Rochester, N.Y.; 10, U. S. A., Fraser, K., Gt. Falls, Ont.; 11, Kennedy, S., Appleton Hill, 10, Noville, S. J., Cottonwood, Sask.

**CRUMB'S IMPROVED WARRIOR STANCHION**

Henry H. Alberson, Burlington, N. J., writes: "My attention was called to the contents of any cow's milk by reading your article on 'Why Torture the Cow with Stanchions?' Send for specifications of inexpensive yet sanitary Crumb's Improved Stanchions."

**WALLACE B. CRUMB, Box 24, F. Westville, Conn.**

May  
CIT  
I  
The C  
City B  
years ha  
supply to  
or is livin  
down. A  
died inst  
delivered  
wonderfu  
been dire  
what of  
these year  
been prod  
disease san  
the consum  
Milk is  
less than  
reeds is sp  
dealer, the  
of all the  
farmers h  
for what  
with after  
has no  
utensils un  
flies and  
milk and  
to often  
house of  
frequently  
table in th  
either con  
faces when  
summer ar  
the produ  
We are v  
summers ha  
some farm  
would requ  
If Boards  
heart the p  
organized,  
consumer  
there. The  
homes wher  
ret. Let th  
children un  
able to use  
after the  
At what de  
kept? Is i  
grows with  
or fish? Is  
warm room  
child at wil  
the baby in  
its bottle a  
clean.  
Milk con  
have improv  
note, the m  
many consum  
milk recepta  
bottle? Gre  
made in the  
and the alar  
milk fed ba  
could not tur  
get them to  
ility. Let ou  
tion that th  
throw out in  
past, Health  
the production  
is only half  
of the cow  
same sanitar  
urged for th  
there is a gre  
in the milk  
there be far  
farmers to  
sanitary lines.  
ONE WA  
Next cars  
for milk m  
benefit of t  
give the mo  
is for the cr  
able product  
articles in wh

**CITY MILK SUPPLY DEPARTMENT**

**The Cause of Sanitary Milk**

City Boards of Health in recent years have sought to control the milk supply to make sure that the producer is living up to the regulations laid down for the production of sanitary milk. As a result of this agitation and instruction, the quality of milk delivered to our cities has improved wonderfully. So far all efforts have been directed at the producer, but what of the consumer? During all these years that the farmers have been prodded up continually to produce sanitary milk, the education of the consumer has been overlooked.

Milk is in the hands of the farmer less than half of its natural life. The rest is spent under the care of the dealer, the storekeeper and greatest of all the consumer. Why blame the farmers because the milk will not keep? Should he be held responsible for what the milk comes in contact with after it leaves his hands? He has no control whatever over utensils used by the consumer. The flask and the dirt that get into the milk and the filthy utensils that are too often used to contain it in the house of the consumer, where it is frequently left open on a shelf or table in the living room, these and other conditions that the product faces when in the hands of the consumer are far from the control of the producer.

**EDUCATE THE CONSUMER.**

We are well aware that many consumers handle milk well, also that some farmers are dirty, but we would refer to the great majority. If Boards of Health had at heart the purpose for which they are organized, they would educate the consumer and exert external vigilance there. They should investigate the homes where the milk is kept the longest. Let them go to the homes of children under five years and there ask to see how the milk is cared for after the retailer has delivered it. At what degree of temperature is it kept? Is it kept in a chest at 70 degrees with other articles of food such as fish? Is it left on a table in a warm room to be consumed by each child at will? Ask if there is a bottle baby in the home. If so look at its bottle and see if that is kept clean.

Milk conditions, most assuredly, have improved in recent years; but note, the farmer has done it all. How many consumers know how to wash a milk receptacle or cleanse a nursing bottle? Great strides can well be made in the matter of sanitary milk, and the alarming death rate of cow milk fed babies can be reduced, if we get them to take up their responsibility. Let our Boards of Health give to the consumer some of the education that they have been so free to throw out in other directions. In the past, Health Boards have looked to the production end of the milk. This is only half their duty. When they go to the consumer and urge the same sanitary measures that they have urged for the producer, then will there be a great change for the better in the milk supply and then will there be far less opposition among farmers to any recommendations along sanitary lines.

**ONE WAY OF OBTAINING IT**

Next cards of instruction, on caring for milk might be printed for the benefit of the consumer. These could give the most approved method available for the care of this ever-perishable product and the cleaning of all articles in which it is kept. While

**Every Cockshutt Implement Is Built To Make Farming Pay Much Better!**

extreme care, lest it prove an expense instead of an investment. Cockshutt Implements will make your farm pay better. This one, for instance:

**This Western Spring-Tooth Cultivator**

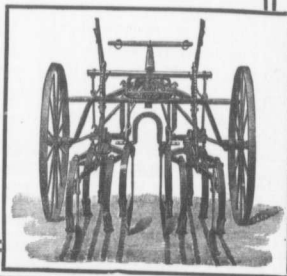
For all-round field and crop culture you cannot excel this compact, practical combination machine,—really four machines in one: a corn cultivator; bean cultivator; bean harvester; and general crop cultivator. It can be quickly and readily adjusted for field work by connecting a centre attachment (supplied as an extra at a nominal price). Does its work well in any soil; stands up to hard usage; keeps repair bills down; draws light; easy and 'handy' to handle.

**Specially Useful in the Cornfield**

Farmers who grow much corn will find the Western just exactly the machine they need. Pressure can be applied to each gang to make it cut, stir and turn the soil in the hardest ground and driest season. Each machine is shipped with reversible blades, having both wide and narrow points. Wide weeding-blades, or other styles, supplied if you want them, as also extension arms for bean cultivation, and an attachment for bean harvesting. You will be thoroughly satisfied with the Western Cultivator. Glad to send you full particulars if you will

WRITE DIRECT TO US

**COCKSHUTT** Plow Co. **BRANTFORD**  
Limited.



inspecting these homes of children, whose numbers go to swell the death-rate through the summer months, one of these cards might be fastened to the wall in a most conspicuous place. The average mother of five small children has no time for reading. What the eye carries to her mind must be done while she works. We hear it said, all consumers know how to care for milk. But do they? Do they even know how to wash a vessel that has contained milk? Do they not, in many of them, first of all pour boiling water into it, thus cooking the milk fast to the sides of the vessel, whereas it should have been washed and rinsed in cold water and then scalded.

We must get both sides pulling together in this matter of sanitary milk. In the past all pulling has been done like the ox team of history, where one was willing to pull and the other was willing to let him. Education on the part of the consumer would have other advantages as well. Few realize that a quart of milk at 12 cents is 20 cents. Nevertheless it is true. Great results would accrue for an educational propaganda in the cause of sanitary milk, that takes the consumer into serious consideration.

Accept my congratulations on the improvement in Farm and Dairy. I would not care to be without it, as I find a great deal of useful information contained therein.— *Jas. McGlenon, Northumberland Co., Ont.*

**Notes From Saskatchewan**

*S. J. Neville, Regina District, Sask.*  
Our long-expected summer has come at last. The winter was a very cold and stormy one, not a bit undecided as it was in Ontario. It stuck right to business, and lived to a good old age. We thought ourselves rid of it early in April, but, as it turned out, that was merely a recognition of the rights of the first, for we had two more winters, and even after the snow ceased to lie on the ground, in the last week of the month, we were presented with a touch of zero weather. But that is all past now, and the season has burst into a warm and genial smile, which the farmers find to be contagious.

Most of the seed wheat is sown, and plowing has begun here and there. The weather promises to be mild, and we expect good growth in the early part of the season. Later, however, we will need frequent heavy showers; as the winter, with all its bluster, gave us little snow. The recent light falls did good, but their effect cannot last many days before the high West winds which prevail. They are drying out the soil rapidly, and dust storms are frequent. These do little damage now, but if they persist after the wheat begins to grow they cause the young plants and by covering those in hollows too deeply, but the main harm is in the cutting and bruising of the young stems by the sand.

Local telephones have been received.

ing the consideration that they deserve. Several farmers' companies have been formed in this locality, and, with the aid given by the Government, they have built lines connecting with the long-distance systems that are in operation in all the more important districts. Other neighborhoods are becoming interested, and the recent action of the Saskatchewan Government in buying out the Bell lines in this province, will greatly encourage the timid and the canny ones.

The gophers are preparing to put in a season of annoyance, and we must begin to combat them soon. Badgers are continuing their good work, but are too few to control the pests.

After the lambs have come, the ewes should have plenty of turnips with some bran and oil cake and the youngsters will soon get to eating.—*Stanley A. Logan, N. S.*

**Seldom See**  
a big knee like this, but your horse may have a hunch or bruise on his Ankle, Hock, Stifle, Knee or Throat.

**ABSORBINE**

will clean them off without laying the horse up. No blister, no hair grow. A Seldom See bottle, 25¢. Book \$1.00. **ABSORBINE**, J.C. for sale, B. G. D. Co., Detroit, Wash., Berlin, Toronto, Vello, Vancouver, Old Bone, Always Pain. Book free. **W. F. FLEMING, P.O. 123 Temple St., Springfield, Mass.**  
**LYNARD & Co., Montreal, Canada Agents.**

## FARM AND DAIRY

AND RURAL HOME

Published by The Rural Publishing Company, Limited.



FARM AND DAIRY is published every Thursday. It is the official organ of the British Columbia, Manitoba and Western Ontario, and Bedford District, Quebec, Dairymen's Associations, and of the Canadian Horse, Saddle and Jersey Cattle Breeders' Association.

**SUBSCRIPTION PRICE, \$1.00 a year** actually in advance (greatly in advance a year). For all countries, except Canada and Great Britain, add 25c for postage. A year's subscription free for a club of two new subscribers.

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

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

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

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

## CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed 7,500. The actual circulation of this issue, including copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 12,000 to 12,500. All subscriptions are accepted at less than the full subscription rates. Thus our mailing lists do not contain any dead cities.

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

## OUR PROTECTIVE POLICY

We want the readers of Farm and Dairy to feel that they can deal with our advertisers with our assurance of our advertisers' reliability. We try to admit to our columns only the most reliable advertisers. Should any advertiser have cause to be dissatisfied with the treatment he receives from any of our advertisers, we will investigate the circumstances fully. Should we find reason to believe that any of our advertisers is unreliable, even in the slightest degree, we will discontinue immediately the publication of their advertisements. Should the circumstances warrant, we will expose through our columns the advertiser's name. Thus we will not only protect our readers, but our reputable advertisers as well. It is our policy to include in all our letters to advertisers the words, "I saw your name in Farm and Dairy." Complaints should be sent to us as soon as possible after reason for dissatisfaction has been found.

## FARM AND DAIRY

PETERBORO, ONT.

## TORONTO OFFICE:

Room 206 Manning Chambers, 72 Queen St., West, Toronto.

## CONTROL THE CODLING WORM

The codling worm is one of the best known and most widely distributed enemies of the apple. It has been much complained of for many years. Where spraying has not been resorted to, the loss from this insect has been great. This loss has been estimated from 10 per cent. to as high as 75 per cent. of the total crop. In many cases it could safely have been put even higher, for in recent years orchards have been noted where there were not enough apples to go around and as a result, two or more Codling Worms were often found in an apple. Orchards were common in Western Ontario last year, where a No. 1 apple was a rarity; in fact in some orchards so great had been the ravages of the Codling Worm that a No. 1 pack was not attempted, all going as No. 2's or 3's.

Elsewhere in this issue the Codling worm is dealt with at length by Mr. L. Caesar, of the Ontario Agricultural

College. He points out that \$1,000,000 was lost by farmers of Ontario last year as a result of the depredations of the Codling worm. Had proper methods been adopted for controlling this insect, 90 per cent. or more of this loss could have been averted.

The remedies for the Codling worm are all well known and are efficient if a proper amount of care is taken in their application. Where one brood is to be dealt with, it can practically be controlled by the spring spraying. Where two broods have to be considered, it seems advisable to supplement the work of spraying by banding the trees with burlap or other material, thus giving the caterpillars a shelter in which to spin cocoons and then destroying them before the moths emerge.

It is sufficiently evident that the controlling of the Codling worm is a matter of great economic importance. We should learn the best and most effective methods of dealing with this pest. Farm and Dairy readers will do well to give careful study to Mr. Caesar's article. If farmers and fruit growers would faithfully adopt the cheap means available of dealing with this insect, they would add a very large amount to their income derived from orchards.

## PROVIDE GOOD PASTURES

The importance of good pastures in the economical production of animal products is emphasized when we consider that pastures furnish the cheapness and best feed available for milch cows and growing stock. It is false economy to supply insufficient pasture for all stock kept. How often is this policy followed out? With the exception of late springs, such as the present one, when cattle are turned out before the grass gets a fair start, there is no lack of pasture during the latter part of the season. On this account the scheme of management practised on many farms provides insufficient pasturage during the greater part of the season and results in larger losses.

Plans should be laid to have a portion of some meadow ready, so that the second crop may be pastured off at the time when such shortage usually occurs. Other means of supplementing the regular pasture are available. Should it not be desired to resort to soil crops, the annual pasture as advised by Professor Zavitz proves most satisfactory. It consists of a mixture of oats, early amber sugar cane, and red clover sown in the following proportions: oats one and one-half bushels, early amber sugar cane 30 pounds, common red clover seven pounds. Under ordinary growing conditions this pasture is ready for use about six weeks after the seed has been sown.

It is a well known fact that cattle expected to do a good year's work, must be kept doing well the whole year. It is evident, therefore, that cattle should not be allowed to run down during the fall. If they are allowed to shrink in milk or stop growing in the fall, it is practically impossible to get back to normal

again. By allowing cattle to shrink in the fall, one not only loses on them during the time of short pasture, but they may be fed more cheaply on pasture than in any other way, it is certainly the part of wisdom to see that they are provided with good pastures all summer and as late in the fall as possible.

## PROTECT THE FARM WOODLOT

Each year sees a recession to the limits of the farm woodlot. The one purpose with which we seem possessed is to make everything yield immediately returns. This desire has shown itself in various ways on the woodlot. In many cases it has been entirely done away with, its ready money value proving too great a temptation for its owner. In others it has been depleted to such an extent, that the remaining trees lacking the shelter of their mates, are dying at the tops and will soon be subjects fit only for the axe. Others again have sought to make their woodlot return an annual revenue in pasture, stock have been turned in and they have exercised their devastating powers not only on the grass but on the young growth as well. Nor is this all. The damage worked by tramping must be reckoned with.

While it is too true that the woodlot has a ready money value, it is equally true that it will have a greater money value in years to come. The woodlot should not be handled as a mine. Its resources should be husbanded and conserved, for, if properly handled it will produce a crop annually that will well repay rent for the land and recompense one in other ways far in excess of any revenue derived in the form of pasture.

The young growth is the valuable part of any woodlot. It is worth protecting and the little grass that grows there naturally will not compensate for the damage done to the timber crop by the cattle when pasturing on it. Give every care to the woodlot. You will not regret it in the years to come, and you will have a most valuable part of the farm to hand down to posterity.

## NEW LIFE IN INSTITUTES

It is gratifying to note renewed interest in Farmers' Institutes. The Farmers' Institute Clubs, so largely organized throughout Ontario during the past year, played no little part in awakening new life in Farmers' Institutes. The Institute has done a great work in the past, there is still much for it to do. The results that are being accomplished, will depend to a great extent upon the officers chosen to direct the efforts of the organization.

Probably much of the success of the Farmers' Institute Clubs can be attributed to the fact that the young men were largely interested. In the forthcoming annual meetings, directors and friends of the Institute will do well to recognize this fact and see to it that men of life and resource, be they old or young, are chosen to fill the offices of their Farmers' Institutes.

## SUCCESS OF A 17-YEAR-OLD BOY

To own and feed a cow and make her produce over 21,000 lbs. of milk in a year is something that many aspire to, but few realize. That a 17 year old boy should have reached this goal is worthy of note. George Van Patter, of Elgin County, Ont., is indeed to be patted on the back for the remarkable record that the cow "Netherland Aggie De Kol" has just completed under his care.

Probably no one thing tends to discourage the boys on the farm more than the quality of the stock that is so largely kept. The average healthy farm boy needs to be interested in something that is worth while if he is to be induced to stay with the farm. Pure bred stock for which the boy is held responsible is one of the best ways of giving a boy an interest in the farm. Should he be so fortunate as to produce and care for a record breaking cow, he will have attained something well worth while, not only to himself but to the dairy interests of the country.

## Lost Opportunities

(Blue Valley Bulletin)

There is something in connection with the word "Lost" that strikes terror to everybody. The boy assuming himself in the yard, playing ball, throws it into some high weeds and he goes to his mother crying as if his heart would break because it's lost. Hardly a day passes that some woman is not seen in one of the large department stores in the city bathed in tears because she has lost her pocket-book. Ever and anon the metropolitan newspapers issue an extra and in great big head-lines is the announcement, "A Child Lost," and the whole city is aroused with the most intense interest.

The stock man is grieved over the loss of a valuable horse or cow. We read a soul stirring account of a stormy voyage across the ocean and our whole interest centres on the report that a passenger was lost. The whole world is moved with sympathy for the family of orphan children who have lost a mother, and so we might continue to enumerate losses of property by fire, of crops by floods, or storms, or drought, of whole cities by earthquake, etc. The world appreciates losses of this character and uses every means at its command to prevent their occurrence, but we are led to believe that the seriousness of lost opportunities is not appreciated.

The man or woman who realizes that they have been unfortunate in their marriage relations are forcibly reminded of an opportunity once offered that would have changed the situation.

It is a sad story the man relates, who in the evening of life tells of many opportunities that were presented, but refused, and which might have made his life a success, instead of a failure. All along the commercial pathway of industrial life may be found the wrecks from failure that were brought about through neglected opportunities.

There is no business in which a man's success depends more on his

## Expired

Many of us have been here for many years to continue many years they will return expire, trouble of n

Look at wrapper of X. If it X it means tion has e your renewe expired, and renewed, w lose no time our subscri strictly in the blue X week. If y to let us see an early date

Circulat FARM A PETERBORO

embracing oppo ing, and there there are so m sented. Beas the greatest oppo to the dairman for cheap feed the profit. An opportunity in skin milk to re it; by feeding to the proper time.

## Greater Unif Br

Editor, Farm a series of the such as have be past few weeks, trial horsebreedi Ontario, is to be here, if anywhere the opportunity real men behind trets of the cou he spent for th this great agric Canada, here is ably be done.

In the great c of the horse of the country, muc spent, yet, while marked, it is cert as lovers of the to be.

The great lack and seen every ramed consisten lacked uniformi of many minds, a to each man fo mind, some ideal along his own lii way. Limited he ial not too well a it out.

In all countri ing has enjoyed success, such sucro patronage of othe ing stock, some of continuation of a con dition of a cons standard is ubiq

## Expired Subscriptions

Many of our subscribers have been on our mailing list for many years. We want them to continue as our subscribers many years to come. We trust they will renew their subscriptions promptly, when they expire, thus saving us the trouble of notifying them personally.

Look at the address on the wrapper of your paper this week. If it bears a small blue X it means that your subscription has expired, and that your renewal is in order. If your subscription has already expired, and you have not yet renewed, we trust you will lose no time in doing so, as all our subscriptions are payable strictly in advance. Look for the blue X on your label this week. If you see it don't fail to let us see your renewal at an early date.

Circulation Department  
**FARM AND DAIRY**  
PETERBORO - CANADA

embracing opportunities than dairying, and there is no business where there are so many opportunities presented. Bear in mind that one of the greatest opportunities that comes to the dairman is that of preparing for cheap feed and thereby increasing the profit. Another very important opportunity is that of utilizing the skim milk to realize the most out of it by feeding to good stock and at the proper time.

### Greater Uniformity in Horse-Breeding

Editor, Farm and Dairy.—To visit a series of the spring stallion shows, such as have been held during the past few weeks, at almost every central horsebreeding point throughout Ontario, is to become convinced that here, if anywhere, is the place and the opportunity for getting at the real men behind the horsebreeding interests of the country. If effort is to be spent for the advancement of this great agricultural interest of Canada, here is where it can profitably be done.

In the great efforts for the elevation of the horsebreeding interests of the country, much money is annually spent, yet, while progress is not unmarked, it is certainly not so obvious as lovers of the horse could wish it to be.

The great lack in this work, as felt and seen everywhere, is that jewel named consistency. The work has lacked uniformity. Many men are of many minds, and this fact has led to each man forming, in his own mind, some ideal for which he works along his own lines, and in his own way. Limited he often is to material not too well adapted for carrying it out.

In all countries where horsebreeding has enjoyed a full measure of success, such success as commands the patronage of other nations for breeding stock, some such thorough appreciation of a common ideal in type and standard is ubiquitous. It is the one

great necessity which the Canadian horse-breeding interests still to some measure lack. It is doubtful if individual effort can ever supply it. That work must be the duty of either the government itself, or else of consolidated horsebreeding interests.

Perhaps there would be no more immediately practical system, which could offer fewer objectionable features, and at the same time accomplish substantial advancement in the acceptance of a universally recognized type of horse, than the more thorough standardization of the work of the department judges at the spring stallion show. Were every judge to work for a common ideal, in each class of horse, the public mind would be very quick to grasp it, and the result of this would be evident in a very few years, in a type of horse essentially far more uniform than at the present time. This work has already been undertaken in a small degree, and departmental judges have all been asked by J. Lockie Wilson the present superintendent of fairs, to attend a short course series of lectures, at the Ontario Agricultural College, where, under the supervision of Prof. G. E. Day, efforts are made to render a more uniform appreciation of just what the right thing in the various breeds of live stock is.

This is a work which could well receive more exhaustive attention. Its importance cannot well be overestimated. The fixing in the popular mind of a comprehensive and accurate idea of an ideal type, embodying the qualities and characteristics desirable, is a work rather too big for any one man to undertake, and should call for the co-operation of the best horsemen in the country, whose experience and judgment qualify them to adjudicate upon such a matter intelligently. Its compilation should represent the best efforts of the best men whose services could be obtained.

Some years ago, at the invitation of the minister of agriculture for the Province of Ontario, the Ontario horse breeders' Association was organized. Under its provisions, every member must be a man actively engaged in horsebreeding. Its officers are elected by these men, and represent the best available skill, experience, and integrity. Such a work as this should be theirs. A commission from the Ontario Horsebreeders' Association, consulting with association representative of the various breeds of horses, should be able to set down standards for both light and heavy breeds, which would soon become well known, and generally accepted, and to which progressive adherents on the part of department judges might profitably be insisted upon.—J. W. Sangster, Sec. Clydesdale Horse Association of Canada.

### Well Satisfied

Another happy premium winner of one of Farm and Dairy pigs, may be found in Mr. Thomas Gray, of Ontario Co., Ont. For a very little while Mr. Gray now is the proud possessor of a fine pure bred pig, which Farm and Dairy shipped him as a premium for securing a club of only seven new yearly subscribers to Farm and Dairy. Mr. Gray writes us as follows: "I received the pig, bred by Mr. W. W. Brownridge of Ashgrove, which Farm and Dairy sent me, and am well satisfied with it. Accept my sincere thanks."

Why not follow Mr. Gray's example? We have more good pure bred pigs, looking for good homes. Let us have your club at an early date.



## WHY DE LAVAL DISCS?

The discs increase the skimming efficiency and surface. They are used for a purpose. But the use of discs alone is not sufficient. The split wing tubular shaft found only in the genuine

## De Laval

## Cream Separator

is absolutely necessary to the proper distribution and protection of the milk in entering and cream in discharging from the bowl.

GET A DE LAVAL

THE DE LAVAL SEPARATOR CO.  
175-177 William St.

WINNIPEG

MONTREAL

VANCOUVER

# SILOS

WE SUPPLY THESE  
MADE OF STEEL

Our Customers have found these Easier  
to Erect, Just as Durable, and  
**FAR CHEAPER**  
than the styles ordinarily  
used.

WRITE US FOR  
PRICES

We manufacture a Complete Line of Dairy Power Plants

**The Waterous Engine Works Co.,**

BRANTFORD ONT. Limited

## Creamery Department

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

### Refrigerator Dairy Service

Commencing Thursday, May 20th, and until further notice, an iceed refrigerator car service will be established for the carriage of butter only to Montreal, also shipments for export forwarded via Quebec; the intention being to have the car arrive at Outremont (Montreal) Sunday so that the contents may be delivered first thing Monday morning.

The service will be four cars weekly, as follows:

(1) From Windsor, iceed car every Thursday on "Way-Freight Extra." This car will leave London by "Way-Freight Extra" Friday a.m., and Toronto by No. 54 Friday midnight.

Shipments from intermediate main line stations west of Toronto will be loaded in this car. Shipments from Port Burwell, Ingersoll and St. Mary's Branches should be way-freighted to Woodstock for transshipment to iceed car from Windsor.

(2) From Windsor, iceed car every Friday on "Way-Freight Extra" connecting with Train 56 at Guelph Junction.

Shipments from Listowel Branch should be way-freighted to Linwood Junction for transshipment to iceed car from Goderich.

(3) From Owen Sound, iceed car every Friday on "Way-Freight Extra" for West Toronto, to be transferred at Toronto whenever possible to car from Windsor.

Shipments from Walkerton Branch should be way-freighted to Saugeen

Junction and shipments from Muskoika Branch should be way-freighted to Holton for transshipment to iceed car from Owen Sound.

(4) From Teeswater, iceed car every Friday on "Way-Freight Extra," running via Orangeville and Streetsville Junction for connection at Toronto, whenever possible, with car from Windsor.

Note.—If cars from Owen Sound and Teeswater, should fail to arrive in Toronto in time to allow transfer of butter to car on train No. 54 from Toronto, they will be consolidated, and sent east from Toronto on first through freight train.

Current less-than-carload tariff rates will apply without any charge for icing.

As far as space will permit, the cars may be used for local shipments of butter.

Way-bills for shipments loaded into these iceed refrigerator cars must be endorsed by agents, across the face as follows:—Loaded into Government iceed car No. .... at ..... as per Circular O.P. No. 942.

This service will be operated for the transportation of butter shipments only. Cheese and other dairy products will not be accepted for shipment in these iceed cars.—W. M. Kirkpatrick, General Freight Agent, Toronto, May 15th.

### Cream and Cream Separator Legislation

Canadians take a great pride in the laws enacted to protect and foster the dairy industry. The laws against spurious dairy products; the laws against milk adulteration; the laws providing for sanitary inspection and instruction in cheese factories and creameries were well conceived and have proven very effective in maintaining the standard and

improving the quality of our dairy products. Recently passed legislation in Ontario seeking to control the erection of cheese factories and creameries and to establish a standard of qualification for makers has in it possibilities for further improvement in quality and placing the business of cheese and butter-making on a more stable basis.

It may be possible to legislate an industry out of existence, surrounding it with so many rules and regulations that the freedom of the individual to think and act for himself is so checked that he seeks a new field for his activities, where by his own personal application he can do better for himself and for his country. This cannot, however, be said of our dairy laws numerous and exacting as they are. There is a sane sense about them that makes them both effective and workable. Other countries are beginning to recognize this and are copying them and applying them to their own conditions.

#### A DRASTIC DAIRY FARM

Some countries have gone one or two better and are striking out new lines. The State of Oregon has recently passed a dairy law, which, though, rather drastic as it is, will, if it can be enforced, go a long way towards improving the quality of the dairy products of that State. How would our farmers, who own cream separators and are supplying cream to the cities, like to submit to the following legislation, which has been enacted by the State legislature of Oregon?

"It shall be unlawful for any dairyman, who skims his milk by cream separator process to offer or expose for sale, or sell any milk or cream coming from a separator that is not thoroughly washed and cleaned after each use thereof, or to offer or ex-

pose for sale, or sell any milk or cream coming from a separator that is kept in any stable or other building where any animal is housed or in any other place that is unsanitary or where bad air exists; provided that this does not prohibit keeping separators in a room that is wholly separated by sealed and papered partition from that part of the stable in which animals are housed. All tin and wooden ware and other utensils used about any dairy shall be kept in a clean and sanitary condition.

"When cows are kept by any person or persons, for dairy purposes, whether for butter, cheese, or for the production of milk or cream for sale, in addition to provisions already made by law, and now enforced, the stables or barns where such cows are kept shall be thoroughly cleaned every day and kept in a sanitary condition. The cow's udder shall be well cleaned immediately before each milking, and when the udder is soiled by mud or other filth it must be thoroughly washed with water and wiped with a clean, dry cloth.

"It shall be unlawful for any persons who operate cream routes to accept or receive cream on said routes which has been separated or skimmed more than four days, excepted from June 15th to Sept. 15th of each year, during which period it shall be unlawful to accept cream which has been separated or skimmed more than three days."

#### MUST BE TAGGED

Another clause provides for the same regulations in regard to cream carried over a railroad, steamboat, etc. And further provides that every seller of cream must attach a tag to the receptacle holding such cream on which it must be stated that such

cream is not more than three days over, it is not a dry agent or accept cream.

There is no mention of the nature of butter or cream produced by the state commissioner. Un-der complaints at the time that he is unfit for the office, he has been removed from the office and a new one appointed to take his place.

for use shall every creamery or all cream purchased from the dairy producer, subject to the approval of the board of health, be required to be tagged with the name of the producer and the date of the tagging.

The cream-tagging system is a very important feature of the creamery business. It is a system which has been in use for many years and has proved to be a very effective means of preventing the sale of adulterated cream.

It is a system which has been in use for many years and has proved to be a very effective means of preventing the sale of adulterated cream.

# Disks 50 Times More Work



Washing 42 disks, and other bowl parts, from a disk filled "bucket bowl" machine. Other "bucket bowls" are about as bad.

ARE YOU willing to wash and dry 50 to 100 times more tinware surface than you need to? If not, why not let "bucket bowl" cream separators alone and get a Sharples Tubular? Is thoroughly washing and carefully drying tinware so easy that you don't care how much you wash? Had you not rather wash a single piece, that has no more surface than the palm of a man's hand, than to wash 40 to 60 pieces that, together, have as much surface as a piece of carpet two yards long and a yard wide?

That's a pretty big contrast, for sure.

But it shows truly the difference in the work of washing a common disk filled "bucket bowl" cream separator as compared to washing the light, sanitary, wear forever modern bowl used in Sharples Dairy Tubular Cream Separators. Look at the two dish pans and you'll see the point.

Other "bucket bowl" separators are about as bad.

Considering the complication and weight of "bucket bowl" cream separators (and all cream separators except the Tubular are the "bucket bowl" kind) don't you think you'll save a lot of work, wear and expense by letting the "bucket bowl" sort entirely alone and getting a Tubular?

It is not surprising that Tubular sales exceed those of most, if not all, other separators combined. "Bucket bowl" sales are so reduced, by Tubular popularity, that several makers of cheap machines can no longer sell their product through responsible dealers and depend largely on peddlers to get rid of their machines.

Any farmer or dairyman who is looking for an expensive bit of experience, instead of cream separator satisfaction, can get it of a peddler.

The manufacture of Tubulars is one of Canada's leading industries. It is the world's greatest cream separator. It will give you greatest satisfaction—greatest profits—greatest wear. Get catalog No. 253.



All there is to the Dairy Tubular bowl. Washed easily in three minutes. A few thrusts of the brush does it.

The disks in the full pan belong inside a "bucket bowl." The little piece in the other pan is all there is inside Sharples Dairy Tubular bowls.



29 Yrs The Sharples Separator Co. Toronto, Ont. - Winnipeg, Man.

## Cheese

Makers are invited to send contributions to this department, to ask questions of matters relating to cheese-making and to suggest subjects for discussion. Address your letters to the Cheese Maker's Department.

### Farmer's Wives Hand

Editor, Farm Experience in pastures what limited. I touring one season

I have attempted of some of my boys are of the opinion of the why is a feeding than in asked the opinion wives and they have for it, as the cost of easily cleaned than comes home sold. I am enough to save the price that was cans.

My opinion is that been in a better of cleanliness, this part after being asked why he had not point thirty looking pigs they had not get grain for three months. Another good or gave me the pigs never did as pasteurized. I could ions from other re to sum them from the conclusion the

Improvement made in of why if pasteurized The cost is very a man sending 500 would have to pay a trifle more, for h



## OUR PARTNERSHIPS

3 WILL govern my life and thoughts as if the whole world were to see the one and to read the other.

—Mrs. Frank Webster, Victoria Co., Ont.

## Sowing Seeds in Danny

By Nellie L. McClung

ALL RIGHTS RESERVED.

(Continued from last week)

SYNOPSIS—The Watson family live in a small town in Manitoba. The family consists of Mr. Watson, a man of few words, who works on the "section," and nine children. Pearl Watson is an imaginative, clever little girl, 12 years old, and is the mainstay of the family. Max Watson is often employed by the local hardware store. Mrs. Burton Francis, a dreamy woman, who has beautiful theories on life, is the pet theorist on Pearl's eye, and is a favorite of Mrs. Francis, who tries some of her pet theories on Danny. Camilla Rose is a capable young woman who looks after Mrs. Francis's domestic affairs, and occasionally helps her to apply her theories. Mrs. Francis loses no chance to install her ideas and theories into poor Mrs. Watson's hands. Mrs. Francis is known as the "Missus run interested." Mr. McEldrie, the next door neighbor of the Watsons, has a special antipathy for Mr. Watson. A treat was given Pearl and Danny in chapter 6, when Mrs. Francis got tickets for them to attend a musical concert. Mr. Sam Motherwell is a well off but very stingy farmer, who lives on a farm near the Watsons'. Mr. Motherwell and the minister in Chapter 7 are a good indication of his character.

THE grain was just beginning to show a slight tinge of gold. It was one of those cloudy, sunny days in the beginning of August, when a faint blue haze lies on the Tiger Hills, and the joy of being alive swells in the breast of every living thing. The creek swollen with the July rain, ran full in its narrow channel, sparkling and swirling over its gravelly bed, and on the green meadow below the house a herd of Shorthorns contentedly cropped the tender after-grass. In the farmyard a gigantic turkey-gobbler marched majestically with its arched neck and spreading wings, feeling himself very much the king of the castle; good-natured ducks paddled contentedly in a trough of dirty water; pigeons, white winged and graceful, circled and wheeled in the sunshine; querulous-voiced hens strutted and scratched, and gossiped openly of mysterious nests hidden away.

Sam stood leaning on a pitchfork in front of the barn door. He was a stout man of about fifty years of age, with an ox-like face. His countenance showed a sullen stolidity of a man that spoke little but listened always, of a man who indulged in suspicious thoughts. He knew every inch of his neighbors, good and bad. He might forget the good but never the evil. The tragedies, the sins, the misdeeds of thirty years ago were as fresh in his memory as the scandal of yesterday. No man had ever been tempted beyond his strength but Sam Motherwell knew the manner of his undoing. He extended no mercy to the fallen; he suggested no excuse for the erring.

The collector made known his errand. Sam became animated at once. "What?" he cried angrily, "ain't that blamed thing paying yet? I've a good notion to pull my money out 'of it and be done with it. What do you take me for anyway?"

The collector ventured to call his attention to his prosperous surroundings, and evident wealth.

"That's like you town fellows," he said indignantly. "You never think of

the hired help and the twine bills, and what it costs to run a place like this. I pay every time I go, anyway. There ain't a time that I let the plate go by me, when I'm there. By gosh! you seem to think I've money to burn."

The collector departed empty-handed. The next time Sam went to Millford he was considerably surprised to have the young minister, the Reverend Hugh Grantley, stop him on the street and hand him ten twenty-five dollars.

"I understand, sir, that you wish to withdraw the money that you invested in the Lord's work," he said as he handed the money to Sam, whose fingers mechanically closed over the bills.

\*\*\*\*\*

### Likes our Story.

We are pleased to see that you are publishing as a serial story in Farm and Dairy, the very interesting and wholesome story entitled "Sowing Seeds in Danny," written by Mrs. Helen McClung. The story is fortunate in this being given a wide readership in Farm and Dairy as it is an opportunity of reading this good western Canadian story made by its writer quite famous recently.—H. Crews, Hastings Co., Ont.

\*\*\*\*\*

as he stared at the young man. The Rev. Hugh Grantley was a typical Scotchman, tall and broad shouldered, with an eye like cold steel, but many people had contracted a dislike for him, and he was at least to his face. His voice could be sweet as the ripple of a mountain stream, or vibrate with the thunder of the surf that beats upon his own granite cliffs.

"The Lord sends you this seed-time and harvest," he said, fixing his level gray eye on the other man, who somehow avoided the gaze, "has given you health of body and mind, sends you rain from heaven, increases your riches from year to year. You have given him twenty-five dollars in return and you regret it. Is that so?"

"I don't know that I just said that," the other man stammered. "I don't see no need of these five churches

and paid preachers. It ain't them as goes to church most that is the best."

"Oh, I see," the young man said, "you would prefer to give your money to the relief of the poor or hospitals or children's homes, or something like that. Is that so?"

"I don't know as there's any reason for my giving up the money I work hard for," Sam was touched on a vital spot.

"Well, I'll tell you the reason," the minister said, his voice was no louder but it felt warmer emphasis. He moved a step nearer his companion, and some way caught and held his wavering vision. "God owns one-tenth of all that stuff you call your own. You have cheated Him out of His part all these years, and He has carried you over from year to year, hoping that you will pay up without harsh proceedings. You are a rich man, in this world's goods, but your soul is lean and hungry and naked. Selfishness and greed have blinded your eyes. If you could see what a contemptible, good-for-nothing creature you are, you would know you would call on the hills to fall on you. Why, man, I'd rather take my chances with the gambler, the felon, the drunkard, than with you. They may have fallen in in moments of strong temptation; but you are a respectable man merely because it costs money to be otherwise. The Lord can do without your money. Do not think for a minute that God's work will not go on. He shall have dominion from sea to sea, but what of you? You shall lie down and die like the dog. You shall go out into outer darkness. The world will not be one bit better because you have passed through it."

"Sam was incoherent with rage. "See here," he spluttered, "what do you know about it? I pay my debts, everybody knows that."

"Hold on, hold on," the young man said gently, "you pay the debts that the law compels you to pay. You have to pay the taxes and your share of the threshing bills, and all that because you would be used if you didn't. There is one debt that is left to a man's honor, the debt he owes to God, and to the poor and needy. Do you pay that debt?"

"Well you'll never get a cent out of me anyway. You have a mighty power of asking for money—maybe if you had taken the right way you might have got some."

"Excuse me, Mr. Motherwell," the young man said with unaffected good humor, "I did not ask you for money at all. I gave you back what you might have got some."

\*\*\*\*\*

\*\*\*\*\*

will ask you for any, though there may come a time when you will ask us to take it."

Sam Motherwell broke into a scornful laugh, and, turning away, went angrily down the street. The fact that the minister had given him back his money was a severe shock to some of his deep-rooted opinions. He had always regarded churches as greedy institutions, looking and begging for money from everyone, ministers as parasites on society, living without honest labor, preying upon the working man. Sam's favorite story was the old one about the woman whose child got a cure through throat. She did not send for the doctor, but for the minister! Sam had always seen considerable truth in this story and had told it to every minister he had met.

He told himself now that he was

glad to get back the money, twenty-five dollars was not picked up every day. But he was not glad. The very touch of the bills was distasteful to him.

He did not tell his wife of the occurrence. Nor did he put the money in the black bag, where their money was always kept in the bureau drawer, open as usual. He could not do that without telling his wife where it came from. So he shoved it carefully into the pocket of the light overcoat that he was wearing. Sam Motherwell was not a careless man about money, but the possession of this particular twenty-five dollars gave him no pleasure.

### CHAPTER VIII.

#### The Other Doctor.

The young minister went down the street with a thoughtful face.

"I wonder if I did right," he was thinking. It is hard to talk that way to a human being, and yet it seems to be the only thing to do. Oh, what it would mean for God's work if all these rich farmers were saved from their insatiable greed!

He turned into Dr. Clay's office. "Oh, Clay!" he burst out when he had answered the young man's friendly greeting, "it is an awful thing to lay upon a man's meanness, and to tell him the plain truth about himself."

"It is, indeed," the young doctor answered, "but perhaps it is heroic to want your man needed, for I would think you have been reading the law to someone. Who was it?"

"Sam Motherwell," the minister answered.

"Well, you have had a good subject," the doctor said gravely. "For aggravated greed, and fatty degeneration of the conscience, Mr. Motherwell is certainly a wonder. When that poor English girl took the fever out here, it was hard to convince Sam that she was really sick. Look at them red cheeks of hers," he said to me, "and her ears ain't cold, and her eyes is bright as ever. She's just looking for a rest, I think, if you wuz to ask me."

"How did you convince him?"

"I told him the girl would have to have a trained nurse, and would be sick probably six weeks, and that they couldn't get the poor girl cured with hands quick enough. 'I don't want that girl dyin' round here,' Sam said."

"Is Mrs. Motherwell as close as he is?" the minister asked after a pause. "Some say worse," the doctor replied, "but I don't believe it. She can't be."

"The minister's face was troubled, "I wish I knew what to do for them," he said sadly.

"I'll tell you something you can do for me," the doctor said, sitting up straight in his chair. "At least something you may try to do."

"What is it?" the minister asked. "Devise some method, suggest some course of treatment, whereby my tried and trusted horse Pleurius will cease to look so much like a saw-horse. I'm afraid the Humane Society will get after me."

The minister laughed. "Everybody knew Dr. Clay's horse; there was no danger of mistaking him for any other. He was tall and lean and gaunt. The doctor had bought him believing him to be in poor condition, which good food and good care would remedy, but as the months went by, in spite of all the doctor would do, Pleurius remained the same, eating everything the doctor brought him, and looking for more, but showing no improvement.

"I've tried everything except pig-nug," the doctor went on, "and pig-nug, and I would like to turn over the responsibility to someone else. I think perhaps his trouble must be

mental—some keeps him aw mind drivin' me know me and him occasionally when I m kind-looking o books at me thinkin', and I joys it, and I nst a farmho family run o is not a plin' of being sunshin' trail of merrime

"What people conscience is your horse, you what's the odds Hugh Grantley, of the heather, brood at his frie

"Oh, there y said smiling, catechism comin' Scotch complac wish I had, but like a rogue, a d the helpless, who

"Horace," the with his level gra fully at his frie 's man in either has no right to feels. Don't fee much. It is neve to go on, no dis or looking behin'

"In other wor and never mid d smiled. Then h

"But, Grantley, sure I am right a sinner is in dan danger of damna is but one cure, have quincy, and the tr

But oh! Grantley Scotch-gray contin you have. If you would tell a man he'd proceed to ha only set out to to-nail. But the

cided will of t young Al Cowan last night to go has a bad attack the strangest case

The gaisty had young man's face plexed and anxio I were on speakin "And are, you m asked in surpris me that you had I thought—"The minister's face





mental—some gnawing sorrow that keeps him awake at night. I don't mind driving Pleurisy where people know me and know that I do feed him occasionally, but it is disconcerting when I meet strangers to have kind-looking old ladies shake their heads at me. I know what they're thinking, and I believe Pleurisy really enjoys it, and then when I drive past a farmhouse to see the whole family run out and hold their sides in no a pleasure. Pleurisy leaves a trail of merriment wherever he goes.

"What difference does it make what people think when you conscience is clear? You do feed your horse, you feed him well, so what's the odds," inquired the Rev. Hugh Grantley, son of granite, child of the heather, looking with lifted brows at his friend.

"Oh, there you go!" the doctor said smiling. "That's the short-cathism coming out in you—that Scotch complacency is the thing I wish I had, but I can't help feeling like a rogue, a cheat, an oppressor of the helpless, when I look at Pleurisy." "Horace," the minister said kindly, with his level gray eye fixed thoughtfully at his friend's handsome face, "a man in either your calling or mine has no right to ask himself how he feels. Don't feel your own pulse too much. It is disquieting. It is for us to go on, never faltering and never looking behind."

"In other words, to make good, and never mind the fans," the doctor smiled. Then he became serious. "But, Grantley, I am not always so sure I am right as you are. You see a sinner is always a sinner, and in danger of damnation, for which there is but one cure, but a sick man may have quinsy, or he may have diphtheria, and the treatment is different. But oh! Grantley, I wish I had that Scotch-gray confidence in myself that you have. If you were a doctor you would tell a man he had typhoid, and he'd proceed to have it, even if he had only set out to have an in-growing toe-nail. But my patients have decided will of their own. There's young Ab Cowan—they sent for me last night to go out to see him. He has a bad attack of quinsy, but it is the strangest case I ever saw."

The gaiety had died out of the young man's face and he looked perplexed and anxious.

"I do wish the old doctor and I were on speaking terms."

"And are you not?" the minister asked in surprise. "Miss Barner told me that you had been very kind—and I thought—" There was a flush in the minister's face, and he hesitated.

"Oh, Miss Barner and I are the best of friends," the doctor said. "I say, Grantley, hasn't that little girl had one lonely life, and isn't she the brave little soul!"

The minister was silent, all but his eyes.

The doctor went on: "Who hath sorrow, who hath weep, who hath redness of eyes?" Solomon wasn't it, who said it was "I think he should have added 'those who wait at home.' Don't you think she is a remarkably beautiful girl, Grantley?" he asked abruptly.

"I do, indeed," the minister answered, giving his friend a searching glance. "But how about the doctor, who will he not speak to you?" He was glad of a chance to change the subject.

"I suppose the old man's pride is hurt every time he sees me. He evidently thinks he is 'll the medical aid he would come around here. But I do wish young Cowan; it's the most puzzling case I ever met. There are times, Grantley, when I think I should be following the plough."

The minister looked at him thoughtfully. "A man can only do his best, Horace," he said kindly.

(Continued next week.)

**How to Have a Good Lawn**

A. B. Cutting, Peterboro Co., Ont.

There are two methods of producing turf on a lawn, viz., sodding and seeding. For immediate results on small lawns, the former method is to be employed. Sodds are used also for making the borders of walks and drives and of flower beds. Their use is almost imperative for terracing and for covering steep banks. Where the latter are apt to be gullied by rains, they may be strengthened by a soft stone fence at the bottom which will prevent slipping.

Sodding may be done at any time during the growing season, providing that the plot to be turned is convenient to a constant water supply. Springtime is best where plenty of water is not available. Secure sods from an old pasture or from a road cut the sod in strips of about twelve or fifteen inches in width. With the spade or a sod knife shave off these strips to a depth of about two inches to the place to be sodded. The method of laying sods will be mentioned when we discuss the question of repairing

lawns, another operation for which sods are useful.

**SODDING LAWNS.**  
Where haste is not necessary on small lawns and where the area is large, seeding is the best method. By this means, one can have the kinds of grass that will do best in the particular circumstances. Grass seed may be sown either in fall or in spring. In mid-summer, there is not sufficient moisture for best results.

In a previous article, it was stated that the ground for lawns is best graded in the fall to allow for settling. When this is done, probably, on account of the setting, it will be necessary to do some extra grading in the spring. When the grading is completed, level the surface and make as fine a seed bed as possible. Sow the seed in a freshly-disturbed soil. To prevent scattering by the wind, sow early in the morning or on a still day. Sow liberally and evenly. For an even distribution, it is better to divide the quantity of seed and to sow both ways of the plot.

Different quantities and kinds of grass seeds are recommended and used. When blue grass or kindred seeds are used, it should be applied at the rate of about four bushels to the acre. Do not sow oats or other grass for the purpose of shading the grass. Oats rob the grass of plant food and moisture. After sowing cover the seed with a rake or by means of a piece of brush. The soil about them be rolled. It is important to firm the soil, particularly in a dry season or where the soil itself is naturally dry, so as to raise moisture from lower depths to the roots.

The kind of grass seed to use depends chiefly upon the character of the soil and upon the location of the plot. It is almost safe to say that the grasses that make the best pastures will make the best lawns. It may be observed that pastures are made up of many species that produce feed for stock throughout the season, one or more species in spring, others in summer when it is dry, and still others in fall.

Kentucky blue grass is the mainstay for lawns. It grows strongly, is hardy and will endure drought and shade on both sandy and clay soils. Red top and Rhode Island bent, strong growing, hardy and early germinating, are also good grass seeds for lawns. They spread by means of creeping root stalks. They are adapted for use on low ground but are seldom satisfactory when sown alone. In all lawn grass mixtures, there should be a little white Dutch clover seed. This grows close to the ground and fills the spaces between the other grasses. For lands that cannot well

be drained, Canadian blue joint may be used. There are other species of grass seed that are valuable for certain places and purposes but the foregoing are usually sufficient.

Grass seeds for lawns should be sown in a mixture. The proportions of each will depend upon local conditions. If the locality and soil are dry, use proportionately more white clover than the others that may be chosen. A good general mixture for lawns is Kentucky blue grass, red top, and white clover in equal parts by weight. On small plots sow this at the rate of about one quart to the square rod.

Many seedsmen offer for sale lawn mixtures. Usually these may be depended upon to give good results and they save time and bother. It is best, however, to buy the separate species and mix them at home. Buy the seed from reliable seedsmen. As grass seed often is apt to contain weed seeds, the best quality should be purchased as it will be the cheapest even at a high price.

(Concluded next week.)

**The Upward Look**

**HAPPY CHRISTIANS**  
Pray without ceasing. In everything give thanks; for this is the will of God in Christ Jesus concerning you.—1 Thessalonians, 5: 17, 18.

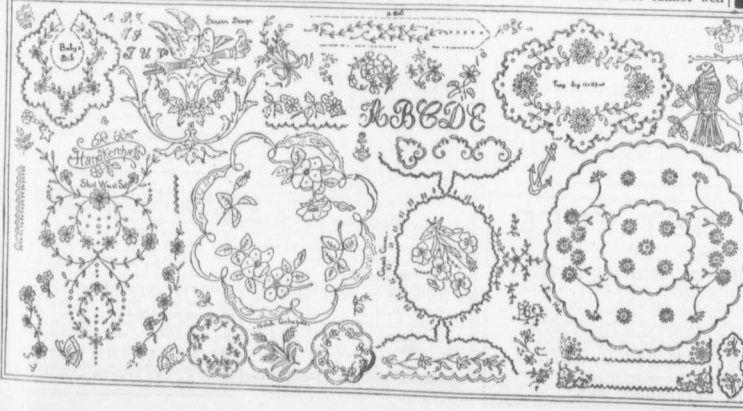
God's loving kindness is manifested to us in so many ways that we Christians should be singing glad songs of praise to Him continually. We should be happy Christians. So happy that

No Work Washing Cloths With

**"New Century" Washing Machine**

No scalded hands—no tired arms—no strained backs—no rubbing—no all-day spent over the tub. The picture shows the "New Century" way of washing. And you can wash a tubful of clothes in 5 minutes. The New Wringer Attachment makes the wringing easy, too, and drains the water right into the tub. Write for a free booklet that tells all about the "New Century."

Improved Mfg. Co. Limited, Hamilton, Ont.

**Art Embroidery**  
No. 571. Special Perforated Stamping Outfit. This splendid outfit consists of about fifty up-to-date and handsome full-size designs, including a Shirt Waist, Corset Cover, Lingerie Hat, two Complete Alphabets (one 2 1/2 in. and one 1 in.), one 2 1/2 piece (size 16 in.), two Doilies (5 1/2 in.), two turnovers, Borders, Belt, Book Cover, Sofa Pillow, and many other useful designs, in all the modern styles of embroidery. The above designs are perforated on a good quality of paper. We also include a cake each of the blue and white of the "Ideal," two Penicets, and full directions for using the stamping preparation, at the special price of 75c for all.

These Perforated Patterns can be used an unlimited number of times.

# "Puritan"

## Reacting Washing Machine

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

Then, there's the extra heavy Balance

means easy running.



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

## "Favorite" Churn

You can churn with your hand—with your foot—or both together, with the "Favorite". Easiest churn you ever used. Roller bearings make it so. In 8 sizes—churns from 1/4 to 30 gallons of cream. Ask your dealer to show you the "Favorite" or write us for full description.



DAVID MAXWELL & SONS  
St. Mary's Care

## Long ago the Scotch learned this.

The sturdy old Scotchman must be amused at the recent "discoveries" that oatmeal is the best food in the world. Our scientific men have been making experiments which prove that Canadians eat too much fat and grease and not enough cereals.

The Scotchmen say: "Look at our nation as proof. The sturdiest nation on earth." Still we have one good point to make. We make better oatmeal than the Scotch.

They buy Quaker Oats and consider it the leader of all oatmeals to be had anywhere. If you are convenient to the store you'll probably buy the regular size package. For those who live in the country the large size family package is more satisfactory. The large package contains a piece of handsome china for the table. Follow the example of the Scotch; eat a Quaker Oats breakfast every day. Canada may well be proud of the Quaker Oats Company's mills at Peterborough.

others seeing us will want to find the secret of our happiness and thus be led to Christ through us.

The worst kind of a Christian is a gloomy Christian. Such Christians, by their very words and actions, show a lack of faith in God's mercy and an absence of love for God and for their fellow men that repels others and thus puts stumbling blocks in their way. If we are not glad continually there is something wrong with us. It is probable that we are thinking too much of ourselves, of our troubles, of our aches and our pains and too little of the love and tender care that God shows for us in all things. We should think more of God and of our fellow men and less of self.

In our text we are told to give thanks in every thing. That does not mean only in some things. If we believe in God's word we must believe that even our troubles are intended for our good. In the second and third verses of the first chapter of James we are told to count it all joy when we fall into divers temptations, knowing that the trying of our faith worketh patience. When, therefore, we are beset by troubles on every side we give thanks to God who will be true to His promises and that in time He will work things out for our best good. We must not, however, forget to follow the instructions that we are given in the first part of our text; that is to pray without ceasing. Most of us Christians fail at that point. We do not pray enough. Through persistent, earnest prayer we may, if we will, obtain the strength and the wisdom that we require for each day's needs, and the peace of mind and the joy that every true Christian should possess and that we should manifest in our daily life.—I.H.N.

## Medicinal Qualities of Vegetables

By Mrs. C. S. Everts, Que.

There is an old saying, "Eat onions in May. All the year after the doctor may play." But that as it may, onions are one of our most valuable vegetables, and if eaten freely would prevent much illness. They contain actual nourishment to the amount of 14 per cent. protein, 8 per cent. fat, 5 per cent. carbohydrates, but are more valuable for their medicinal qualities. If eaten at night they relieve insomnia. They have a quieting effect on the nerves, and are helpful for those with rheumatism. It is said if they are habitually eaten they are a preventive of malaria, diphtheria and scarlet fever. The writer knows of cases of malaria having been cured by eating freely of them.

Lettuce has a quieting effect on the nerves and will sometimes relieve insomnia. It contains some iron and mineral salts.

Cooked cabbage is hard to digest and many can not eat it. If eaten raw, with a simple salad dressing, or, better still, sliced in long strips and eaten like celery, with salt, it agrees with most persons. It contains little nutrition, but has valuable min-

erals salts, and is a good thing on that account.

Carrots contain considerable iron and are valuable. It is said their regular continued use gives a beautiful complexion.

The acid of tomatoes is one of the best correctives for a torpid liver, or if freely used, will prevent it. Best effects are obtained by eating them raw, and when they can not be obtained canned ones are a good substitute.

## A Good Light

W. D. Ketcheson, Hastings Co., Ont.

We have used acetylene gas for five years and like it well. I would not want to go back to the coal oil lamps, as they are dangerous and require a lot of work to keep them clean. We use a Ward machine made in Kingston. It is a 12 light machine, but we can run 17 burners with it.

Its cost was \$50 for the machine. The cost of piping and fixtures would amount to about \$30 extra. The amount of carbide it takes to supply our house a year is from three to four hundred pounds at \$3.00 per hundred pounds or about \$14.00 a year, which with the convenience of the gas is quite reasonable.

Some people are rather afraid of the gas machines, but there is no danger if you keep all lights away from it, and do the cleaning and filling in the daytime.

## How Do You Hoe?

Say, how do you hoe your row, young chap?

Say how do you hoe your row?

Do you hoe it fair?

Do you hoe it square,

Do you hoe it the best you know? Do you cut the weeds as you ought to do.

And leave what's white while there? The harvest you'll garner depends on you;

Are you working it on the square?



Are you killing the noxious weeds, young chap?  
Are you making it straight and clean?  
Are you going straight,  
At a hustling gait  
Are you scattering all that's mean?  
Do you laugh and sing and whistle shrill,  
And dance a step or two,  
As the row you hoe leads up the hill?  
The harvest is up to you.

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

## THE COOK'S CORNER

Send in your favorite recipes, for publication in this column. Inquiries pertaining to cooking are solicited, and will be replied to, as soon as possible after receipt of same. Our Cook Book sent free to cooks and paper subscribers at \$1.50 each. Address, Housewife, Peterboro, Ont.

### QUEEN MUFFINS

Ingredients: 1/4 cup butter, 1/2 cup sugar, 1 egg, 1/2 cup milk (scant), 1 1/2 cups flour, 2 1/2 teaspoons baking powder. Cream the butter and sugar, and egg well, beaten, sift baking powder with flour and add to the first mixture, alternating with milk. Bake in gem tins for twenty minutes.

### SCALLOPED ONIONS.

Select six large onions, and boil them until tender. Take them up, drain and separate them. Put a layer of bread or biscuit crumbs in a dish, then a layer of onions, and so on alternately until the dish is filled. Season with pepper and salt and a little butter. Moisten with milk and brown half an hour.

### DATE PUDDING.

Ingredients: 1/2 cup dates (stoned and chopped), 3 cups flour, 1 cup breadcrumbs, 1/2 lb. dripping, 3 eggs, 1/2 cup sugar, 1 tablespoonful butter, 1 tablespoonful soda, pinch of salt, mix ingredients together, add a little milk if necessary. Put in pudding cloth and boil for three hours. Serve with a sweet sauce.

### CAMBRIDGE PUDDING.

Ingredients: 1 lb. flour, 1 1/2 pints skimmed milk, 1 egg, 2 ozs. sugar, 1/2 lb. apples, peeled and sliced. Make a smooth batter of the flour, milk and egg; add the sugar and the apples. Grease a tin, pour in the mixture, tie a floured cloth over the top, and boil for two hours. You can use any fruit you like instead of apples.

### STOCK MINCEMEAT WITHOUT MEAT.

One cup of cold water, half a cupful of molasses, half a cupful of brown sugar, half a cupful of cider vinegar, two-thirds of a cupful of melted butter, one cupful of raisins, and one chopped, one egg beaten light, half a cupful of rolled cracker crumbs, a tablespoonful of cinnamon, a teaspoonful each of cloves, all-spice, nutmeg, salt and black pepper. Put the saucepan over the fire with the water and raisins; let them cook a few minutes, then add the sugar and molasses, then the vinegar, then the other ingredients.

### SEASONED BUTTER SAUCE

Rub 1/2 cup butter to a cream, add 1/2 teaspoon salt, a little pepper, 1 tablespoon chopped parsley and 1 tablespoon lemon juice. Mix and spread on hot beef-steak, broiled or fried fish.

## Renew Your Subscription Now.

The Quaker Oats Company is advertising Quaker Oats in our columns. There ought not to be a family in town that needs any persuasion to eat this wholesome and strength-giving food. It's the most economical strength-maker anyone can eat.

## PATTERNS FREE

YOUR CHOICE OF ANY 3 PATTERNS in Farm and Dairy, ABSOLUTELY FREE, to return for one new yearly subscription at \$1 a year.

ART EMBROIDERY STAMPING OUTFIT, FREE, for one new yearly subscription at \$1.

Address, Pattern Department,

FARM AND DAIRY  
Peterboro, Ont.

## OUR

In the House and Dairy, that the farm hard and good

I think who and holy eye will Holy to my husband is, to earned through other and their saving, together is "ours," not that is "yours."

She will in clothes and buy her. Her "The Daughters" wife of a farm

coy wages for money gets each haps if it, were the good farm, as much in the would, were th

person else. M but all the mo not buy the lo we find in our farm homes.—

SUMM In recent issu I have read so mer boarder qu

## Pr



persive by

## SHIL PAINT

Made in Canada

## Given tio

Share that thing. The best

Best necktie ONE NEW SU CIRCULATION D

It is desirable to m

## A DINNER SET FREE

FOR A FEW HOURS WORK

Secure a CLUB of only NINE NEW SUBSCRIPTIONS AT \$1.00 EACH, and you will be sent FREE OF COST, an elegant English Semi-Porcelain Dinner Set of 95 pieces.

This set consists of the following pieces: 12 tea plates, 12 soup plates, 12 fruit dishes, 12 butter plates, 12 cups, 12 saucers, 1 platter (10 inch), 1 platter (14 inch), 1 gravy boat, 1 pickle dish, 2 covered vegetable dishes, 1 taker, 1 soup bowl, and 1 cream jug. This set is genuine English semi-porcelain, decorated in a dainty green floral border, with embossed and scalloped edges.

Sample copies on request. Write Circulation Department:

FARM AND DAIRY, PETERBORO, ONT.

**OUR HOME CLUB**

**THE HOUSEWIFE'S ALLOWANCE**

In the April 29th issue of Farm and Dairy, the "Daughter" thinks that the farmer's wife works very hard and gets no pay for her services.

I think when she enters that "high and holy estate of matrimony" she will likely be just as anxious as her husband is, to put what each have earned through co-operation with each other and their way of working and saving, together, and feel that this is "ours," not this is "mine" and that is "yours."

She will in all probability get clothes and board, good enough to suit her. However, I would advise "The Daughter" not to become the wife of a farmer if she wishes to receive wages for her work. Sometimes money gets scarce on the farm. Perhaps if it were summed up, neither the good farmer nor his wife receive as much in the way of wages, as each would, were they working for some person else. Money may be all right, but all the money in the world cannot buy the love and happiness that we find in some of our Canadian farm homes.—"The Doctor's Wife."

**SUMMER BOARDERS**

In recent issues of Farm and Dairy I have read some letters on the summer boarder question. A few words

on this topic from one who feels lonesome at times may be of interest. Summer boarders on the farm are all right if they are girls, but I have no use for those flimsy-flimsy, luddi-dah dudes, who do not know the difference between a pitch fork and a saw horse. It doesn't make so much difference whether girls know anything about farm things and doings or not, so long as they are pretty. God made them, and it isn't their fault if they do ask "which cow gives the butter-milk."

It makes my heart flutter like a fanning mill to be told by the boss to take the girls for a drive down to the rocks where they can pick blueberries. Last summer I had to do this quite often as the girls who stay with us were great ones for taffying up the old man. I hope that they come back again this year. If they don't, I suppose that others will take their places, but I don't want to see any of those high falutin' nothings that call themselves men. They are not worth a splinter on a board fence.—"The Hired Man."

**"SISTER'S" VIEWS ON HOLIDAYS**

The main objection always raised by a farmer, when the subject of a holiday is broached, is the difficulty, impossibility he will say, of leaving home. It is the old story; man is born with the idea that his work is of ultra importance, to mankind in general. Nevertheless, one has only to look around and observe the readiness with which the ranks broken by

death are filled, to realize that few of us are indispensable. As one of the members says, "where there is a will there is generally a way," and surely in the majority of cases, a way may be found to give the members of the farmers' family time for a well earned vacation.

Of course in some cases there are insuperable barriers, and other methods of recreation must be employed. Unfortunately few of us are endowed with the vivid imaginations of the "Pastor's Wife," who derive such amusement and benefit from the perusal of a novel, and guide books. May I suggest that for the more materialistic of us, an hour spent in the woods, or a drive—if as "Aunt Faithie" will rest and interest the busy housewife more than the study of "Bradshaws'" innumerable.—"Sister."

**KEEPING THE BOYS ON THE FARM**

Young people reared on a farm have in too many instances listened to their conditions contrasted with that of city life, greatly to the disparagement of the former. Such an education is easily comprehended by young minds. There is a glamour and a glare in the city life that attracts inexperienced people. They are carried away by appearances.

A gross mistake is made of suggesting that any one who is considered more commonplace than his brother, be set apart for a farmer, that a boy of ordinary ability if fit only for a farmer. Every farmer, when the son reaches the age of manhood ought in justice to both parties to arrive at a proper understanding as to their relationship in regard to compensation for services performed. A plan put forward when no arrangement is made is that of giving him as his own property a young animal. This animal is to be fed at his father's expense. Such a plan as this would certainly tend to create selfishness in any boy. Whatever became of his father's stock his own would receive double share.

Any young man who can be retained on a farm by the value of a calf or a cow will never write his name very high as an agriculturist. Greater and farther reaching inducements than these must be placed before him. An appeal must be made to far higher qualities of mind and heart, in order to retain youth on the farm.

A practical solution of this question is difficult. No rule could be laid which would apply to all. This much is clear, however, that no young man should be asked to remain on a farm without a proper understanding regarding his prospects.—"Cousin Eva."

**HOW TO ENJOY A HOLIDAY**

All farmers need an occasional holiday, if they apply themselves to the calling. A holiday should mean rest. To obtain this, we should have an aim or purpose to accomplish.

So many of us go to the "Fair" just to see the "Fair." We see it all but in a few days we only remember the antics of the clown; when if we went to see the fine points in the best dairy cows, we would learn something that would be of lasting enjoyment.

If we are interested all the year in dairy cows, it may not seem a change yet it will surprise us, what a feeling of restfulness will come when we are able to see the beauty there is in common everyday life.

We also will get much change, rest and happiness, in hoping each other to live and enjoy a holiday. Let the "boss" dig in and give the "Hired Man" a chance in his pull up hill. He has his likes and dislikes, and will respond nobly to any kindness, as we will when others have an unselfish interest in us. Thus we can make every day almost a holiday when cheerful unselfishness shines through our work.—"Uncle Will."

**The Sewing Room**

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

**CLOSED DART FITTED DRAWERS 6277**



The drawers that the drawers are joined at the hips and loose about the knees are the ones that are preferred by the greater number of women. The leg portions of the drawers are finished with continuous facings are made at the side. The drawers are fitted by means of

**BLUOUSE OR SHIRT WAIST 6278**



The simple blouse that allows effective use of buttons is one that will command this season and this model with its wide belt is exceptionally desirable. The wide box plait and the plain spaces between the shoulders allow unusually good opportunity for the display of hand embroidery.

**GIRL'S BOX PLAITED DRESS 6282**



Simple dresses like this make the stand-by of the girl's wardrobe. They can be made from linen, from pique, or from the lighter weight ginghams and chambrays and become long lines while it is absolutely simple and childlike in effect.

**GIRL'S EMPIRE DRESS 6295**



Empire dresses are more becoming to the little girls than the Empire. It is graceful and attractive, and so simple that it suits childish needs, and childish materials, peculiarly well. This one is made with a prettily scalloped bertha and can be worn with a sash as illustrated or with a soft crushed belt as liked.

**Brighten Up**



You want the most economical paint, not the cheapest paint. You want paint that will last a long time and look well, not paint that is cheap by the gallon and expensive by the job.

Ask the S-W. agent about

**SHERWIN-WILLIAMS PAINTS AND VARNISHES**  
Made in Canada THE SHERWIN-WILLIAMS CO. Montreal Toronto Winnipeg

**Given for One New Subscription to Farm and Dairy**

**The best premium offer yet. Patent nickel Tension Shears**  
Shears that are always sharp; always ready to cut anything and everything. The best shears for every purpose in the household.  
Test nickel 8 inch Tension Shears given away absolutely FREE for every ONE NEW SUBSCRIPTION to Farm and Dairy.  
CIRCULATION DEPT. FARM AND DAIRY, PETERBOROUGH, ONT.

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

## OUR FARMERS' CLUB

Contributions Invited.

### QUEBEC

COMPTON CO. QUE.

WATERVILLE—The weather still continues cold and backward. Owing to the frequent rains very little seed has been sown. The grass is rather late, and in many cases feed has been exhausted, and farmers have been obliged to turn their cattle out. All farm produce is high in price; pork is \$10.50 to \$11 a cwt; eggs are 25c a doz.—J. M.

COMPTON CENTRE.—Spring is later than usual, farmers having only started to put in their crops. Scarcity of hay was a serious matter to many. Some were unable to get any and had to put their stock out very early. Hay sold for \$10 to \$12 a ton. A small quantity of sugar was made and its quality was poor. Eggs are selling at from 18c to 25c a doz. The roads dried quickly and are now fairly good.—H. C.

### RICHMOND CO. QUE.

DANVILLE—The weather is improving; farmers are able to plow and harrow and on some light soil seeding is being carried on as quickly as possible. Young cattle are turned out to pasture, with some milk cows. Grass is still very dry, but hay is scarce and high in price, bringing \$14 a ton. The butter and cheese factories are doing a fine business. Butter still commands a good price, 25c a lb; eggs, 18c a doz. There is not such a demand for beef, but it is selling well. Potatoes sell from 15c to 90c a bush; milk cows, \$35 and \$40 each. Sheep and lambs

### DURHAM CO. ONT.

BLACKSTOCK.—On account of the exceptionally wet season there are some wet spots on the low lying lands that are not yet seeded. A few dry days, however, would see the finish of seeding. Clover and fall wheat, although not far advanced, are looking healthy. Good seed is coming. Quite a number of cattle are out on the grass owing to the scarcity of feed. Alfalfa is being sown in small quantities on a very great extent there seems to be a fine crop of thriving looking lambs this spring.—R. J. F.

### VICTORIA CO. ONT.

OAKWOOD—Fall wheat, taken on the average will be a poor crop, judging by present appearances. A number of farmers are sowing barley on the wheat and for a mixed crop. Alaska and red clover has wintered fairly well.—R. W. H.

BURY'S GREEN.—Hay is scarce and many farmers are buying. Considerable pressed hay is being shipped to Fenelon Falls. All kinds of seed grain is high, and many have had to buy. Trifolium and small grasses are reasonable in price. Alfalfa is becoming more generally sown. There will be a large acreage of roots sown, also considerable corn. Milk cows are high priced, and stockers are in good demand, not as plentiful as usual, but the hog is bound to stay.—G. O.

FENELON FALLS.—To say that the season is late, wet and unfavorable for seeding would be expressing it mildly. Many farmers have little or no seeding done yet. Grass and pasture lands are still lying in hopes that there will again be "corn in Egypt." Farm and Dairy contains some new lessons we learned in every issue, and it is congratulated on its important editorials.—H. B. J.

OAKWOOD—Practically every farmer who has been turning his attention into pork is rushing it into money. As high as \$7.50 a cwt has been paid for good lots. Every one is investing heavily in hogs last fall have certainly realized well on their investment. Best cattle are in good demand. The prices quoted for good shippers has risen to \$15.00 to \$17.50 a cwt, while butchers' cattle bring from \$5 to \$5.50 according to size and quality.—R. W. H.

### WELLAND CO. ONT.

RIDGEWAY.—There is no seeding in the ground is so wet the farmers can't get out. Everybody is generally speaking, with odd good pieces. Several are planning to plow up the wheat, and it is not yet wet enough to seed. Clover wintered well and indications point towards a heavy hay crop. Fruit promise a good year. Farm help is plentiful. Laboring men are getting \$12 a day. Prices for potatoes, flour and meat are high, and consequently leave laboring men with very little living where they have families to keep.—W. W. S.

### BRANT CO. ONT.

ST GEORGE.—Orchards give promise of a fine crop, while small fruits have wintered well, generally speaking there is a little lack of farm help, as the ranks of the laboring men are recruited from the "Old Country" nearly every year. Hogs bring \$7.25 a cwt. Even at that there are small deliveries—the result of a few hogs being killed. Many of the hogs were fat, as many hog raisers have greatly reduced their stock.—C. C. S.

### WELLINGTON CO. ONT.

METZ.—The season is very backward; some have had their winter seeding all and will not be able to do any for a while unless the weather improves greatly. Hitters are good through, or on the finish in a few days. The supply of feed is getting pretty scarce, and some have had their winter all right, but so far, the horses have come through the spring work very well, as they only get about two tons each at a time.—H. S.

MOUNT PLEASANT.—Seeding operations are about 50 per cent finished. Many will not finish until June 1st. Clover has come through all right, but the weather was not well drained land. It is badly heaved out, however, on poorly drained lands. The winter has been very dry, already and sheep and young stock can get quite a picking. More corn will be sown than formerly, as the winter crop is becoming more popular year by year. The seed offered this year is excellent.—O. F. C.

### OXFORD CO. ONT.

GOLSPIE.—We are having a very late season for seeding. It is keeping very wet and cold and a great many of the farmers have not begun seeding yet, there will be a great deal of corn put in this season, owing to it being so late for other crops. However, I sowed 12 acres of oats in June

## LIVE HOGS

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

THIS WEEK'S PRICES FOR HOGS DELIVERED AT FACTORY

**\$7.65 a Cwt.**

FOR HOGS WEIGHING 160 TO 220 LBS.

**THE GEO. MATTHEWS CO., LIMITED**

PETERBOROUGH, - HULL, - BRANTFORD

quite a number of years ago, and had a good crop. However, the seasons have changed a good deal since.—A. M. M.

### MIDDLESEX CO. ONT.

DELAWARE.—A large part of the spring seeding yet to be done. Fall wheat never looked better. The hay crop has a good start, in moisture at least. Hay has been sold for \$15 a ton recently on London market. Plums and cherries are beginning to blossom. The outlook for fruit of all kinds is good. Eggs are 15c a doz. Whole-sale butter ranges from 12c to 25c a lb.—E. M. H.

TEMPO.—Everything is growing with a vim, as the weather is very warm and damp. Very little spring grain has been sown as yet, and this is the 14th of May. Some farmers have tried to work the land, but have come near losing their horses in the very soft earth. Fruit trees are bursting forth in their blooming apparel, and all indications point to a good crop of fruit. Cattle are going on the pasture to their delight, and have come through the winter very well.—J. E. O.

### HURON CO. ONT.

PORTER'S HILL.—The weather conditions are still very backward for seeding operations. The summer hay is grain sowed at all, while those having higher land have considerable seeding done, although there is little growth yet. Land that was seeded down last year is in good condition, and there is a good catch of grass and clover. The indications for fruit this year are very favorable, especially for the apple crop. There being little fruit through this section last year, many are looking forward to a heavy crop. A few have started spraying operations, but an sorry to say too few have made a start in that line to set the fruit interests of our country.—R. R. S.

### BRUCE CO. ONT.

WABTON.—Dairy cattle have been much sought after, and there seems to be a number of cows not in calf from one cause or another, so that the output of dairy products from this district will be below normal. There are complaints from sheep men of lambs dying because the mothers have no milk. This is due to want of condition in ewes—in other words, starvation rations. The stronger the breeding flock at lambing time, the less trouble there will be for the shepherd.

Pigs are practically no longer kept to sell. Nothing will empty man's granary quicker than a lot of pigs. There seems to be profit in the summer litter, but it appears to be a losing business. The winter wheat closed at 65c. Hay remains about \$10. Every crop market is doing well. The unreasonable weather may have had disagreed with the grasshoppers' eggs.—C. S.

### GOSSIP

#### MANITOBA.

WINNIPEG.—Spring wheat seeding is now practically completed throughout the Canadian prairie west. In the earlier districts, good progress has been made with oats and other coarse grains. Where seeding was accomplished under the most favorable conditions, grain is already showing above ground, while weather conditions of alternating warm sunshine and showers could hardly be bettered for bringing along the crop early in the low lying country, where land is wet and cold, does any appreciable percentage of the land prepared for wheat remain unseeded. Speaking generally, the crop has been got in under splendid conditions, and in good time, as compared with any average season.

Old timers say that if the spring wheat is in the ground by May 24th, it is in plenty time for a good crop, provided subsequent conditions are favorable. There is therefore no foundation for any anxiety which may have been felt at a low ebb as regarding the lateness of the season. Fall wheat in Southern Alberta is reported looking good.—T. W.

Crumb's Warriner Stanchions are backed by the manufacturers' guarantee as to the quality of material used in constructing them, and also that they will please the purchaser. They are shipped subject to trial in buyer's own stable, and no manufacturer can do this and remain in business unless the article is right. For booklet describing the device and giving testimonials from many of the most prominent dairymen in the country, send your address to Wallace B. Crumb, Box 1, Forestville, Ont.

Renew Your Subscription Now.

Our Leader Seeder,

(Hoe or Disc)

Elastic Spring Tooth

Cultivator,

Diamond Tooth Harrows



Used on your farm this Spring will increase the yield and insure a good crop for you. They are doing it for others, and will do it for you also.

Do not hesitate to order any or all of them. They will make good.

**The Peter Hamilton Co., Limited**

PETERBOROUGH, ONT.

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

MARKET REVIEW AND FORECAST

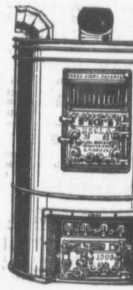
Let Us Help You To Solve The Heating Problem

Our advice—our recommendations—and our estimates of the cost of a complete heating system—are given absolutely free of charge.

Simply send us a rough diagram of your home—giving dimensions of rooms etc.

We will put our experts to work. They will plan the entire heating arrangement—size of furnace, size and location of pipes—and tell you just what it will cost for the completed job.

We will also send you catalogue of



The "Tecla" Furnace

illustrating and describing the many admirable features of this most popular furnace.

Write us now, so we can devote ample time to drawing up the plans for your heating system.

Clare Bros. & Co. Limited, Preston, Ont.

73

Toronto, May 22nd, 1909. — The cool, wet weather has not only delayed seeding and farm work generally but has also had a quieting effect on business generally. The past day or two's fine weather has created a better feeling and the progress in seeding in the west has given more confidence in business circles generally. The business situation generally shows little change over a week ago, but the spring activity hoped for has been delayed. The demand for both cash money and for commercial purposes has been fair, with a change in interest or discount rates. Collections show some improvement.

WHEAT

Notwithstanding that Russia has largely increased her exports of wheat the past few weeks and the visible supplies in Canada and the United States show an increase over the corresponding period of last year, wheat prices still rule high. At Chicago on Thursday May wheat reached the record price of \$1.36, and elsewhere 1/2 to 1/4 below this figure. July wheat closed at \$1.15, or higher than the day previous. At Winnipeg on Thursday May wheat closed at \$1.26 1/2, July at \$1.20 1/2, and October at \$1.07 1/2, a bushel. The Liverpool market was also strong and generally there is no present indication of lower prices. Unfavorable crop reports were the main cause of this strength in the market, though it is possible that speculative element has been putting the market on and forcing things somewhat. There is a strong demand in the western States for each wheat and millers are increasing their outputs. At Chicago millers are buying wheat to cover their orders, or \$1.33 a bush for each wheat. The local market here is inactive as there is little or no wheat to be had and dealers quote Ontario wheat at \$1.30 to \$1.35 outside points. On Toronto farmers' market fall wheat sells at \$1.30 to \$1.35, and goose at \$1.18 to \$1.20 a bush.

COARSE GRAINS

The oat market in this part of Canada is attracting more attention just now than that of wheat. There have been several advances in price all week and prices have advanced a couple of cents a bush during the week. It is reported that dealers that several dealers have realized small fortunes owing to the brisk advance in the price of the most wheat. The market is excited. Western Canada oats are quoted at Montreal as high as 67 1/2c a bush. There is a local scarcity here and owing to an increasing export demand prices are mounting upward. Dealers here quote Ontario at 55c to 56c on track, Toronto at 56c and 56c to 52c at bush outside. In the farmers' market here they sell at 54c to 56c a bush, and barley at 51c to 52c. Dealers here quote barley at 50 to 56c, and peas at 50c to 56c outside. At Montreal malting barley is quoted at 75c to 76c and feed barley at 67 1/2c to a bush.

FEEDS

Milk feeds rule strong under a good demand. The advent of warm weather has quieted the market somewhat, and there is no buying in large quantities. The market here is arriving more freely at Montreal. There are quotations for feed at Montreal as follows: No. 1, \$1.30 to \$1.35; No. 2, \$1.25 to \$1.30; No. 3, \$1.20 to \$1.25; No. 4, \$1.15 to \$1.20; No. 5, \$1.10 to \$1.15; No. 6, \$1.05 to \$1.10; No. 7, \$1.00 to \$1.05; No. 8, \$0.95 to \$1.00; No. 9, \$0.90 to \$0.95; No. 10, \$0.85 to \$0.90; No. 11, \$0.80 to \$0.85; No. 12, \$0.75 to \$0.80; No. 13, \$0.70 to \$0.75; No. 14, \$0.65 to \$0.70; No. 15, \$0.60 to \$0.65; No. 16, \$0.55 to \$0.60; No. 17, \$0.50 to \$0.55; No. 18, \$0.45 to \$0.50; No. 19, \$0.40 to \$0.45; No. 20, \$0.35 to \$0.40; No. 21, \$0.30 to \$0.35; No. 22, \$0.25 to \$0.30; No. 23, \$0.20 to \$0.25; No. 24, \$0.15 to \$0.20; No. 25, \$0.10 to \$0.15; No. 26, \$0.05 to \$0.10; No. 27, \$0.00 to \$0.05; No. 28, \$0.00 to \$0.05; No. 29, \$0.00 to \$0.05; No. 30, \$0.00 to \$0.05; No. 31, \$0.00 to \$0.05; No. 32, \$0.00 to \$0.05; No. 33, \$0.00 to \$0.05; No. 34, \$0.00 to \$0.05; No. 35, \$0.00 to \$0.05; No. 36, \$0.00 to \$0.05; No. 37, \$0.00 to \$0.05; No. 38, \$0.00 to \$0.05; No. 39, \$0.00 to \$0.05; No. 40, \$0.00 to \$0.05; No. 41, \$0.00 to \$0.05; No. 42, \$0.00 to \$0.05; No. 43, \$0.00 to \$0.05; No. 44, \$0.00 to \$0.05; No. 45, \$0.00 to \$0.05; No. 46, \$0.00 to \$0.05; No. 47, \$0.00 to \$0.05; No. 48, \$0.00 to \$0.05; No. 49, \$0.00 to \$0.05; No. 50, \$0.00 to \$0.05; No. 51, \$0.00 to \$0.05; No. 52, \$0.00 to \$0.05; No. 53, \$0.00 to \$0.05; No. 54, \$0.00 to \$0.05; No. 55, \$0.00 to \$0.05; No. 56, \$0.00 to \$0.05; No. 57, \$0.00 to \$0.05; No. 58, \$0.00 to \$0.05; No. 59, \$0.00 to \$0.05; No. 60, \$0.00 to \$0.05; No. 61, \$0.00 to \$0.05; No. 62, \$0.00 to \$0.05; No. 63, \$0.00 to \$0.05; No. 64, \$0.00 to \$0.05; No. 65, \$0.00 to \$0.05; No. 66, \$0.00 to \$0.05; No. 67, \$0.00 to \$0.05; No. 68, \$0.00 to \$0.05; No. 69, \$0.00 to \$0.05; No. 70, \$0.00 to \$0.05; No. 71, \$0.00 to \$0.05; No. 72, \$0.00 to \$0.05; No. 73, \$0.00 to \$0.05; No. 74, \$0.00 to \$0.05; No. 75, \$0.00 to \$0.05; No. 76, \$0.00 to \$0.05; No. 77, \$0.00 to \$0.05; No. 78, \$0.00 to \$0.05; No. 79, \$0.00 to \$0.05; No. 80, \$0.00 to \$0.05; No. 81, \$0.00 to \$0.05; No. 82, \$0.00 to \$0.05; No. 83, \$0.00 to \$0.05; No. 84, \$0.00 to \$0.05; No. 85, \$0.00 to \$0.05; No. 86, \$0.00 to \$0.05; No. 87, \$0.00 to \$0.05; No. 88, \$0.00 to \$0.05; No. 89, \$0.00 to \$0.05; No. 90, \$0.00 to \$0.05; No. 91, \$0.00 to \$0.05; No. 92, \$0.00 to \$0.05; No. 93, \$0.00 to \$0.05; No. 94, \$0.00 to \$0.05; No. 95, \$0.00 to \$0.05; No. 96, \$0.00 to \$0.05; No. 97, \$0.00 to \$0.05; No. 98, \$0.00 to \$0.05; No. 99, \$0.00 to \$0.05; No. 100, \$0.00 to \$0.05; No. 101, \$0.00 to \$0.05; No. 102, \$0.00 to \$0.05; No. 103, \$0.00 to \$0.05; No. 104, \$0.00 to \$0.05; No. 105, \$0.00 to \$0.05; No. 106, \$0.00 to \$0.05; No. 107, \$0.00 to \$0.05; No. 108, \$0.00 to \$0.05; No. 109, \$0.00 to \$0.05; No. 110, \$0.00 to \$0.05; No. 111, \$0.00 to \$0.05; No. 112, \$0.00 to \$0.05; No. 113, \$0.00 to \$0.05; No. 114, \$0.00 to \$0.05; No. 115, \$0.00 to \$0.05; No. 116, \$0.00 to \$0.05; No. 117, \$0.00 to \$0.05; No. 118, \$0.00 to \$0.05; No. 119, \$0.00 to \$0.05; No. 120, \$0.00 to \$0.05; No. 121, \$0.00 to \$0.05; No. 122, \$0.00 to \$0.05; No. 123, \$0.00 to \$0.05; No. 124, \$0.00 to \$0.05; No. 125, \$0.00 to \$0.05; No. 126, \$0.00 to \$0.05; No. 127, \$0.00 to \$0.05; No. 128, \$0.00 to \$0.05; No. 129, \$0.00 to \$0.05; No. 130, \$0.00 to \$0.05; No. 131, \$0.00 to \$0.05; No. 132, \$0.00 to \$0.05; No. 133, \$0.00 to \$0.05; No. 134, \$0.00 to \$0.05; No. 135, \$0.00 to \$0.05; No. 136, \$0.00 to \$0.05; No. 137, \$0.00 to \$0.05; No. 138, \$0.00 to \$0.05; No. 139, \$0.00 to \$0.05; No. 140, \$0.00 to \$0.05; No. 141, \$0.00 to \$0.05; No. 142, \$0.00 to \$0.05; No. 143, \$0.00 to \$0.05; No. 144, \$0.00 to \$0.05; No. 145, \$0.00 to \$0.05; No. 146, \$0.00 to \$0.05; No. 147, \$0.00 to \$0.05; No. 148, \$0.00 to \$0.05; No. 149, \$0.00 to \$0.05; No. 150, \$0.00 to \$0.05; No. 151, \$0.00 to \$0.05; No. 152, \$0.00 to \$0.05; No. 153, \$0.00 to \$0.05; No. 154, \$0.00 to \$0.05; No. 155, \$0.00 to \$0.05; No. 156, \$0.00 to \$0.05; No. 157, \$0.00 to \$0.05; No. 158, \$0.00 to \$0.05; No. 159, \$0.00 to \$0.05; No. 160, \$0.00 to \$0.05; No. 161, \$0.00 to \$0.05; No. 162, \$0.00 to \$0.05; No. 163, \$0.00 to \$0.05; No. 164, \$0.00 to \$0.05; No. 165, \$0.00 to \$0.05; No. 166, \$0.00 to \$0.05; No. 167, \$0.00 to \$0.05; No. 168, \$0.00 to \$0.05; No. 169, \$0.00 to \$0.05; No. 170, \$0.00 to \$0.05; No. 171, \$0.00 to \$0.05; No. 172, \$0.00 to \$0.05; No. 173, \$0.00 to \$0.05; No. 174, \$0.00 to \$0.05; No. 175, \$0.00 to \$0.05; No. 176, \$0.00 to \$0.05; No. 177, \$0.00 to \$0.05; No. 178, \$0.00 to \$0.05; No. 179, \$0.00 to \$0.05; No. 180, \$0.00 to \$0.05; No. 181, \$0.00 to \$0.05; No. 182, \$0.00 to \$0.05; No. 183, \$0.00 to \$0.05; No. 184, \$0.00 to \$0.05; No. 185, \$0.00 to \$0.05; No. 186, \$0.00 to \$0.05; No. 187, \$0.00 to \$0.05; No. 188, \$0.00 to \$0.05; No. 189, \$0.00 to \$0.05; No. 190, \$0.00 to \$0.05; No. 191, \$0.00 to \$0.05; No. 192, \$0.00 to \$0.05; No. 193, \$0.00 to \$0.05; No. 194, \$0.00 to \$0.05; No. 195, \$0.00 to \$0.05; No. 196, \$0.00 to \$0.05; No. 197, \$0.00 to \$0.05; No. 198, \$0.00 to \$0.05; No. 199, \$0.00 to \$0.05; No. 200, \$0.00 to \$0.05; No. 201, \$0.00 to \$0.05; No. 202, \$0.00 to \$0.05; No. 203, \$0.00 to \$0.05; No. 204, \$0.00 to \$0.05; No. 205, \$0.00 to \$0.05; No. 206, \$0.00 to \$0.05; No. 207, \$0.00 to \$0.05; No. 208, \$0.00 to \$0.05; No. 209, \$0.00 to \$0.05; No. 210, \$0.00 to \$0.05; No. 211, \$0.00 to \$0.05; No. 212, \$0.00 to \$0.05; No. 213, \$0.00 to \$0.05; No. 214, \$0.00 to \$0.05; No. 215, \$0.00 to \$0.05; No. 216, \$0.00 to \$0.05; No. 217, \$0.00 to \$0.05; No. 218, \$0.00 to \$0.05; No. 219, \$0.00 to \$0.05; No. 220, \$0.00 to \$0.05; No. 221, \$0.00 to \$0.05; No. 222, \$0.00 to \$0.05; No. 223, \$0.00 to \$0.05; No. 224, \$0.00 to \$0.05; No. 225, \$0.00 to \$0.05; No. 226, \$0.00 to \$0.05; No. 227, \$0.00 to \$0.05; No. 228, \$0.00 to \$0.05; No. 229, \$0.00 to \$0.05; No. 230, \$0.00 to \$0.05; No. 231, \$0.00 to \$0.05; No. 232, \$0.00 to \$0.05; No. 233, \$0.00 to \$0.05; No. 234, \$0.00 to \$0.05; No. 235, \$0.00 to \$0.05; No. 236, \$0.00 to \$0.05; No. 237, \$0.00 to \$0.05; No. 238, \$0.00 to \$0.05; No. 239, \$0.00 to \$0.05; No. 240, \$0.00 to \$0.05; No. 241, \$0.00 to \$0.05; No. 242, \$0.00 to \$0.05; No. 243, \$0.00 to \$0.05; No. 244, \$0.00 to \$0.05; No. 245, \$0.00 to \$0.05; No. 246, \$0.00 to \$0.05; No. 247, \$0.00 to \$0.05; No. 248, \$0.00 to \$0.05; No. 249, \$0.00 to \$0.05; No. 250, \$0.00 to \$0.05; No. 251, \$0.00 to \$0.05; No. 252, \$0.00 to \$0.05; No. 253, \$0.00 to \$0.05; No. 254, \$0.00 to \$0.05; No. 255, \$0.00 to \$0.05; No. 256, \$0.00 to \$0.05; No. 257, \$0.00 to \$0.05; No. 258, \$0.00 to \$0.05; No. 259, \$0.00 to \$0.05; No. 260, \$0.00 to \$0.05; No. 261, \$0.00 to \$0.05; No. 262, \$0.00 to \$0.05; No. 263, \$0.00 to \$0.05; No. 264, \$0.00 to \$0.05; No. 265, \$0.00 to \$0.05; No. 266, \$0.00 to \$0.05; No. 267, \$0.00 to \$0.05; No. 268, \$0.00 to \$0.05; No. 269, \$0.00 to \$0.05; No. 270, \$0.00 to \$0.05; No. 271, \$0.00 to \$0.05; No. 272, \$0.00 to \$0.05; No. 273, \$0.00 to \$0.05; No. 274, \$0.00 to \$0.05; No. 275, \$0.00 to \$0.05; No. 276, \$0.00 to \$0.05; No. 277, \$0.00 to \$0.05; No. 278, \$0.00 to \$0.05; No. 279, \$0.00 to \$0.05; No. 280, \$0.00 to \$0.05; No. 281, \$0.00 to \$0.05; No. 282, \$0.00 to \$0.05; No. 283, \$0.00 to \$0.05; No. 284, \$0.00 to \$0.05; No. 285, \$0.00 to \$0.05; No. 286, \$0.00 to \$0.05; No. 287, \$0.00 to \$0.05; No. 288, \$0.00 to \$0.05; No. 289, \$0.00 to \$0.05; No. 290, \$0.00 to \$0.05; No. 291, \$0.00 to \$0.05; No. 292, \$0.00 to \$0.05; No. 293, \$0.00 to \$0.05; No. 294, \$0.00 to \$0.05; No. 295, \$0.00 to \$0.05; No. 296, \$0.00 to \$0.05; No. 297, \$0.00 to \$0.05; No. 298, \$0.00 to \$0.05; No. 299, \$0.00 to \$0.05; No. 300, \$0.00 to \$0.05; No. 301, \$0.00 to \$0.05; No. 302, \$0.00 to \$0.05; No. 303, \$0.00 to \$0.05; No. 304, \$0.00 to \$0.05; No. 305, \$0.00 to \$0.05; No. 306, \$0.00 to \$0.05; No. 307, \$0.00 to \$0.05; No. 308, \$0.00 to \$0.05; No. 309, \$0.00 to \$0.05; No. 310, \$0.00 to \$0.05; No. 311, \$0.00 to \$0.05; No. 312, \$0.00 to \$0.05; No. 313, \$0.00 to \$0.05; No. 314, \$0.00 to \$0.05; No. 315, \$0.00 to \$0.05; No. 316, \$0.00 to \$0.05; No. 317, \$0.00 to \$0.05; No. 318, \$0.00 to \$0.05; No. 319, \$0.00 to \$0.05; No. 320, \$0.00 to \$0.05; No. 321, \$0.00 to \$0.05; No. 322, \$0.00 to \$0.05; No. 323, \$0.00 to \$0.05; No. 324, \$0.00 to \$0.05; No. 325, \$0.00 to \$0.05; No. 326, \$0.00 to \$0.05; No. 327, \$0.00 to \$0.05; No. 328, \$0.00 to \$0.05; No. 329, \$0.00 to \$0.05; No. 330, \$0.00 to \$0.05; No. 331, \$0.00 to \$0.05; No. 332, \$0.00 to \$0.05; No. 333, \$0.00 to \$0.05; No. 334, \$0.00 to \$0.05; No. 335, \$0.00 to \$0.05; No. 336, \$0.00 to \$0.05; No. 337, \$0.00 to \$0.05; No. 338, \$0.00 to \$0.05; No. 339, \$0.00 to \$0.05; No. 340, \$0.00 to \$0.05; No. 341, \$0.00 to \$0.05; No. 342, \$0.00 to \$0.05; No. 343, \$0.00 to \$0.05; No. 344, \$0.00 to \$0.05; No. 345, \$0.00 to \$0.05; No. 346, \$0.00 to \$0.05; No. 347, \$0.00 to \$0.05; No. 348, \$0.00 to \$0.05; No. 349, \$0.00 to \$0.05; No. 350, \$0.00 to \$0.05; No. 351, \$0.00 to \$0.05; No. 352, \$0.00 to \$0.05; No. 353, \$0.00 to \$0.05; No. 354, \$0.00 to \$0.05; No. 355, \$0.00 to \$0.05; No. 356, \$0.00 to \$0.05; No. 357, \$0.00 to \$0.05; No. 358, \$0.00 to \$0.05; No. 359, \$0.00 to \$0.05; No. 360, \$0.00 to \$0.05; No. 361, \$0.00 to \$0.05; No. 362, \$0.00 to \$0.05; No. 363, \$0.00 to \$0.05; No. 364, \$0.00 to \$0.05; No. 365, \$0.00 to \$0.05; No. 366, \$0.00 to \$0.05; No. 367, \$0.00 to \$0.05; No. 368, \$0.00 to \$0.05; No. 369, \$0.00 to \$0.05; No. 370, \$0.00 to \$0.05; No. 371, \$0.00 to \$0.05; No. 372, \$0.00 to \$0.05; No. 373, \$0.00 to \$0.05; No. 374, \$0.00 to \$0.05; No. 375, \$0.00 to \$0.05; No. 376, \$0.00 to \$0.05; No. 377, \$0.00 to \$0.05; No. 378, \$0.00 to \$0.05; No. 379, \$0.00 to \$0.05; No. 380, \$0.00 to \$0.05; No. 381, \$0.00 to \$0.05; No. 382, \$0.00 to \$0.05; No. 383, \$0.00 to \$0.05; No. 384, \$0.00 to \$0.05; No. 385, \$0.00 to \$0.05; No. 386, \$0.00 to \$0.05; No. 387, \$0.00 to \$0.05; No. 388, \$0.00 to \$0.05; No. 389, \$0.00 to \$0.05; No. 390, \$0.00 to \$0.05; No. 391, \$0.00 to \$0.05; No. 392, \$0.00 to \$0.05; No. 393, \$0.00 to \$0.05; No. 394, \$0.00 to \$0.05; No. 395, \$0.00 to \$0.05; No. 396, \$0.00 to \$0.05; No. 397, \$0.00 to \$0.05; No. 398, \$0.00 to \$0.05; No. 399, \$0.00 to \$0.05; No. 400, \$0.00 to \$0.05; No. 401, \$0.00 to \$0.05; No. 402, \$0.00 to \$0.05; No. 403, \$0.00 to \$0.05; No. 404, \$0.00 to \$0.05; No. 405, \$0.00 to \$0.05; No. 406, \$0.00 to \$0.05; No. 407, \$0.00 to \$0.05; No. 408, \$0.00 to \$0.05; No. 409, \$0.00 to \$0.05; No. 410, \$0.00 to \$0.05; No. 411, \$0.00 to \$0.05; No. 412, \$0.00 to \$0.05; No. 413, \$0.00 to \$0.05; No. 414, \$0.00 to \$0.05; No. 415, \$0.00 to \$0.05; No. 416, \$0.00 to \$0.05; No. 417, \$0.00 to \$0.05; No. 418, \$0.00 to \$0.05; No. 419, \$0.00 to \$0.05; No. 420, \$0.00 to \$0.05; No. 421, \$0.00 to \$0.05; No. 422, \$0.00 to \$0.05; No. 423, \$0.00 to \$0.05; No. 424, \$0.00 to \$0.05; No. 425, \$0.00 to \$0.05; No. 426, \$0.00 to \$0.05; No. 427, \$0.00 to \$0.05; No. 428, \$0.00 to \$0.05; No. 429, \$0.00 to \$0.05; No. 430, \$0.00 to \$0.05; No. 431, \$0.00 to \$0.05; No. 432, \$0.00 to \$0.05; No. 433, \$0.00 to \$0.05; No. 434, \$0.00 to \$0.05; No. 435, \$0.00 to \$0.05; No. 436, \$0.00 to \$0.05; No. 437, \$0.00 to \$0.05; No. 438, \$0.00 to \$0.05; No. 439, \$0.00 to \$0.05; No. 440, \$0.00 to \$0.05; No. 441, \$0.00 to \$0.05; No. 442, \$0.00 to \$0.05; No. 443, \$0.00 to \$0.05; No. 444, \$0.00 to \$0.05; No. 445, \$0.00 to \$0.05; No. 446, \$0.00 to \$0.05; No. 447, \$0.00 to \$0.05; No. 448, \$0.00 to \$0.05; No. 449, \$0.00 to \$0.05; No. 450, \$0.00 to \$0.05; No. 451, \$0.00 to \$0.05; No. 452, \$0.00 to \$0.05; No. 453, \$0.00 to \$0.05; No. 454, \$0.00 to \$0.05; No. 455, \$0.00 to \$0.05; No. 456, \$0.00 to \$0.05; No. 457, \$0.00 to \$0.05; No. 458, \$0.00 to \$0.05; No. 459, \$0.00 to \$0.05; No. 460, \$0.00 to \$0.05; No. 461, \$0.00 to \$0.05; No. 462, \$0.00 to \$0.05; No. 463, \$0.00 to \$0.05; No. 464, \$0.00 to \$0.05; No. 465, \$0.00 to \$0.05; No. 466, \$0.00 to \$0.05; No. 467, \$0.00 to \$0.05; No. 468, \$0.00 to \$0.05; No. 469, \$0.00 to \$0.05; No. 470, \$0.00 to \$0.05; No. 471, \$0.00 to \$0.05; No. 472, \$0.00 to \$0.05; No. 473, \$0.00 to \$0.05; No. 474, \$0.00 to \$0.05; No. 475, \$0.00 to \$0.05; No. 476, \$0.00 to \$0.05; No. 477, \$0.00 to \$0.05; No. 478, \$0.00 to \$0.05; No. 479, \$0.00 to \$0.05; No. 480, \$0.00 to \$0.05; No. 481, \$0.00 to \$0.05; No. 482, \$0.00 to \$0.05; No. 483, \$0.00 to \$0.05; No. 484, \$0.00 to \$0.05; No. 485, \$0.00 to \$0.05; No. 486, \$0.00 to \$0.05; No. 487, \$0.00 to \$0.05; No. 488, \$0.00 to \$0.05; No. 489, \$0.00 to \$0.05; No. 490, \$0.00 to \$0.05; No. 491, \$0.00 to \$0.05; No. 492, \$0.00 to \$0.05; No. 493, \$0.00 to \$0.05; No. 494, \$0.00 to \$0.05; No. 495, \$0.00 to \$0.05; No. 496, \$0.00 to \$0.05; No. 497, \$0.00 to \$0.05; No. 498, \$0.00 to \$0.05; No. 499, \$0.00 to \$0.05; No. 500, \$0.00 to \$0.05; No. 501, \$0.00 to \$0.05; No. 502, \$0.00 to \$0.05; No. 503, \$0.00 to \$0.05; No. 504, \$0.00 to \$0.05; No. 505, \$0.00 to \$0.05; No. 506, \$0.00 to \$0.05; No. 507, \$0.00 to \$0.05; No. 508, \$0.00 to \$0.05; No. 509, \$0.00 to \$0.05; No. 510, \$0.00 to \$0.05; No. 511, \$0.00 to \$0.05; No. 512, \$0.00 to \$0.05; No. 513, \$0.00 to \$0.05; No. 514, \$0.00 to \$0.05; No. 515, \$0.00 to \$0.05; No. 516, \$0.00 to \$0.05; No. 517, \$0.00 to \$0.05; No. 518, \$0.00 to \$0.05; No. 519, \$0.00 to \$0.05; No. 520, \$0.00 to \$0.05; No. 521, \$0.00 to \$0.05; No. 522, \$0.00 to \$0.05; No. 523, \$0.00 to \$0.05; No. 524, \$0.00 to \$0.05; No. 525, \$0.00 to \$0.05; No. 526, \$0.00 to \$0.05; No. 527, \$0.00 to \$0.05; No. 528, \$0.00 to \$0.05; No. 529, \$0.00 to \$0.05; No. 530, \$0.00 to \$0.05; No. 531, \$0.00 to \$0.05; No. 532, \$0.00 to \$0.05; No. 533, \$0.00 to \$0.05; No. 534, \$0.00 to \$0.05; No. 535, \$0.00 to \$0.05; No. 536, \$0.00 to \$0.05; No. 537, \$0.00 to \$0.05; No. 538, \$0.00 to \$0.05; No. 539, \$0.00 to \$0.05; No. 540, \$0.00 to \$0.05; No. 541, \$0.00 to \$0.05; No. 542, \$0.00 to \$0.05; No. 543, \$0.00 to \$0.05; No. 544, \$0.00 to \$0.05; No. 545, \$0.00 to \$0.05; No. 546, \$0.00 to \$0.05; No. 547, \$0.00 to \$0.05; No. 548, \$0.00 to \$0.05; No. 549, \$0.00 to \$0.05; No. 550, \$0.00 to \$0.05; No. 551, \$0.00 to \$0.05; No. 552, \$0.00 to \$0.05; No. 553, \$0.00 to \$0.05; No. 554, \$0.00 to \$0.05; No. 555, \$0.00 to \$0.05; No. 556, \$0.00 to \$0.05; No. 557, \$0.00 to \$0.05; No. 558, \$0.00 to \$0.05; No. 559, \$0.00 to \$0.05; No. 560, \$0.00 to \$0.05; No. 561, \$0.00 to \$0.05; No. 562, \$0.00 to \$0.05; No. 563, \$0.00 to \$0.05; No. 564, \$0.00 to \$0.05; No. 565, \$0.00 to \$0.05; No. 566, \$0.00 to \$0.05; No. 56

ST. LAWRENCE DAIRY COMPANY

Pasterizer, Curd Agitator, General Cheese Factory and Dairy Supplies. 21 ST. PETER ST., MONTREAL, QUE. Phone Main 4619

HOLSTEINS

BERTRAM HOSKIN

Mount Pleasant Farm, The Quilly, Ont. Breeder of Holstein Cattle, Tamworth Swine. High-Class Young Stock for sale. Long Distance Phone 610-28-09

50 HOLSTEINS 50

To be sold at Brookville fair grounds, May 25th. Attend the sale and secure some of these choice cattle and along the lines of the world's champion. Send for catalogue.

GORDON D. MANHARD, E-5-27-09 Manhard, Ont.

LYNDALE HOLSTEINS

Head your herd with a son of Sara Hengerveld Komrade whose dam was recently sold for \$2,000. His 23 nearest dams average 29.12 lbs. butter each in 7 days. Only 1 of his sons left. We still have a few sons of Con. Kol Porter to Paul, and a number of calves, 6-13-27-09

BROWN BROB, LYND, ONT.

FOR SALE, HOLSTEIN BULL

Cornucopia Albon D. Kol, 4 years old, kind sure; 23 of his half sisters put up Advanced Registry Official Records in their two year with records better than 120 lbs. butter in 7 days. J. A. CASKEY, Madoc, Ont. 6-1-27

HOME-BRED AND IMPORTED HOLSTEINS

We must sell at least 25 cows and heifers at once, to make room for the natural increase of the herd. This is a chance of a lifetime to get a good bargain; we also have a few head of bull, Pontiac Hermes, Imp. son of Henderson Dekol, M. J. the greatest sire, head of line. Come and see them. H. E. GEORGE, CRAMPTON, ONT Putnam Stn., 1 1/2 miles C.P.R. E-4-11-10

AYRSHIRES

JAS REGO, ST. THOMAS, AYRSHIRES, Standard for this herd is 40 lbs. milk per day. No culls, 6-9-1909

SUNSHINE AYRSHIRES

Imported and home bred, are of the choicest breeding, of good type and have been selected from the best of the head young bulls dropped this fall sired by "Nether Hall Good-time" 26641, (Imp.) as well as a few females of various ages for sale. Write or come and see. J. W. LOGAN, Howick Station, Que. (Phone 306) E-10-25-09

SPRINGHILL AYRSHIRES

Imported and home bred stock of a good type for sale. Write for prices. See our show this fall. Write for prices. ROBT. HUNTER & SONS, Maville, Ont. Long distance phone. E-6-15-09

BURNSIDE AYRSHIRES

Are in such demand it will make another importation. Will attend great dispersion sale of the world renowned Barkschee Herd of Mr. And. Mitchell, Kirkcaldy, Scotland, June 1st. The choicest Ayrshires ever offered will be sold. Orders entrusted to me will be carefully attended to. Take advantage of this great sale and February and March trials. Correspondence solicited and satisfaction guaranteed. R. H. BURNSIDE, E-16-09 Howick, Que.

STONEYFORD STOCK FARM

Harold M. Morgan, prop., Ste. Anne, de Bellevue. Choice young Ayrshire Bulls and heifers for sale. Yorkshire pigs from imported sire and champion breeder Ben March trials. Largest selection. Highest quality. Write for prices. E-5-26-09 E. W. BORKLELAND, Manager.

SUNNYDALE

Offers a GREAT variety of carries in a close degree the blood lines of Butler Boy Helena Pietrieje, the now famous three old world champion heifer. Born April 15th's Holstein Register for her out and in records. Her dam was bred here. Write for particulars. A. D. FOSTER, Bloomfield, Ont. Phone at Haight Bros., Plonction Central.

were quickly picked up at \$8.50 a cwt for selected lots, and as high as \$8.60 was offered for a special lot. There seems to be very little prospect of lower prices for some time to come.

Dressed hogs are firm with a very fair demand in spite of the fact that the dealers are obliged to ask. Fresh killed abattoir stock is quoted at \$12 a cwt.

EXPORT BUTTER AND CHEESE

Montreal, Saturday, May 22nd. The export demand for butter this week has been very active, and as anticipated at the beginning of the week the supply was not nearly sufficient to meet the demand, the bulk of the offerings at the country boards a week ago having been bought up by one or more of the wholesalers from the market here. As a consequence there was keen competition to get in at the country markets this week which opened at the beginning of the week with prices ranging from 11c to 12c, but have advanced daily throughout the week, high water mark being reached on Friday where the entire offering of colored cheese sold at 12 7/8c a lb, and the white cheese sold at 12 5/8c. The market for Col. Quois, Kempsville and other boards sold at 12 1/8c, yesterday's ruling price being 12 1/2c. The market for white cheese is strong in sympathy with the advance in the country, and strictly finest Belle-Brookville and other Ontario cheeses are quoted at 12 1/2c. Townships at 12c, and Quebecs at 12c. At these prices there is a number of exporters and there is every prospect of every available box of cheese in store here being shipped out on this week's steamers. The advance in price caused by the increased demand from the other side, where there is evidently a shortage of cheese at present, especially of white cheese, which can be more readily sold than colored, and is commanding a small premium in price. The local market here is somewhat behind last year's at this time and this fact has also aided in the present market. The local market here has not been quite equal to the demand, which would have been easily satisfied with a few boxes. The butter market has been firm from all goods from all sources and prices "at the present moment" are well maintained on a high grade of creamery. Finest Township creamery is quoted at 23c to 25c a lb, with ordinary finest quoted at 21c, and secondary quality at 19c. Dairy butter not plentiful, and selected stock is quoted at 10c to 12c a lb. In the Eastern Townships the offerings sold at 10c to 12c at factories equal to 22c a lb delivered here. Dealers generally are looking for lower prices in the near future, but at the moment is that they are about due now. The make is increasing with leaps and bounds and next week's receipts will be more than can conveniently be handled on this market without a good demand from outside points.

GOSSIP

SUCCESSFUL SALE AT MIDDLEMARCH Success attended the sale of stock held by Messrs. C. H. Caughell & Son, of Middlemarch, held May 18. Implements went at bargain day prices. Registered Holstein cattle went at fairly low prices. The highest priced cow, loaned by Col Calamity, brought \$360. She was purchased by John Carroll of Middlemarch. The two cows, Maudie and Dorothy Durlaka, each brought \$250, and were purchased by D. Caughell, Yarmouth Centre, and Charles Grimley, Bedford Park, Toronto, respectively. The Hill was bought by E. C. Gilbert of Paynes' Mill, for \$300. Other prices ranged well over the \$100 mark. Good lots of dogs sold for \$60 and \$26 for calves. The aged stock

MISCELLANEOUS

HARRISON BROS., M. Albert, Herford cattle, Oxford Downs sheep. Stock for sale from 6-9-09

ABRAM EASTON, Appleton, Ont., Leicester sheep. Shorn ring and breeding stock. 6-4-25-09

BERKSHIRES AND TAWMORTHS Choice Berkshire boars for service and sows ready to breed; imported and home bred; ready to breed; boars fit for service, consisting of good stock of both sexes. Guaranteed as represented.

Georgetown, G.T.E. Mills, C.P.R., Halls Co. 6-6-09 W. B. BROWNBRIDGE, Ashgrove

bull, Count Calamity Mercedes, sold for \$75 to W. A. Rife of Hespeler. The entire herd was disposed of. Mr. G. H. Caughell, a well known dealer in the partnership, is retiring, and moving to St. Thomas. Mr. Caughell, Jr., is moving on to smaller farms and implements, etc., recently purchased at Talbotville.

EXCURSIONS TO GUELPH AGRICULTURAL COLLEGE

During the month of June there are thousands of Canada's best farmers and farmers' sons and daughters who take advantage of the excursion routes to visit the O. A. College. It is worth while to visit the College to get the latest information, convenience and construction of the farm buildings, and that nearly all of these are roofed with "Elastake" Metallic Shingles. It will be noticed that the roofing is practically in perfect condition today though it has been on many of these buildings for more than 15 years, yet it has withstood the ravages of the weather, storms, wind and lightning absolutely. The "Elastake" Metallic Shingles are manufactured by the Metallic Roofing Co. of Toronto, the pioneers in the manufacture of metallic building materials. They will gladly furnish our readers with full information as to cost, and show how easily they can be applied to any roof, old or new.

The price list of the Canadian National Exhibition is not being distributed as usual, it contains handsome premiums for everything Canadian make, or grow, or mine. The exhibition this year begins August 28th and closes September 13th, thus giving two full weeks open to the exhibitor. Canada's Great Fair are determined to keep it in the van of Canadian progress. To mention even the features of the different sections in limited space would be an impossibility. Suffice it to say that to the grand total of \$9,000 in premiums, special are added in every department and that no effort or expense has been spared to secure special attractions in keeping with the greatest exhibition on this continent. Over the million mark in the matter of attendance is the avowed intention of the management of the exhibition.

HOLSTEIN-FRIESIAN NEWS

Farm and Dairy is the official organ of the Canadian Holstein-Friesian Association and is published for the benefit of its readers of the paper. Members of the Association are invited to send items of interest to Holstein breeders for publication in this column.

BULL TRANSFERS FOR MARCH, 1909.

The publication of these transfers is paid for by the Holstein-Friesian Breeders' Association.

(Continued from last week.)

- Sir Lulu Darknes, B. Mallory to N. A. Bonstedt, Belleville, Ont.
Sir Methchilde Posch 4th, A. Kennedy to C. E. Fry, Bright, Ont.
Sir Mechtild, to H. A. Kennedy to D. R. Clark, Morrison, Ont.
Sir Melrose, to H. H. Robert J. Miller to F. W. Miller, Buffalo, N. Y.
Sir Mercena Tempest, Miles Hartley to Frank Brown, Holbrook, Ont.
Sir Nightingale Wynne, Walburn Rivers to J. H. W. Brown, Ont.
Sir Paul, to J. H. W. Brown, Ont.
Sir Ralph Clitwell, W. W. Brown to Joe Allen & Son, West Osogo, Ont.
Sir Peterie, to Joseph Jewell, John Lihman to David J. Lindsey, Hamilton, Ont.
Sir Ross Echo, B. Mallory to Wm. Pollock, Welland, Ont.
Sir Sylvia Agatha De Kol, Clark Hamilton to Wm. Higginson, Inkerman, Ont.
Sir Thimble, to Wm. P. Ashby to Joseph Croteau, St. Patrick de Timinich, Ont.
Sir Totilla Posch Johanna, Benj. Webster to Lakeview Farm, Bronte, Ont.
Sir Urs Darknes, to Wm. P. Ashby to L. Jayne, Grafton, Ont.
Snowbird, to W. R. May to R. McLean, Colborne, Ont.
Son of Elsie Evington, Peter Kines to James Dayberry, Bronte, Ont.
Summer Hill Butcher Boy, D. C. Platt to Son to William McFarland, Rockley, Ont.
Summer Hill Count, D. C. Platt & Son to W. T. Davidson, Welland, Ont.
Summer Hill Echo, D. C. Platt & Son to H. F. Hickson, Thornhill, Ont.
Tidy Baron, S. J. G. Gray, E. Gray, Eden, Ont.
Victor Auntie Wayne, Richard Connell to S. E. Baldwin, North Mountain, Ont.
Victor Lord James Williams to Wilson Moore, Springfield, Ont.
Victor de De-j. Allen, St. Michel, Que.
Victor De Kol Tenny 2nd, Peter Kines to William Porterfield, Atwood, Ont.
Venus, Chester, to Samuel Pool, John H. Caldwell to W. A. Park, Berwick, Ont.
Yvonne, to E. George to E. D. George, Putnam, Ont.

COW TRANSFERS FOR MARCH, 1909. Aargie De Kol Bewunde, H. E. George to W. Barron, Braxbridge, Ont.
Abbeleyer, to Samuel Pool, C. E. Smith, Scotland, Ont.
Agart, to H. W. May to E. D. George to Poole & Mann, Dundas, Ont.
Alice Josephine, A. Mittlefield to John Hill, Camboro, Ont.
Alma Busquey, Dr. L. de Harwood to I. L. Ladour, Montreal, Que.
Annette Abbekeyer, I. G. Wyckoff to Nelson Hall, Rockford, Ont.
Augusta Paula, Mittlefield, to John Hill, Camboro, Ont.
Azie De Kol Johanna Bus, Benj. Webster to Lakeview Farm, Bronte, Ont.
Barbara Tensen, C. H. Smith to Isalah Parker, Toledo, Ont.
Beauy Banks De Kol, Miles Hartley to Stephen Hartley, New Durham, Ont.
Belle Flora, William Post to Gordon Summers, Rockford, Ont.
Bryant to L. Abbott, Cambriche, Ont.
Belle of Sylvania 2nd, W. A. Bryant to L. Abbott, Cambriche, Ont.
Bell Wayne, John Sheridan to Gordon S. Gooderham, Bedford Park, Ont.
Beryl Wayne Milk Maid, Mrs. Wm. McMenomy to Justus H. McLean, Inkerman, Ont.
Bess Echo De Kol, A. D. Foster to W. H. Steedman, Ontario, Ont.
Bess Hengerveld De Kol, A. D. Foster to W. H. Cudman, Gaspport, Ont.
Bessie Guelmette, J. M. Boyce to John Venable, Oxford, Ont.
Bessie Yorkman Wayne, H. E. George to J. O. Ball, Springfield, Ont.
Betsey, John Sheridan to Gordon S. Gooderham, Bedford Park, Ont.
Black Crown, A. Mittlefield to Wm. H. Steedman, Ontario, Ont.
Bonnie Gene, Donald E. McMaster to J. O. Ball, Springfield, Ont.
Bonnie Netherland, Pesch, Thomas E. Gedgoged to Andrew Thompson, Bellon, Ont.
Buckley Maid 3rd, W. B. Mantel to Dr. L. de Harwood, Sandford, Ont.
Burke, to Wm. P. Ashby to J. Sheridan, Toronto, Ont.
Carnegie, to John Sheridan to Gordon S. Gooderham, Bedford Park, Ont.
Calamity Posch Wayne 3rd, Walburn Rivers to J. H. W. Brown, Ont.
Carney Madrigal, H. E. George to Thos. L. H. Norman, Bronte, Ont.
Cecil Wayne, Benj. Webster to Lakeview Farm, Bronte, Ont.
Cecilia, to J. P. D. Eds to Smith & Dymont, Dundas, Ont.
Chest Spring Lass, J. C. James to James Knapp, Oxfordville, Ont.
Clearing Jane, Maple Line, W. A. Bryant to L. Abbott, Cambriche, Ont.
Clothilde, Maud, John Sheridan to Gordon S. Gooderham, Bedford Park, Ont.
Cora Busquey, Dr. L. de Harwood to C. Smith & Dymont, Dundas, Ont.
Cora Countess Echo, D. C. Platt & Son to C. E. Fry, Bright, Ont.
Cora to Smith & Dymont, Dundas, Ont.
Cory, to W. E. Ball, Springfield, Ont.
Cory, to Gordon S. Gooderham, Bedford Park, Ont.
Cory Evergreen, George Boyd to Arthur W. Brown, Bronte, Ont.
Corralie, John Sheridan to Gordon S. Gooderham, Bedford Park, Ont.
Corinne L. Priestley, H. E. George to Robert Griestack & Son, Collingwood, Ont.
Cornelia Victoria 2nd, Peter Kines to Jacob Ankerman, Gouston, Ont.
Cory, to J. M. Boyce to W. C. J. Foster, Bloomfield, Ont.
Cory, to Wm. P. Ashby to Estate of Wm. Cleland to Henry Duncan, Newry, Ont.
Cobana Pauline De Kol 2nd, Edwin Butler to H. W. May to Wm. P. Ashby, H. E. George to Poole & Mann, Dundas, Ont.
Daisy Abbekeyer Pauline, I. G. Wyckoff to Samuel Poole, Norwich, Ont.
Daisy, to Wm. P. Ashby to E. J. J. Cleary, Shawbridge, Que.
Daisy, to H. H. A. Layng to F. W. Scovel, Hildon, Ont.
De Kol Plus, C. T. Ward to Carter, to J. H. W. Brown, Bronte, Ont.
De Kol Plus, Cartwright Hawley to John De Joyce, Napasno, Ont.
De Kol Plus, to S. J. Foster, Bloomfield, Ont.
De Kol Plus 3rd, Cahos Bro, to Samuel Dickie, Central Onslow, N. S.
Della Sarcanta Lovell, H. E. George to John De Joyce, Napasno, Ont.
Della Roberts De Kol, Miles Hartley to Charles De Joyce, Napasno, Ont.
Della Queen De Kol, Wm. Johnson to R. Hanton, Franklinville, Ont.

(Continued next week.)



sands of paper-ragged would repair—Long wa'—gle thin

Because of your thing of he toughen galvanizing



moisture Galvanizing are We are in quar for twen in plain million of ten guar if any 1934, we for nothing Honest "Oshaw last a few five These shingles four sides whole roe sheer crevice of ture or to The MONTREAL 213 Craig St. W.

# The Right Kind of a Roof



Long years before you could find a sign wear-out about an "Oshawa" shingled roof, any wood-shingled roof would be rotted to dust. Any ordinary metal-shingle roof would be pitted with thousands of rust holes. Any patent paper-and-tar roof would be ragged pulp. Even a slate roof would be dangerously out of repair—

Long, long before any "Oshawa" shingled roof needed a single thing done to it.

Because, as you can easily see for yourself, there is simply nothing TO wear out about a shingle of heavy (28-gauge) toughened steel, special galvanized to defy



moisture — "Oshawa" Galvanized Steel Shingles are like that.

We are safe enough in guaranteeing these shingles for twenty-five years, as we do, in plain English, with a quarter-million dollars back of the written guarantee, which says:

If any roof that's "Oshawa" shingled in 1909 leaks at all by 1934, we will put on a new roof for nothing.

Honestly, we believe an "Oshawa" shingled roof will last a century, let alone twenty-five years. Why shouldn't it?

These heavy steel galvanized shingles lock underneath on all four sides in such a way that the whole roof is practically one sheer sheet of steel—without a crevice or a seam to catch moisture or to let wet get through.

You need never put a brushful of paint on an "Oshawa" shingled roof, the special galvanizing makes paint entirely needless, and it won't wear off nor flake nor peel. Yet that roof will be Rain-proof, Snow-proof, Wind-proof, Weather-TIGHT as long as the buildings stand. Fire-proof, of course. How



could a seamless sheet of tough steel catch fire? That alone is worth the whole price of these Oshawa Galvanized Steel Shin-

**Lasts a Century**  
**Never Needs Painting**  
**Can't Catch Fire**  
**Makes Buildings Lightning Proof**

Half a million dollars doesn't cover the damage lightning did last year to Canadian farm buildings alone, and "Oshawa" shingling would have saved all that loss.

Yet, with all these things to show you that an "Oshawa" shingled roof is the RIGHT roof for you, "Oshawa" Galvanized Steel Shingles cost no more than wood shingles to start with. Let me tell you just what it would cost to roof any building right. You needn't figure the labor, for anybody who can use a



hammer can put these shingles on easily and quickly.

Will you let me send you sample shingles, an estimate, and book that tells all about "Roofing Right"? It would pay you, I think, to read the book. It's free, of course.

Just address our nearest place Ask for Roofing Right Booklet No. 9.

*G. A. Pedlar*

PEDLAR PRODUCTS include every kind of sheet metal building materials—too many items to even mention here. You can just for a catalog—estimate—prices—advice—interest you in our Art Steel Ceilings and Side Walls—they are a revelation to many people. More than 2,000 designs. May we send you booklet and pictures of some of them?

**"OSHAWA"**  
**GALVANIZED STEEL**  
**SHINGLES**

A new roof for nothing if they leak by 1934

gles. Count the saving in insurance rates (any company makes a lower rate on buildings so shingled). Count the freedom



from anxiety, the safety of your houses and barns.

And, a most important fact to you, an "Oshawa" shingled roof is LIGHTNING-proof! Positively proof against lightning — insulated far better than if it bristled with lightning rods.

## The PEDLAR PEOPLE of Oshawa

ADDRESS OUR NEAREST WAREHOUSE

MONTREAL 251 Craig St. W.

OTTAWA 423 Sussex St.

TORONTO 11 Colborne St.

LONDON 86 King St.

CHATHAM 390 King St. W.

WINNIPEG 76 Lombard St.

VANCOUVER 821 Powell St.

QUEBEC 127 Rue du Pont

ST. JOHN, N. B. 42-46 Prince William St.

HALIFAX 16 Prince St.

ESTABLISHED 1861

WE WANT AGENTS IN SOME SECTIONS.

WRITE FOR DETAILS.

MENTION THIS PAPER.

# Send Now For Free Book and Sample

Learn about the strongest, most practical, most durable and easiest-laid culvert ever made—that's

"For more than five years I have been experimenting with our experts to find the BEST culvert for all-round uses.



We sought the markets of the world for one that was just right; and we didn't find it. If we had, we'd have

bought the patent rights for Canada. Finally, last spring we struck the idea. Then we put in some extensive months in making that idea better—and NOW we've got a culvert that is so far ahead of any other there's no comparison."

"You'll read something about it here; but to KNOW how 'way-ahead it really is, you'll want to see the sample (sent free) and read the booklet (free, ditto). With that before you, you will soon see why every Reeve, or Warden, or Town Councillor, or anybody who has any use for culverts at all,—will find it pays to get in touch with me right NOW. I'm asking you to lay aside your notions of what makes a good culvert, and a cheap culvert and find out about this NEW culvert. I don't expect you to buy a foot of it until it PROVES to you that Pedlar Culverts are in a class by themselves, and that you can't afford to overlook them. Let us start that proof toward you soon — address nearest Pedlar place."

G. A. Pedlar

## Frost-Proof, Rust-Proof, and Water-Proof

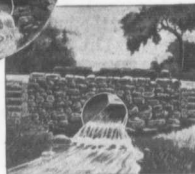
This triple-rib flange-lock principle, found only in Pedlar Culverts, not only adds greatly to the strength of the piping and makes a perfect joint—practically as good as if welded—but it also allows for expansion and contraction under cold or heat. Though a Pedlar Culvert, of any length, be frozen solid full of ice, it will not split nor spring a leak.

Send for Free Sample and Booklet 21—Address

State your probable needs and we will quote prices and discounts—



A structure like this, with Pedlar Culvert, won't wash out nor need repairs.



## PEDLAR Perfect Corrugated Galvanized CULVERT

A few hours' work and a few dollars will put a modern and permanent culvert in place of a ramshackle bridge. Easily laid by anybody.

### Made of Special Billet Iron, Extra Heavy

In very size of Pedlar Culvert, which comes in all standard diameters from 8 inches to 6 feet, we use nothing but the best grade of Billet Iron, specially made for us, of extra-heavy gauge (14 to 20 gauge, according to the diameter. This Billet Iron curved into semi-cylinders—curved COLD, so there will never be any variation from exact dimensions; and it is then deeply and smoothly corrugated on a special press that puts a pressure of SIXTY TONS on every square inch of the metal. The corrugations, therefore, are uniform and very deep.

### Galvanized After Being Pressed Up

When the corrugating process is done, the sections are galvanized by our exclusive process that covers the entire surface with a thick coating of zinc spelter. Every edge, every crevice is heavily coated with this rust-proof, corrosion-proof galvanizing, not a spot is left unprotected. This is the only culvert galvanized after being shaped. Is absolutely Rust-Proof.

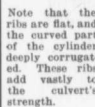
### Will Stand Incredible Strains

The heavy-gauge Pedlar Billet Iron sections, deeply corrugated and locked together without bolts or rivets by our compression triple rib (this rib is flat—not corrugated), make a culvert that will stand enormous crushing strains, and neither give nor spring. A thin cushion of soil on top is all the protection such a culvert needs against traffic, and no special precautions need be observed in laying it—it will stand what no other culvert can.

### Compact—Portable Easily Laid



Half-sections nested for shipment.



Clanking the flange lock—no bolts, no rivets, no makeshifts.

Pedlar Culverts are shipped in half-sections, nested—see Fig. 1. Saving freight charges and making carriage easy in rough, country. Quickly and easily transported anywhere.

Sections in course of assembling.

Unskilled labor, with a single tool, quickly clamps the flanges together, making a triple-fold joint that is tighter and better than any riveted or bolted joint can be.



### BRANCH WAREHOUSES

MONTREAL 221-3 Craig St. W.  
OTTAWA 432 Sussex St.  
TORONTO 11 Colborne St.  
LONDON 86 King St.  
CHATHAM 200 King St. W.