

Issued Each Week—only One Dollar a Year

VOL. XXVIII

NUMBER 43

# FARM AND DAIRY

## RURAL HOME

PETERBORO, ONT.

OBER 28, 1909



COLONY POULTRY HOUSES USED THE YEAR ROUND AT MACDONALD COLLEGE, QUE.

The three main essentials of a satisfactory poultry house are that it shall be dry, free from draughts, and be one in which there is no smell of hens. The colony houses illustrated have these characteristics, and other advantages as well. Dryness and fresh air are ensured by a loose board ceiling, over which straw is put, and a gable window opening into the straw loft. These houses provide suitable shelter in winter time, and are sufficiently cool in summer.

They are single boarded only, except where the roosts are placed, yet out of several hundred birds wintered in these houses not a comb was frosted, the reason being that though the houses are cold, they are dry.

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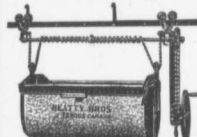
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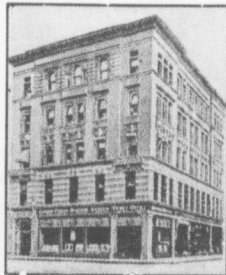
## The Taxation Question

### A Farmer's Policy

Editor, Farm and Dairy, — The Lawlor lot, on the north west corner of King and Yonge streets, Toronto, was sold recently at the rate of more than \$3,000,000 an acre exclusive of the building upon it. This is a fair sample of how the value of land increases in our larger cities. This lot, it is said, was originally obtained by the Lawlor family many years ago in payment for a board and laundry bill. To many farmers this example may be a revelation. They never dreamed that city land ever reached such a price. But here it is in cold figures, and there is land in Toronto held at a higher price even than that.

The same is true of every city and town in the province, the difference being only in degree. The larger and more populous the city the greater will be the value of the land. In New York and Chicago there is land 10 times as valuable as in Toronto.

The farmers of Ontario have all along held that they were the principal land owners of the Province, but they are not. They are so far as area is concerned, but most farm land is in itself of comparatively little value. Let any of those who have



The Lawlor Lot, Toronto

Sold recently at the rate of more than \$3,000,000 an acre, exclusive of the building upon it.

in the past opposed any proposal to raise all taxes from land values, sit down and figure how much farm land in their township it would require to buy one acre of such city land as the Lawlor lot. In many cases they will find that it would take more than all the farms in the township, improvements and all. It is to the cities and towns therefore that we must go to find the land owners of the province, if we would measure land by its value.

And how many farmers have any conception of the extent to which they themselves, taken as a whole, have contributed to the production of these enormous city land values? The value of land, apart from the improvements on or in it, is not the product of the land owners individually, but the collective product of the whole community. And the farmers are a part, and a most essential part, of the community. Imagine a community without any rural population. The cities draw their very life blood from the country. The country could get along in a way, without the city, as in the case of pioneer communities, but the city owes its very existence to the country.

The land value taxer says that as the value of the land, exclusive of improvements, is the collective pro-

duct of the community as a whole, it should be taxed for the benefit of the community as a whole. This would mean that high priced city lots, like the Lawlor property, would be taxed in proportion to their value and the money expended not exclusively for the benefit of the city, but for the benefit of the surrounding rural districts as well.

A municipal tax on land values would not accomplish this end. A county tax would to some extent. A provincial land value tax would do so to a much greater extent. Suppose that a special provincial tax on land values were levied for the purpose of providing better roads, electric car services, telephones, etc., for the rural districts, what an evening up effect it would have. Wherever land values are taxed the price of land is prevented from rising. Wherever the tax money is expended in needed public improvements and public services the price of land increases, or is prevented from declining. The taxation of the valuable land in the cities and towns and the money in giving to the country more of the conveniences that are now almost exclusively confined to the city areas would pull down those enormous values in the cities and increase the value of rural land to a very large extent. Such a policy would do more than anything else that was ever proposed towards solving the problem of keeping the boys and girls on the farm. If we would do this we must make country life more attractive. This can be done only by giving to the country as many as possible of the advantages of city life. This is one of the most important functions of the taxation of land values.

The first step towards the desired goal is to get the municipal and county taxes transferred to land values exclusively, and this the proposed amendment to the assessment act, which is now being petitioned for by over 200 municipal councils in Ontario and which petition was outlined in Farm and Dairy on October 14th, would make possible. Every farmer in the province should exert every effort to further this movement. A provincial tax as above outlined will soon follow.—L. B. Walling, Sec. Single Tax Association, Toronto.

### Investigating Hog Disease

As several outbreaks of a disease which is either hog cholera, or which resembles it to a remarkable degree, have recently occurred in garbage fed hogs in the vicinity of Canadian towns and cities, and as it has been quite impossible to trace the source of infection in any of these cases, the Live Stock Department of the Dominion Department of Agriculture is engaged in making a careful pathological investigation with the view of being able to reach a definite decision as to the exact nature of the malady.

Some people have thought that hog cholera might be caused by our hog eating scraps of pork and bacon imported from sections in the United States where hog cholera is prevalent or that possibly the disease might be brought in on the packages. The live stock division at Ottawa has not sufficient exact information yet to enable it to say for a certainty whether or not this disease can be transmitted by such channels. These points will probably be investigated.

The following persons have recently been fined for violations of the Fruit Market Act, on complaints laid by the Dominion Fruit Inspectors: J. O. Konkke, Beamsville, Ont.; Wm. Nash, Stony Creek, Ont.; S. Overholt, Jordan, Ont.; Loughheed Bros., Parkburg, Ont.; Geo. Dyce & Co., Meaford, Ont.; T. S. Shepard, St. Montclair, Que.; D. Hanniwel, St. Davids, Ont.

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FOR WEEK ENDING OCTOBER 28, 1909.

No. 43.

## Some Comment on the Split-Log Drag

John Jackson, Lincoln Co., Ont.

MUCH has been said and published during recent years about the merits of the split-log drag for keeping clay or earth roads in proper shape. And it is hardly possible to say too much in favor of the split-log drag, which is one of the most useful implements introduced in recent years, especially where the small cost of it is taken into consideration.

Simple as it is in order to get best results, much depends on the construction of the drag. The man that uses it is another important factor. Two men may take the same make of plow; work of a very inferior character. To make a good job of anything it is necessary to start first furrow is straight, it is an easy matter to keep all straight. If the first one is crooked and uneven it is so to the end.

### ERRORS IN ROAD MAKING

Let us consider a few of the prevailing errors most common in road making. The turnpikes in most cases are laid out too wide. Crooked ditches so commonly found give an uneven width to the road bed, causing it to grade up higher in the narrow places.

The dimensions as I have seen them given for making the split-log drag call for too wide a drag. A turnpike to be in the best condition possible, must have a good even round or crown. A long drag can have no longer bearing on a round surface than a shorter one. When one end is down in the ditch, the other is up in the air and so the extra length only hinders the proper working of the machine. A fairly wide turnpike may be all right where travel is congested that is if work enough can be put on it to round it up properly. But a narrow roadway rounded up is much preferable to a wide, flat one, or one simply with a ridge up the centre with a flat on each side, which latter is not uncommon. On such roads the water has to soak away in the road bed instead of running directly off into the ditch.

### THE SECRET OF GOOD ROADS

A deep ditch is not necessarily as essential as it is to have an even grade with open outlets so that surface water cannot stand in the ditches. In fact herein lies the secret of keeping a road in good shape.

In laying out a new turnpike it is better to start it on the narrow side rather than to be too wide. It is easier to widen it out in working, than it is to narrow it. On a model clay road in

the nearby vicinity the turnpike is nineteen feet between outside of ditches; this seems all right for width. At all events, for all ordinary roads, concessions and side lines, 20 feet from outside to outside of ditches should be the limit. Some will claim that to be too narrow on account of danger in meeting autos, etc., but remember that to round up this width requires but a small ditch only, about the depth of a plow furrow. There is no danger in case of emergency to drive across it. As we widen the turnpike, we must deepen the ditch. A 24 foot turnpike must have a ditch twice the size of one 2 feet wide and it will take twice the work to make and keep it in shape.

### GRADING WITH THE DRAG

The regular road machine is perhaps the proper thing with which to grade up the road although some with a good deal of experience in road-making, too, will contend that a turnpike can be made as good and as cheaply with a split-log drag as with a regular road grader. Be that as it may, I have seen an excellent turnpike made right out the rough with the split-log drag; but

If the turnpike is laid out too wide and the ditches are crooked it is unwise to waste any more work on it while in that shape. If necessary, narrow the roadway and straighten the ditches by plowing, throwing the furrows outward. Or start anew by setting stakes; set them straight and work to them. The work will pay well. The road will grade up even and keep in better shape. The looks alone are more than worth the extra pains taken to make the ditches straight and it will be an object lesson for others to profit by.

The illustration shows a road in the Township of Clinton near Beamsville turnpiked up from the flat. The work was done entirely with the drag shown, by Angus Stewart and Mr. Comfort. This drag is faced with strong iron in front. With two teams and two men riding it it rolls up this heavy clay about equal to any road machine.

### GOOD ROADS AT SMALL COST

A properly kept clay road may be very bad for a little time each year. But far about nine months

of the year it is really better than the average fairly well kept macadamised roads. The cost of keeping up all the roads in a Township, side lines and concessions by means of the split-log drag would not exceed the cost of one macadamised road through the township. This applies particularly where the stone has to be hauled some distance. The foregoing would not apply to all parts of the country with the same force, such as where there is plenty of good gravel at convenient points, nor would it apply so aptly in the case of a very light sandy road.



A Road That Was Graded Up in 1909 Entirely With the Split-log Drag  
The possibilities of the split-log drag are well illustrated in the photo reproduced above. This road in the township of Clinton, near Beamsville, Ont., was turnpiked up from the flat by means of a split-log drag.

—Photo by J. Jackson.

where they do excel is in keeping a road in proper shape. The drag that we use has three blades instead of two. This is an improvement. Compared with the two blade drag, it is like a joint plane to a draw knife. Our drag is made of material 2 by 8 inches; 5 feet 4 inches long, the pieces being placed two feet apart. They are shod with iron plates in front.

It is better not to have the drag too heavy; weight can be added if necessary. If a road is once properly graded it may be kept in good shape for from five to ten years without re-grading with road machine. Drawing the drag on the proper angle will keep up the round of the road to counterbalance the natural tendency to flatten out. The road should be dragged often enough, either when very wet or when mellow, so that it will smooth up nicely. The turnpike must be kept free from grass or the machine will not take a proper hold.

## Diseases of Horses' Feet—Founder

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

Laminitis or founder is one of the most serious diseases from which the horse is liable to suffer. It is an inflammation of the soft tissues of the hoof which unite the external horny hoof to the internal pedal bone. An acute attack of this disease causes most intense pain and suffering to the patient. In inflammation of any tissue relief is always experienced to a greater or less extent when swelling occurs. It will readily be understood that in the case of a horse's foot swelling is impossible, enclosed as it is in an unyielding hoof and the result is in most cases excruciating pain.

### CAUSES OF FOUNDER

The most ordinary causes are over exertion, hard driving, especially on hard roads, over-feeding of heating grain as wheat or peas, chills and some-

times it follows as a sequel to other diseases. One very common predisposing cause is weak feet. A horse with a good strong foot will not develop laminitis if used in an ordinarily careful manner, but in a horse with naturally weak feet very little troubling cause is often sufficient to set up the trouble.

#### SYMPTOMS

If both front feet are affected the animal will be almost unable to move but will stand with his hind legs drawn forward under the belly and the fore limbs extended forward in order to throw the weight of the body as much as possible on the hind legs. If compelled to move he will lift his feet with great difficulty and will sometimes groan with pain, while the body will often be wet with sweat. It will be almost impossible to make him move backwards and if he does so will throw the weight of the affected feet on the heels. Often the patient will lie down and it is difficult to make him rise.

#### TREATMENT

Gentle purgatives should be administered if the pain is intense. Opium or morphine should be given and the feet should be kept in warm poultices until relief is experienced. In the great majority of cases of this disease, it will be well to employ veterinary assistance as serious conditions often follow a case which has not been properly looked after and which not only renders the horse useless for months but will leave him with more or less deformed feet for the rest of his life and as a consequence reduce his value very much.

### Winter Fattening of Sheep

From "Sheep Husbandry in Canada."

The principle of avoiding extreme changes of diet observed by all careful feeders, should be strictly adhered to when the housing season arrives. The daily feeds of hay and grain for a few weeks before winter seals up the ground and renders pasturing unobtainable is a fine preparation for complete hand feeding. As the rape, lucerne or whatever outside crop has been the chief diet fails, roots may be gradually substituted. The hay will have to be increased to all the lambs, and the grain ration may be gradually augmented as well. The chief thing to aim at is to keep the feeders gaining and thus paying for their diet as they go along.

The selection of a grain ration is a matter depending upon the market and the crops grown at home. It is generally wise to avoid purchasing feed if it can be satisfactorily raised on the farm. In planning the sowing of the different fields of the farm in spring the fattening lambs should be provided for as far as is consistent with the suitability of the soil and other conditions.

Oats are peculiarly suited to sheep feeding. This grain is nourishing and safe to feed; it will go well with other grains, and as a crop is easily grown, two parts oats, one part peas and one part bran is a good ration for sheep of any class. Corn substituted for the peas answers well. Towards the end of the finishing period the heavy part of the ration may be increased to fully three quarters by weight. Oat cake is highly valued by many sheep feeders. It may be substituted for the bran, when the proportion of heavy grain should accordingly be diminished. From a half a pound to one and one-half pounds of grain per head per day according to the ends to be attained constitutes a fattening ration, when the coarse fodder used is fed liberally and of good quality. The practice of feeders differs with localities. An extensive feeder, Mr. Thos. Shillinglaw, in Huon county, who buys in lambs and sheep to fatten, in some seasons uses rape and grass as the chief ration. Until the housing season arrives no grain is given, but after that date clover hay and grain are fed and the flock allowed on the rape one hour twice daily until about Christmas or un-

til snow buries the feed. The sheep thrive finely on this diet, and are sold as soon as the rape feeding is finished, as it has been found that satisfactory gains are difficult to secure for some weeks after the rape is done. The grain ration used usually consists of a mixture of oats and peas, oats and corn, and sometimes barley is added. About one pint of grain per head per day in two feeds is the usual rate of feeding. Lambs weighing 90 pounds in October 1st, weighed about 110 pounds at Christmas. These weights constitute the average of 600 head.

In the North York, Mr. Robert Somerville raises and feeds about one hundred ewe and wether lambs. In the fall grass pasture is the chief dependence, but either rape or kale is provided also. When taken from the fields lucerne hay and pulped turnips are liberally fed, and a grain ration of oats and barley or peas is commenced at the rate of one pint per day for each animal in two feeds. The lambs are usually finished in January, when sold, weighing about 120 pounds each. The breeding flock consists of Grade Oxford ewes and pure bred Oxford rams. A further discussion of foods occurs elsewhere in this bulletin.

It is of the first importance that for the well-doing of any class of live stock the animals be comfortable. Unless proper precautions are taken sheep are almost sure to be more or less infested with ticks and perhaps the more minute form of vermin lice, a more irritating insect than the former. To rid sheep of these pests they

by the records, and their mating with good bulls of decided dairy descent would give certain results, better cows in every way, without such glaring differences as in this case where the yield of two fairly good cows is more than the total yield of five poor ones.

### Feed and Care of Cows

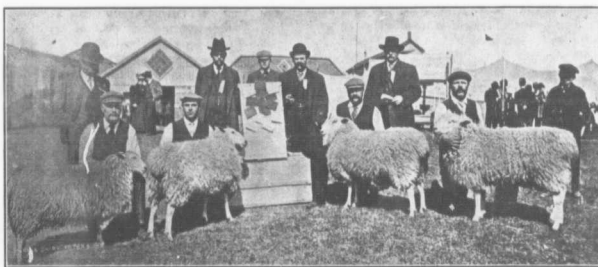
G. H. Blair, Carleton Co., Ont.

The financial success of the dairyman will depend largely upon his ability to feed his animals to profit and advantage. No set rule can be laid down as to what the exact rations of a dairy cow should be. This will depend on the feeds the farmer has at his disposal, and the cheapness with which he can procure those which he does not possess. In every case he should raise all his own rough fodder and as much of the more concentrated foods as he can.

As regards the different foods, our experience has been that ensilage is the cheapest and most economical bulky food at the disposal of the Canadian farmer. He should also have at his command plenty of clover hay and roots, mangels preferred. In most cases also oats and some barley can be grown in sufficient quantities on small Canadian farms.

#### THE DAILY RATIOMS

These feeds, with the addition of some bran, which we have to buy, constitute the rations which we have fed to our cows throughout the winter. We have no fixed standard ration which



Sheep from a Flock that has been Very Successful at Local Fairs

H. and N. Allin, of Durham Co., Ont., who own the sheep illustrated, exhibited at seven fairs this fall, and out of 46 first prizes offered, they captured 45, besides seconds and thirds. They have also taken the flock prize wherever shown.

should be thoroughly dipped with one or other of the reliable commercial preparations, which not only destroy the vermin but clean the skin, reducing irritation and unrest to a minimum.

### 23 Cows or 60 Cows, Which?

C. F. Whitley, in charge of Records, Ottawa

Some of the September records received from members of cowtesting associations show further remarkable variations in different sections of Ontario and Quebec. It is the exception in the Ontario associations to find less than 600 lbs. of milk or 20 lbs. of butterfat as an average yield for the 30 days. In Quebec associations the average yields are almost all lower, though one or two are well up, even to 700 lbs. milk and 26 lbs. fat. One association in Quebec has a total production from 23 cows of 17,900 lbs. milk and 775 lbs. fat, while in another Quebec association just a little less than that is the total production of 60; the 60 cows average less than 300 lbs. of milk.

Twenty three cows in one case, 60 in the other, which kind of a cow would one rather keep? What glowing possibilities are indicated here? Most likely the 60 cows could be made to give better yields if fed better.

The selection of the best individuals, as revealed

we feed to the cows, as different cows require different quantities of food and what each will consume is a matter of study and determination for the feeder himself. We aim, however, to feed a daily ration of about 25 lbs. ensilage, 20 lbs. mangels, 10 lbs. hay (clover) and 5 to 6 lbs. of a mixture containing one part barley to four parts oats, with the addition of a pound or two of bran, to an Ayrshire cow weighing about 800 lbs., when oilcake can be had at a reasonable price, we procure a little of it and feed one-half pound a day to a cow. This ration is fed to cows in full milk, and if she is seen to leave any uneaten food in the manger, her bulky food is decreased and her meal ration left unchanged. The cows are fed half their hay the first thing in the morning; after milking they are given their ensilage and ground feed. About 10 o'clock the full daily ration of foods is fed, and from then until five in the evening they are left practically undisturbed. Then they are fed their ensilage and hay and last of all the grain by itself. We find that the cows are less restless when not fed at noon as their period of digestion is not broken into and they appear to respond by giving a larger yield of milk.

Some city milk dealers have an aversion against milk from ensilage-fed cows, claiming that that milk is tainted, but as the opinions of many but-

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ter makers and dairymen show that there are no bad results from the use of this food, we cannot but say that ensilage may safely be fed to all dairy cows without injury to the quality of the milk. Turnips, however, have a tendency to impart their flavor to milk, especially if fed in large quantities or soon before milking. However, if fed in moderation immediately after milking there is little danger of contaminating the milk.

Regarding the general care of cows in the stable the main point to emphasize is to keep the animals clean and allow them a considerable amount of exercise. Treat them kindly, as the dairy cow is a sensitive machine working under forced draught, as it were, and any excitement that tends to agitate her nerves cannot help but be detrimental to the production of milk.

### Control and Extermination of Weeds

From "Farm Weeds in Canada"

In adopting a method of extermination of a weed, the nature of the plant and its habits of growth must first of all be considered. Some experience is necessary to know the best time to work certain soils or to deal with special weeds, as well as to recognize them in all their stages. Some weeds, Russian Thistle and Stinkweed, for instance, have a very different appearance when young and when mature. No general rule can be given, as the treatment must vary with different districts, different soils and different climatic conditions. What may be successful in one place may fail in another.

Annuals may be eradicated from land, however badly infested it may be, through any method by which germination is hastened and the young plants destroyed before they produce seed.

Biennials must be either plowed or cut down before they flower. Mowing at short intervals in the second year, so as to prevent the development of new seeds, will clear the land of this class of plants; but a single mowing will only induce them to send out later branches, which, if not cut, will mature many seeds. Where plowing is impracticable, such plants should be cut off below the crown of the root.

#### TREATMENT OF PERENNIALS

Perennials are by far the most troublesome of all weeds and require thorough treatment, in some instances the cultivation of special crops, to insure their eradication. Imperfect treatment such as a single plowing, often does more harm than good, by breaking up the rootstocks and stimulating growth.

For shallow-rooted perennials, infested land should be plowed so lightly that the roots are exposed to the sun to dry up. For deep-rooted perennials, on the other hand, plowing should be as deep as conveniently possible. The nature of the land must determine the depth of plowing. In light or gravelly soils shallow plowing may be preferable as deep plowing might interfere with the mechanical texture of the soil, which is so important in the storing of moisture.

The rootstocks of some perennial weeds are very persistent. Small sections or cuttings from them will quickly take root when they are distributed by plowing or cultivation. Where such persistent perennials have become well established it is usually advisable to adopt the most convenient method of cultivation that will bring the rootstocks to the surface. They should then be gathered and burnt or otherwise destroyed. Most perennial weeds will, however, succumb to continued thorough cultivation that will prevent the growth of leaves.

Plants take in most of their food through their leaves. Perennial plants, which live for many years, have special reservoirs where some of this food, after elaboration, is stored in such receptacles as bulbs, tubers and fleshy rootstocks. The first growth in spring, particularly flowering stems, is produced mainly by drawing on this special store of nourishment. Plants are there-

fore in their weakest condition when they have largely exhausted their reserve supply of food and have not time to replenish it. The stage of growth, then, when plowing will be most effective is when their flowering stems have made full growth but before the seeds, which would be a source of danger, have had time to mature.

### Prince Edward Island a Source of Seed Supply

T. G. Raynor, Seed Division, Ottawa, Ont.

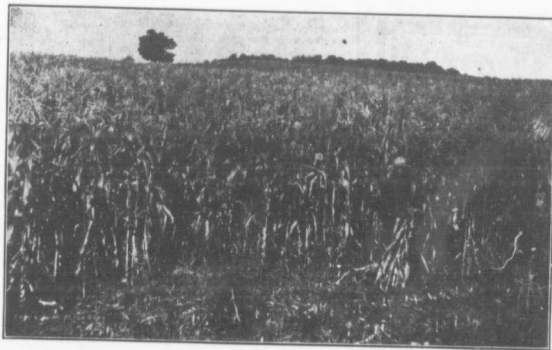
Having spent some ten days at the beginning of the harvest among the farmers and on various farms in Prince Edward Island this summer, some observations on this island, as a source of seed supply, might be of passing interest.

I know of no district where many of the farm seeds could be produced better or purer than on this island. This is made possible first by each farmer practically possessing a threshing outfit of his own. It is usually run by a two horse tread power, which in time will largely give place to the gasoline engine as a knowledge of how to run them properly is obtained.

The soil and climatic conditions are capable of producing a good quality of seed of the cereal grains such as oats, wheat, barley, and especially potatoes. There are numbers of farmers who are willing to pay the price necessary to grow such

is growing in favor among the Island farmers and elsewhere, wherever it is tried. This system is to plow up the meadows very shallow soon after the hay crop is removed and work it more or less until it is plowed more deeply a second time in the fall. In some cases, as when prepared this way for potatoes, one plowing and cultivating in the autumn is sufficient. It is manured the next spring and the potato seed plowed in. This preparation of seed land for crops gives the cleanest as well as the best crops grown. The same plan, it will be noted, is largely used in the fall wheat districts in Ontario, only the stable manure is plowed in and the plowing is done more deeply than is usual on the Island. The average rotation in use on the island is a five or six year one in duration, three and four years of which it lies in meadow. A shorter rotation would doubtless handle some of their annual weeds better. Hemp nettle, spurge and wild buckwheat are very common in the crops. With a good farming mill most of their farm seeds could be sent out free from weed seeds. The island seems to be free, practically, of wild oats, which is a great boon.

The perennial sow thistle is, however, getting a wide distribution. Not many seem to be very much alarmed about its spread or the degree of injury it is working. It may be in their loamy



A View of the Corn Field, taken August 20th, 1909, on Mr. Alex. Hume's Farm

Corn has come to be the main fodder crop of all dairymen, and is extensively grown by our best dairy farmers. The illustration shows but a part of the 13 acres of ensilage corn grown by Mr. Alex. Hume, of Northumberland Co., Ont., whose farm is one of the competitors in the Dairy Farms Competition.

seed grain if only they can get a paying market. By paying the price, I mean that there are a number of farmers there who will select some of the best plants, will use a breeding plot and will be careful to keep the seed from mixing in the field and in the barn. There was evidence of this while judging in their field crops competitions in oats, wheat and barley. In a number of cases, the seed used for these competitions was obtained directly or indirectly from a member of the Canadian Seed Growers' Associations. Some have been selecting their seed for eight and nine years. Quite a large percentage of the prize winning fields were sown more or less with seed selected from such sources. One field of oats secured as high as 97 points out of 100. Where so many of our farmers are growing mixed crops and depending upon a change of seed from year to year in Ontario, it might be wise to try the Prince Edward Island goods to keep the sources of seed supply pure.

It is true that the Island has its weed problem, but not to the same extent in range or in quantity as obtains in most other countries. They have plenty of Couch grass, but it doesn't seem to be so persistent in its growth of root stalk, for it seems to be quite easily handled through a system of cultivation. This system of cultivation

soil, which obtains pretty much over the Island, that it, like Couch grass, may not prove so vigorous as it does in heavier soils.

The Island is rejoicing in a good, all round crop this year. The hay crop was perhaps more than an average one, as there was an unusual amount left for timothy seed, of which there will be some splendid seed for export. The cereal crops, too, were above the average as were the root and potato crops. The promise for potatoes was never better. There are some very large yields of good quality, McIntyre's, the favorite late variety, being most prevalent.

Many of the Island farmers have something to learn about stock breeding. As elsewhere the breeding has been very much mixed so that a lot of inferior stock obtains. There are notable exceptions, however, and some good grade dairy herds are to be seen.

The needs of the Island farmer as summed up by an outsider might be summarized as a shorter rotation; more clover and a trial of alfalfa; a better arrangement and massing under one roof of outbuildings; more attention paid to breeding stock and greater co-operation in methods of handling farm produce. The Island farmers would unanimously say, give us a tunnel to the mainland as a panacea for all our ills.

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## FARM AND DAIRY

PETERBORO, ONT.

## Alaska-Yukon-Pacific Exhi- sition Live Stock Exhibit

For over two years the eye of the  
West and we might almost say of  
the whole country has been turned on  
the Queen city of Puget Sound with  
all expectancy and speculation as to  
the probable result of her effort to  
hold an exposition. This land of red  
apples and gold timber, of gold mines  
and golden opportunities has been the  
Mecca of all westward pilgrims since  
this noted Exposition opened its gates  
last June.

It does not come within our pro-  
nounced how, however, to write of the  
exposition further than to give a few  
brief notes on the exhibit of live stock.  
This was the largest and best  
exhibit of live stock ever held in the  
West. Prof. W. L. Carlyle, who had  
charge of the exhibit in the capacity  
of superintendent, stated that the  
horses numbered over 400, cattle  
about 700 and sheep, swine and goats  
over 1,000. Exhibitors were well pleas-  
ed with the excellent management  
throughout. The officials secured  
judges of international repute and  
men who were absolutely conscienti-  
ous, therefore the work was well  
done and few complaints were heard  
for a show of this magnitude.

### HORSES

Percherons made by far the largest  
showing of all the breeds. Geo.  
Lang, Alberta, was the largest ex-  
hibitor and won the bulk of the rib-  
bons and Champion prizes. McLaughlin  
Bros., Columbus, Ohio., and A.  
C. Ruby, Portland Ore., also made  
large showings and got a share of  
the spoils.

Clydesdales—It was up to Cana-  
dians to make the showing in this  
class. O'Neal & Co., Vancouver,  
Shannon Bros., Cloverdale, B.C., and  
T. L. Mercer, Markdale, Ont., were  
the largest exhibitors. The Fraser  
Valley Land Company, Ladner,  
B.C., and W. G. Cordiner, Walla  
Walla, Wash., each had a few entries.  
In aged stallions Mercer's "Earl of  
Brackley," won 1st and also reserve  
Champion, a horse of grand form  
and fine quality. "Brown Spots"  
owned by Shannon Bros., 2nd. In  
three-year-olds, O'Neal & Co., 1st in  
class, Senior Champion and Grand  
Champion, on "Marcellus Junior," a  
horse with size and quality combined.  
The Grand Champion ribbon went to  
O'Neal on "Flores," a Shanno-  
n Bros., reserve on Lily of Grand  
View. Mercer's "Royal Allam," won  
the Silver Cup for best American bred  
stallion.

Shires—A. C. Ruby, Portland  
Ore., was the only exhibitor of this  
class.

Belgians.—These were out in good  
numbers shown by A. C. Ruby, H.  
C. Campbell, Oregon and George  
P. Reels, Calgary, O'Neal & Co., 1st  
were of high quality; many roans  
were noticed among them.

J. M. Steves & Co., Stevenson,  
B.C., were the only exhibitors of Suf-  
ford Punch horses.

### LIGHT HORSES

Thoroughbreds were shown by F.  
E. Alley, Rosenberg, Ore. Standard  
bred by Boyle and McDougall, Ta-  
coma; Thos. H. Brents, Walla Walla,  
Wash.; Frank E. Alley and E. F.  
Klimmeyer, Gas, Oregon; J. S. In-  
Morgans, J. W. Clise, Willmore  
Farm, Seattle made the best showing.  
His stallion "Troubadour" five years  
of age, is a perfect specimen of the  
breed and was much admired.

Roadsters and carriage horses were  
out in large numbers. Among them  
were many high-class individuals and  
good types.

Hackneys—Four B.C. men were  
the principal exhibitors. A. W. Howden  
Duncan, O'Neal & Co., Vancouver;  
Chas. Moses, North Sanwich, and Jas  
Tomblaine, Westham Island, B.C.  
Tomblaine's stallion "Gastru Duke

of Connaught" a horse of fine  
quality and action won the Grand Sweep-  
stake prize and the Silver Cup. Some  
choice German Coachers were shown  
by A. C. Ruby, Portland, Ore., and  
high-class French Coachers by Mc-  
Laughlin Bros., of Columbus, Ohio.  
There was a big showing of Shetland  
ponies.

The Jacks, Jennets and mules ex-  
hibited by Luke M. Emerson, Bow-  
ling Green, Mo., made a novel show-  
ing especially to the easterners.

The judges on horses were: Clydes-  
dales, Shires, Hackneys and Drafters  
in harness, F. B. Ogilby, Chicago;  
Ill. Belgians, Percherons and Mules  
Col. J. S. Cooper, Chicago, Ill. Morgans,  
Saddle horses, Coachers, Road-  
sters, Standard bred and Ponies,  
Prof. John A. Craig, Stillwater, Ok-  
lahoma. Thoroughbred and American  
Carriage horse, G. M. Rommel, U.S.  
Department of Agriculture, Wash-  
ington, D.C.

### CATTLE

In the beef breeds Shorthorns made  
the largest showing. Carpenter &  
Ross, Ohio, Mrs. J. H. Giddi, Cal-  
W. A. Minor, Oregon and A. D.  
Dunn of Wash., drew for the honors.  
They showed 100 heads and few stars  
but among them were a lot of high  
class animals. Carpenter & Ross had  
the best of the winning, they having  
the Grand Champion male in "Shus-  
ton Albion," two years old; a bull  
of great merit. Their two-year-old  
cow "Lancaster Bull," won the  
Grand Champion prize among fe-  
males.

Herefords—The Williamette Valley  
Stock & Land Company had at their  
own way with the White facers. Two  
other eastern exhibitors had entered  
but failed to come.

Aberdeens—Angus.—The "Doddie"  
were shown by A. C. Binnie and O-  
to V. Battles, both of Iowa. They had  
a smooth fleshed, uniform lot. To  
Battle's "Oakville Quiet Land" went  
the Grand Champion ribbon, while  
the female Grand Champion ribbon  
went to Binnie's smooth three-year-  
old cow "Queen Lass of Alta."

"Galloways"—The shaggy coats—  
"Triple Rivers" blacks were shown  
by C. E. Clark, Minnesota and J. C.  
Sabin of Oregon. The Junior Cham-  
pion bull also Grand Champion,  
"Speedation of Meadow Lawn," owned  
by Clark is a good one, having  
good scale and quality. Clark was  
the largest exhibitor.

Red polled—These dual purpose ani-  
mals were shown by Frank D. Davis &  
Son and Chas. Goff of Nebraska, F.  
J. Clous, Iowa; F. H. Porter, Ore-  
gon, L. K. Cogswell, Wash., and J.  
T. Maynard, B.C. The classes were  
large, the quality on the whole high  
class.

Brown Swiss—These natives of the  
hill, valley and glacier were shown  
by N. M. Snodgrass, of Wash., and  
B. P. Inman, Oregon. While they  
were a good lot, yet there were  
no stars among them.

Devons—This almost extinct breed  
was shown by an easterner and a wes-  
terner—Wm. H. Neal, New Hamp-  
shire and George P. Devons—Prof. R.  
J. Kinger, Manhatata, Kan.; Red  
Polled—J. W. Martin, Gotham, Wis.;  
Brown Swiss—C. Easthope, Warren,  
Ohio.

The dairy breeds were reported in  
Farm and Dairy last week.

### SHEEP

The Lig exhibit of sheep was a sur-  
prise even to the exposition man-  
agers. They came from not only the  
coast but middle States.

Ramboulets made the largest  
showing. Their black, waxy wool  
and big twisting horns were a curi-  
osity to many of the onlookers. Many  
classes contained a dozen or 14 ani-

mals. The Merinos were of high qual-  
ity. Shropshires were also numerous  
and were a choice lot as were the  
Southdowns and Hampshires. In Ox-  
ford downs were a lot of heavy sheep  
of good quality. Dorset horns were  
few in numbers and were a fair lot.

In long wools, Cotswolds predomi-  
nated. They were closely followed by  
Lincolns. Both were high class exhi-  
bits. The Merinos were also, in our  
one exhibit of Leicester was out. It  
comprised some good ones. The sheep  
judges were Merinos & Ramboulets—  
E. D. King, Burlington, Kan.; Shrop-  
shire Downs, Cotswolds and Lincolns  
—L. E. Shaw, U.S. Dept. of Agri-  
culture, Wash., D. C. Crosses—J. H.  
Grisdale, Ottawa, Ont. Goats, N. A.  
Hirvin, Lawrence, Kansas.

The swine exhibit completely filled  
the pens. To the ideal bacon hog man  
they could be considered of type as  
they were mostly of the thick, fat  
breed.

Poland Chinas were in the major-  
ity. They were a typical lot with few  
inferior beasts among them. Chester  
Whites were a close second in point of  
numbers, although they were not so uni-  
form in quality, yet they had many  
fine specimens. Essex, Duroc, Berkshire,  
Hampshires, Duroc, Jersey, all had  
some fine specimens. The Tamworths  
alone claimed the honor of repre-  
senting the true pig, yet they did not  
it well as they were fine individ-  
uals and would have stood high if  
any company. The judges on swine  
were: R. J. Kinger, Manhatata, Kan.;  
Gotham, Wis.; Poland China and Es-  
sex—John L. Smith, Spokane, Wash.;  
Chester White and Duroc Jersey—  
Prof. R. J. Kinger, Manhatata, Kan.;  
Manhatata, Hampshire, Grades and  
Crosses—J. H. Grisdale, Ottawa,  
Ont.—W.F.S.

## Farm Weeds of Canada

Farmers and others who have long  
felt the want of a suitable text on  
weeds may now have that want sat-  
isfied in the second edition of "Farm  
Weeds of Canada," a copy of which  
crally and free by the farmers of Canada.  
The book has recently come out in the  
first edition of "Farm Weeds" was  
distributed free to public institu-  
tions, including rural schools. The  
second or revised edition has been  
prepared and published to meet the  
urgent requests of individuals who  
desire the book for their personal  
use.

The information presented in this  
able addition to the library of the il-  
lustrations of weeds and weed seeds  
make it intelligible to farmers and  
others who are not expert in the no-  
menature of plants. The edition  
contains 76 plates of weeds and weed  
seeds, illustrated in their natural col-  
or, and 180 pages of text. The ex-  
pense entailed in the preparation,  
by F. P. Inman, Oregon, of 76 colored  
plates as contained in this edition,  
precludes it from the list of those  
publications of the Department of  
Agriculture that are distributed gen-  
erally and free of charge. The book  
is available to the farmers of Canada  
(single copies only) at the office of  
the Superintendent of Stationery,  
Government Printing Bureau, Ot-  
tawa, for the nominal price of \$1.00  
which will make a part of the un-  
usual expense incurred in its issue.

The book is well bound. Its contents  
are such as to make it a most valu-  
able addition to the library of any  
farmer. In view of the great need  
of special information pertaining to  
weeds that is required in order to suc-  
cessfully cope with them, all farmers  
should avail themselves of the op-  
portunity to secure this work.

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**CALVES** Raise them without Milk.  
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**FARM MANAGEMENT**

**The Application of Manure**

D. Drummond, Department of Agriculture, Ottawa.

Manure should be applied to a field as soon as possible after the removal of the previous crop. For example, if the field intended for pasture next year is in hay this year, apply, as soon as possible after the crop has been removed, all the manure that has accumulated since winter and continue with all fresh manure as made during the winter months if the land is suitable to spread it. If the land is too rolling or too level and liable to be washed by water in the spring, the better way would be to put it in small heaps on the snow. These small heaps in winter freeze immediately and remain frozen.

**EFFECTS ON THE PASTURE.**

It is a well known fact that the pastures in this country generally fall as soon as dry weather comes. In cultivated fields, we can prevent to a certain extent the damage from dry weather by frequent cultivation and by what is known as a dust mulch. The manure acts as a mulch in the pasture and so lengthens the season of good pasturage.

Some objections may be made that the cattle will not eat the grass so close. Is that an objection or a benefit? Authorities tell us that the leaves are like unto the lungs of the plant, so how can grass be expected to grow without lungs or with very contracted ones as are too frequent in pastures in this country. Therefore, we cannot see that this would be a serious objection. Though the cattle do not eat the grass for a short time after the application of manure spread on the grass during June and July, as soon as the rain comes, they eat it quite freely and it is almost like a new field to them.

**SAVING MANURE.**

All authorities agree that the soonest manure can be applied after dropping the less loss there will be. By applying it to sod, there is a crop of roots already in the ground to make use of it and prevent any leaching. There may be some loss by evaporation in summer, but even that is doubtful. The growth of grass would soon prevent that and the tramping of the cattle seems to cause the manure to lie close to the surface of the soil and so aid the soil to make use of the fertilizing properties of the manure.

**DESTRUCTION OF WEEDS.**

It used to be a general opinion that the rotting of manure destroyed all weeds. That theory is not now generally accepted. Of course, some will be destroyed by rotting but a great many will still retain their vitality. By applying this manure to the land intended to be pastured, the weed seeds germinate almost immediately and if not kept down by the cattle can be cut by mower. Some of the annuals that germinate the first season are killed by frost. Biennials and perennials having had only one year are not far enough advanced to produce seed and as the land is plowed for corn or other crop, either in the fall or spring, aided by the cultivation of the corn crop, will destroy them before they manage to mature.

Anyone who is in the habit of applying manure either in winter or spring to the land, knows well that that land is kept wet, the frost is retained longer and the manure on the surface retards early cultivation which is of great benefit to break up the crust and cause the germination of weed seeds that can then be destroyed by a later cultivation. Even in the case of land not plowed until immediately before corn planting (an

excellent practice if land is suitable), the tramping of the teams in applying the manure has a tendency to coming more difficult and to make the plowing more difficult.

By this other system the manure has been on the sod a year previous and has assisted the grass to make a great root growth, so adding more humus to the soil. Whether plowed in spring or fall, gives the very best bed for a good corn crop, which being a voracious feeder, will use up an excellent fertility and benefit by it, and so leave the soil in a better condition for the following grain crop.

**New Westminster Exhibition**

Here annually gather the cream of the live stock of British Columbia to contest for the honors usually found at the annual exhibition. This year again found the exhibitors well met with a lot of high-class stock in which most of the breeds of horses, cattle, sheep, swine and poultry were represented. Those who have been active in the quality of live stock exhibited now as compared with former years. We believe this is largely due to the expert judge system as adopted by these Western exhibitions.

The horses on the whole were a high-class lot. In drafters, Clydesdales predominated. They were shown by Shannon Bros., Chardale; O'Neal & Company, Vancouver; Pemberton Horse Co., Pender Island, B.C.; Thos. Mercer, Markdale, Ont. and J. M. McLeod, Sea Island, B.C.

Standard breeds, 12 head of high class animals were shown by J. T. & J. F. Wilkinson, Chilliwack. There were a lot of fine Hackneys which were not judged by a correspondent had to leave. The work of the exhibitors were asked for at the office but were refused until after the awards were made. Horses were judged by Professor Rutherford, Regina, Sask.

**CATTLE**

Roof breeds were represented by one herd of shorthorns of good type owned by Jos. Tannoline, Westham Island, also by one herd of Herefords owned by W. R. Austin, Westminster. These latter were very thin in flesh. Red polled cattle were shown by L. K. Cogwell, Chehalis, Wash.; and J. T. Maynerd, Chilliwack.

**DAIRY BREEDS**

Ayrshires made the largest showing. The herds of R. R. Ness and P. Hunter & Sons were on hand on the return trip from Seattle and between them they took the cream of the prizes. A. C. Wells & Son, Sardis, Shannons Bros., Cloverdale and W. R. Austin were other exhibitors.

In aged bulls, Ness on top at Bargenoch Gay Cavalier, Hunter 2nd on Lessnesock Oyamias Guaranteee 3rd A. Wells on Lessnesock King of States; the latter bull was not in as good form as at Seattle therefore had to step down on place.

Two-year-olds—1st Ness, 2nd Wells, Ness was 1st on Senior Yearling, Hunter 1st on Junior Yearling. This brought these two bulls in with the aged bull for Champion honors, for which were finally decided in favor of Hunter's Bargenoch Cavalier over Ness' Grand Champion at Seattle. These bulls are a pair of grand youngsters and any judge would be justified in placing either on top.

In aged cows, Anchenbrain Fanny, a cow that was in fine form and carrying a grand udder, was placed 1st. She afterward won the Champion ribbon. 2nd and 3rd went to Hunter's Castlemain's Violet and Big Nancy.

Two-year-olds—1st Hunter, Queen Bee; 2nd Ness, Orange Blossom; 3rd Hunter, Old Hall Cherry 7th. Senior yearling, 1st, Hunter; 2nd, Ness;

3rd, Wells; Junior yearling, 1st and 2nd, Ness; 2nd, Hunter; Senior calf, 1st, Ness; 2nd, Hunter; 3rd, Shannons; Junior calf, 1st and 2nd, Ness; 3rd, Wells. Junior Herd, 1st, Hunter; 2nd, Ness; 3rd, Wells. Produce of Cow, 1st, Ness; 2nd, Hunter; 3rd, Wells.

Holsteins made a good showing and were of good quality. Wm. Bishop, Chemicum, Wash., and J. Steves & Co., Stevenson, B.C., were the exhibitors. Aged bull, 1st and Champion went to Bishop on Karl Bos (Imp.) a bull of fine type and character. 2nd to Steves. Two-year-old, 1st Bishop; 2nd Bishop. Junior yearling, 1st Bishop; 2nd Steves. Calf, 1st, Steves; 2nd, Bishop. Aged cow, 1st and Champion, Steves on Lottie of Lulu a grand business cow; Bishop 2nd on Mathilde Rea; Steves 3rd. Two-year-old, 1st and 3rd, Steves; 2nd Bishop. Senior yearling, 1st Bishop; 2nd Bishop. Junior yearling, 1st Bishop. Senior calf, 1st and 3rd Steves; Bishop, 2nd. Aged herd, 1st Steves; 2nd Bishop. Junior herd, 1st Steves; 2nd Bishop. Get of sire, 1st and 2nd, Steves; 2nd, Bishop. Produce of cow, 1st Steves; 2nd Bishop.

Decorators shown by A. H. Menzies & Son, Pender Island and were of good quality. His aged bull is of Kerry maid blood. E. Cliff, East Barn Lake and Sprout & Schow, Barnaby Lake each had two individuals on hand.

W. B. Wallantyne, Stratford, Ont., acted as judge of dairy cattle.

There was a nice exhibit of sheep made up of the following breeds: Cotswolds, Lincoln, Leicester, Hampshire and Oxford Downs, Shropshire Southdowns and Dorsets.

The swine were of high quality. Yorkshires predominated, then Tamworth, Berkshire and Essex breeds. As these classes had not been judged when your correspondent had been judged he was refused the names of the exhibit he has been refused the names placed in all his experience of show reporting.

Of the exhibits in the buildings, we cannot refrain from referring to the exhibit of fruit which was simply magnificent, also the County exhibits of fruit, vegetables, grains, etc. Each County vied with each other as to the attractiveness of their exhibit. To my mind the exhibit of Richmond Co. was unrivalled.

The exhibit of butter consisted of 24 crocks of dairy, 18 lots of prints of 3 lots of creamery in boxes and prints and 2 lots for the display prize, one lot each of factory and dairy cheese, one Miss Laura Ross, Guelph, Ont., pronounced the quality of dairy products first-class.—W.F.S.

Worth Working For.—I received the fountain pen and the poultry book both of which were sent me by Farm and Dairy for securing two new subscriptions for that paper, and I am much pleased with them. The premium that Farm and Dairy offer for working for. The pair of fowl that I received last year from Farm and Dairy, as a premium, won 1st prize at our county fair this fall.—W. R. Beach, Missisquoi Co., Que.

Young pigs can readily be stunted by over feeding. A steady corn diet will readily accomplish this in a short order.

"I am much pleased with the Farm and Dairy, as it supplies weekly a budget of good substantial reading."—G. R. Bradley, Carleton Co., Ont.

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

## HORTICULTURE

### An Opinion on Cultivation

Edward Lane, Waterloo Co., Ont.

I have read a great deal of controversy about cultivating an orchard and the writers vary so much that they go from one extreme to the other. As a farmer would not think of putting a thoroughbred animal, which he intends to feed for show purposes, into a stall and also put in a pig or a sheep to feed out of the same manger, so he should not think of putting a tree into a certain piece of ground and then want to grow some other things on it at the same time.

Give the tree as much land as its roots require and that will be as much as its branches cover and a little more. The rest can be plowed six inches deep six feet, which even suits his purpose the best, but nothing but a hoe should be used around the tree and that not more than two inches deep and it should be used as often as any weeder appears or crust forms on the surface. It matters not what is done to the ground between the trees but it matters a good deal what crops are put into the field, as nothing but dwarf growing crops should be grown and those that can be hoed.

### Fruit Growers' Programme

An interesting programme has been arranged for the convention of the Ontario Fruit Growers' Association to be held in Toronto, Nov. 20 and 21. Some of the subjects that will be dealt with are as follows:

#### SMALL FRUITS

"Small Fruit Culture in Ontario During the Past 50 Years," A. W. Peart, Freeman.

"Overplanting of Strawberries and the Western Markets," Robert Thompson, St. Catharines.

"Small Fruits in the Young Apple Orchard," J. E. Johnson, Simcoe.

#### CHERRIES AND GRAPES

"Sweet Cherries for Southwestern Ontario," F. J. Stewart, Homer.

"Cherries for the Commercial Orchards of Ontario," A. E. Sherrington, Walkerton.

"Is Grape Profitable at Present Prices," Murray Pettit, Winona.

"New York Grape Growing Methods," D. K. Falvey, Westfield, N.Y.

#### PEACHES

"Commercial Peach Orcharding in Southwestern Ontario," J. L. Hilborn, Leamington.

"50 Years of Peach Culture in Ontario," A. M. Smith, Port Dalhousie.

"Fruiting of the Peach," J. W. Smith, Winona and Wm. Armstrong, Queenston.

"Peach Crops and Prices," W. H. Bunting, St. Catharines.

"Peach Culture in Michigan," C. Bassett, Fennville, Michigan.

#### PEARS

"Results of 50 Years Experience in Growing Pears," E. C. Beman, Newcastle.

"Profits in Pear Orchards," W. F. W. Fisher, Burlington.

#### APPLES

"Lime Sulphur vs. Bordeaux for Summer Spraying of Apples," L. Casar, O.A.C., Guelph.

"The Apple Orchards of the Lake Huron Shore," S. E. Todd, O.A.C., Guelph.

"Spraying 10 acres of Apples—Cost and Equipment," Max Smith, Burlington.

"Marketing of Apples," R. J. Graham, Belleville.

"Low Cost Cold Storage Plants for Co-operative Associations," J. A. Ruedel, Ottawa.

"Export Apple Trade," by Dealers (English).

"Getting Together," C. Bassett, Michigan.

"Apple Growing on the Pacific Slope," (illustrated by lantern slides) Prof. John Craig, Ithaca, N.Y.

### The Value of Co-operation

"I purpose to give only one example to show what has actually happened and to prove what can be done by having a large number of fruit-growers united and acting co-operatively, in not only preventing being imposed upon by large combines or a number of manufacturers uniting to raise the price of the supplies used by the fruit-grower, but in actually lowering the cost to themselves and also to the general public," said Mr. Robt. Thompson, of St. Catharines, before the American Pomological Society last September.

"In the fall of 1906, owing to a large fruit crop, there was a shortage in the basket supply. A number had to be imported from the United States. These baskets not being the same size as our own, we had trouble in loading cars properly, and the manufacturers would not comply with the law in regard to standard sizes as that went into effect January 1st, 1907.

"The basket manufacturers held a meeting early in December, 1906, and agreed to fix standard prices, and raised the standard six-quart grape basket to \$38 per thousand, and eleven-quart baskets to \$42 per thousand. The growers accepted this

closed previously, no action was necessary for that season.

During the fruit season of 1908 the association was approached by several of the leading basket manufacturers and solicited for their contract for 1909. The reply of the association was that if the Canadian companies would supply them with baskets at a price not to exceed one dollar of an advance per thousand over the cost of the American ones, a contract would be closed. As a result contracts were closed with three leading basket manufacturers in Ontario to supply the association with over a million



Fourteen Pumpkins that Weighed Six Hundred and Eighty Pounds

The product of one hill or three vines. Grown by Mr. E. A. Sanderson, Dauphin, Man.

raise grudgingly and without much open protest. In December, 1907, the basket manufacturers again met and agreed to a further raise in prices, fixing prices at \$40 for six-quart baskets, and \$42 for eleven-quart baskets.

"The St. Catharines association which is probably the largest and strongest body of fruit-growers in Canada, at once began to make arrangements and enquiries to have their supply of grape baskets manufactured in the United States and shipped in, paying a duty of 30 per cent. They found that very large order would have to be placed to warrant the American manufacturer to change his forms and make up the Canadian size. Owing to the large number of growers in the association this was done and a contract closed for several hundred thousand grape baskets of Canadian size, at a very much lower price. The Ontario manufacturers, on learning of this, held another meeting and at once lowered the price of six-quart baskets to \$38 per thousand, and raised the prices of eleven-quart baskets to \$45. As the contract for eleven-quart baskets for the use of this association had been

most composed of French Cherry trees of old Danison and Reine Claude of Montmorency plum trees, with a few wild apple tree seedlings, with a few wild apple tree seedlings, some full of young trees and some already in full bearing. But, notwithstanding all this progress, we meet with a practice coming from two faults, want of knowledge and negligence on the part of our farmers.

This practice is that of leaving the old orchard uncultivated or even of destroying it as soon as it is decided that a new orchard is to be planted, or in fact has been planted. I wish to protest against that practice and to show that we can easily lengthen the life of the old orchard trees for many years, while the new one recently planted grows and gets ready to give an abundance of fruit. I will tell what I did to preserve an old orchard many years ago, my work having been repaid by excellent results.

METHODS OF RENOVATING  
After having pulled away all dead trees from the orchard and having pruned all decayed wood and unsound limbs, broken or otherwise defective of the trees I wished to preserve, I made of these a thorough inspection in order to take away all the parasites infesting them. These were of three sorts; black knot, cankers and gum. I cut away from the branches all the knots protruding over the trunks, took away all cankers to the live wood all traces of exuding gum from plum and cherry trees.

(To be continued next week.)

Farm and Dairy is a splendid paper for the money and we have no fault to find with it. We cannot recommend it too highly.—H. G. Winsor, Elgin Co., Ont.



Mr. Hackett and his son were discussing their new barn.  
"Well, Dad, how about the roof?"  
"We'll shingle it."  
"Poor economy, Dad, shingles rot and are sure to leak."  
"Is it cheaper?"  
"No, it's better than shingles?"  
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## SIXTH ANNUAL Ontario Horticultural Exhibition TORONTO

November 9-10-11-12-13, 1909

The largest exhibition of horticultural products ever held in Canada.

FRUIT—FLOWERS—HONEY—VEGETABLES

Special Excursion Rates from all points in Ontario. Ask your local Railway Agent for particulars.

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F. W. BODGETT, Secretary  
157 Queen Street East, Toronto

### Renewal of Old Orchards\*

J. C. Chapiro, St. Denis, Que.  
Fruit-growing has taken a great extension in our province. New orchards are planted in sections where 25 years ago, it was thought that fruit trees and specially grafted apple tree growing was impossible. Old orchards

\*Extracts from a paper read at a meeting of the Quebec Pomological Society at La Trappe, Que.



Canadian Office: 21 Con. Street, Montreal.



**POULTRY YARD**

**Who Pays for Them?**

While talking to a wholesale dealer the other day he made the remark that in a 30-dozen case of eggs received at this time of the year there would be an average of over two dozen eggs that were absolutely worthless and had to be thrown on the dump heap. I asked who paid for them, and he said, "We don't. If the buyer does not, who does? The middle man can't or would not stay in the business; the consumer may pay a little of it, but it is quite probable that the bulk of the price has to be paid by the producer, for the same man," said, "We have to count this loss when we buy our eggs from the farmer? And still some farmers will continue to market stale eggs."

The worst feature is that the careless one. The remedy is for the man who is honest to cease to sell eggs to the buyer who does not discriminate in price.—F.C.E.

**\$4,500 for Poultry**

The exhibit for poultry in connection with the last Winter Fair was one of the largest ever seen on the American continent at an annual show. There were over 4,200 entries. The poultry committee of the Fair is striving to reach the 5,000 mark at the coming Fair.

Conditions are favorable for a large increase in the entries for this department. The new addition which has been made to the Fair building in Guelph gives 10,000 square feet of additional floor space in the poultry department and brings the total up to 25,000 square feet of space. The high prices ruling for both dressed poultry and eggs has caused a keen demand for pure bred poultry and breeders will therefore desire to secure the advertising which comes from exhibiting at such a large Fair.

The direct financial inducements, of course, are the greatest influence. This has been well provided by regular prizes of \$3,000 in cash and a list of special prizes worth over \$1,500. The classification of the special prizes has just been arranged. Included in the specials will be over \$500 in cash, 43 silver cups, 13 medals, a large number of valuable goods, specials and many valuable ribbons offered by specialty clubs. Poultry entries close on November 22nd and should be sent to the secretary of the Fair before that date.—A.P.W.

**A Short Summer Revue**

There are a number of city families who spend the summer in the country, and sometimes buy a flock of hens to supply the eggs for the household during this time. We have sold quite a few of such flocks during the past three years. One man, who, by the way, kept his flock in the city, gives an interesting record of his small pen for two months, showing that besides providing the family with several eggs, there is a little margin on the transaction.

Our correspondent, Mr. G. Edwards, of Gordon avenue, Verdun, states:

"He pen of Barred Rocks I got from you early in June. I thought you might like to hear how they turned out. I give you herewith their egg record from June 9, when I received them up to August 1, 1909. Also the cost of maintenance as near as I can, because a large amount of their rations at this season are kitchen and table scraps.

Leaving this out of the question, the grain, oats, wheat, with some

shorts to thicken up a mash of table scraps, now and then, amounts to \$1.45. Fresh meat once a week added to this is 40 cents more, and if oyster shell and grit are likewise considered, five cents more, bringing the total up to \$1.90.

Now who do I get for this? The pen, as you know, consisted of a cock and seven hens. The 21 days of June gave me 102 eggs, namely, 18, 17, 17, 13, 13, 11, 13, by individual scores at the trap nets. On June 29 one hen having become broody I gave her a small clutch of eggs and she has now five chicks running around, but has not started to lay yet, so for July's 31 days, we have 109 eggs from six hens, 21, 22, 24, 13, 1, 28.

You will note that for the total we have 211 eggs. Seventeen and a half dozen at summer's low price of 25 cents per dozen, \$4.40; cost of maintaining, \$1.90; profit, \$2.50, besides an increase of five chicks.—F.C.E.

**Dressing Poultry.**—All fowl should be starved at least 24 hours before being killed. Kill by bleeding at the mouth or throat. Dry pick while warm. Leave heads on chickens and turkeys, and take off ducks and geese. Hang up till quite cold before packing. If possible wrap each fowl in paper, this will keep them from getting bruised or sweating if weather is warm, or freezing if too cold.

**How to Build a Telephone Line**

(Continued from October 14)

All trees on the route should be trimmed. All limbs should be cut back so that they will not be within three feet of any wire. It is very important that the trimming shall be done conscientiously, for there is more trouble from rural lines than from those that come from the city. As these limbs will soon grow out again, they should be watched and never allowed to touch a wire at any time, as it makes the work awkward.

The work is now ready for the line wires. For this work you will need, for the best results, climpers, pliers, splicing clamps, pulley blocks, and wire reel. In starting, the reel should be placed in a convenient position behind the first pole. A coil of wire is placed on the reel and unbound, being careful to loosen only the outside end and to keep it clear. Now tie a 50 foot hand line to the end of the wire and you are ready to proceed. A braided cotton line, a half inch in diameter, makes the best kind of a hand line, though any half-inch will do. The line-man starts out with the hand line, climbs the first pole, and runs the line over the top arms next to one of the pole pins. Each pole in succession is climbed, and the wire run over the same place till the man is exhausted. If there are other wires to be strung, the first wire is tied to the arm of the first and last pole and a coil is run through in a manner similar to the first pole. As many wires as necessary are strung without changing the location of the reel. It is a good idea to have the reel so placed that you can string both ahead and backward from the reel, as it saves considerable carrying. Wire for the pins next to the pole on the top arm are first strung, then the two outside of the arm are going outward till the arm is full. The pole upon which the wires are temporarily dead ended, should have a guy run back to the butt of the next pole to keep it from being pulled over before the wire is spliced. The advantage in having a hand line comes in stringing the wires over or through obstructions. A weight is fastened to the end of the line and the wire can be easily pulled through. After the first block is done, the

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YOU OWE IT TO YOURSELF TO WRITE US A LETTER OR A POSTAL.

Don't you often wish you had a good position and a big salary? You see other men who have. Do you think they get them by wishing? Don't you feel if you had the chance you could do their work? Of course you could. Just say, "I'll do it," and you will. Get your pen. Write us a letter or postal. We will show you how.

**YOU CAN EARN BIG MONEY. WE WILL START YOU FOR IT.**

**FIREMEN AND BRAKEMEN!**  
Earn from \$75 to \$150 per month.

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

Our free booklet tells all about our system of teaching. Write for it, giving name, address, weight and height.

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Given away, in return for New Subscriptions to Farm & Dairy

Send us a club of FOUR NEW YEARLY SUBSCRIPTIONS at \$1.00 each and we will send you in return a pair of pure bred fowls, any standard breed, such as Barred Plymouth Rocks, White Wyandottes or Leghorns.

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

second is finished before splicing the wire together. A pair of blocks with half-inch rope is used for pulling up the wire. A wire clamp is attached to each block, so that the tie may be made from both directions at the same time. When tight enough the two ends are brought together side by side and clamped with the splicing clamp. Cut off the wire on each side of the splicing clamp, leaving about five or six inches With your pliers wrap the one end tightly around the line, move the splicing clamp to the part that is wrapped and take two or three turns with the other end around the line wire. These should not be close turns, but should extend along the wire about an inch or an inch and a half. Then finish with four or five turns wrapped closely together. Now, with the splicing clamps holding one end of the splice tightly, and with the pliers holding the end of the wire at the other end of the splice, twist the neck of the splice tightly, but not enough to break the wire. Cut off the ends. Each splice should be soldered at the neck very carefully.

While the stringing has proceeded the insulators should have been put on the proper pins ready to receive the wire. The insulators are usually what is known as pony glass insulators. No more should be used than are needed for the wires already strung. After all wires are spliced, the tying-in should be done. A piece of line wire 10 or 12 inches long is

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

**POULTRY FOR SALE**

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

R. C. W. I. REDS, Partridge Wyandottes African geese—selling out, high class stock, for sale cheap. Write me, it pays. Robert Smith, Colville, Ont.

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

# 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, Ontario and Western Ontario, and Bedford District, Quebec, Dairyman's Associations, and of the Canadian Home, Art, and Jersey Cattle Breeders' Associations.

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## FARM AND DAIRY

PETERBORO, ONT.

### ANOTHER FAKE

Almost every year some new fake in the horticultural line makes its appearance in Canada. The variety and ingenuity of these fakes is astonishing. Even more astonishing, however, is the number of farmers and fruit growers who are bitten by them.

We have had powders which by being injected into a tree, would be carried by the sap through all the branches and result in phenomenal yields. Paints that would protect trees against all insect life and insure large crops, had had their day. "Seedless" apple trees that were going to revolutionize the fruit growing industry have appeared and disappeared. Now we hear of Northern Spy apple trees grown by a new budding process, that will insure young trees coming into bearing inside of three years' time. Agents who are hawking this new discovery (?) we learn are operating in such countries as Simcoe, Grey and Dufferin, in Ontario and possibly elsewhere.

The agents who represent these con-

cerns are smooth talkers. They know that their frauds will not be discovered before several years, which enables them to get a portion at least of the money they are after and get safely out of the country before their victims discover that they have been defrauded. Our farmers and fruit growers should be on the lookout for these gentlemen and demand that they show reports from the experiment stations and government institutions proving absolutely the merits of the goods they offer. When the agents are unable to do this then they should be given a hot time, and the country should be warned of their presence.

### WEED LAW UNSATISFACTORY

The Ontario Act to prevent the spread of noxious weeds needs to be radically amended. In fact, the present law could well be discarded and replaced by a new one.

Its chief defect lies in the fact that its enforcement is left in the hands of the local municipalities. Under such conditions no attempt to enforce the law is likely to be made until conditions in each municipality have become so bad that the majority of the people of the township are suffering serious loss from the weed pest thus creating a condition of affairs where drastic action becomes necessary.

Like all other laws of the same nature, which are left in local hands for enforcement, the weed law is practically a dead letter. At one time, the prosecution of parties who broke the sanitary laws relating to the handling of milk and cream was left with the municipal officers. This proved a failure and finally provincial inspectors were appointed by the Provincial Department. Recently, we find that the work of the enforcement of the criminal laws is being so amended that the county constables hereafter will be managed by the Provincial Government. Other instances of the same nature could be cited.

We need a law in Ontario which will compel the cutting of noxious weeds before they go to seed and the enforcement of which will be left with Provincial inspectors. This matter should be agitated at farmers' institute meetings and by farmers' clubs.

### BETTER ROADS ARE NEEDED

A person who travels through the various provinces, counties and townships of Canada cannot fail to note the great difference in the public roads. The contrast is often great where the division is only a township, and sometimes it is most marked between a rural municipality and a town and that not to the advantage of the town. Why such difference? The same soil and material from which to build a road are available. We must look for other causes. The method of construction is one of them.

If we travel through a township which has 100 to 150 pathmasters we will see many different ideas set forth in road building; such as differences in width of road, grade, ditching, the

placing of culverts and building of bridges. One of the first requisites of road building is uniformity. This can be best accomplished by having some competent person to lay out and superintend their construction. The leading roads should be wider than those that are less travelled. The ditches should not be too deep, but sufficient to carry off all water during the spring or a heavy rain. Where the ground is springy the road bed should be lifted. The road bed must be properly rounded with the road grader so as to carry the water from the centre to the ditches and make a good foundation for broken stone or gravel. The covering of stone or gravel should be thick so that it will form a solid body and should be wide enough to catch the wheels on each side.

The road grader has become common and is an excellent machine when properly used for grading and rounding up the road bed by cutting off the shoulders that form on the sides of the road and throwing them out. In many municipalities the grader appears to be used for destroying roads with a solid foundation of gravel by scraping the soft soil from the sides to the centre of the road. A road so treated will be a mass of mud in wet weather. By its improper use the grader becomes a menace to roads instead of an advantage. New made gravel roads are avoided as much as possible by travellers in dry weather on account of the loose stones. The road roller if properly used, will put all stones down and make it a splendid road to travel upon. More care should be taken in the making and management of our roads.

### FAIRS MUST BE KEPT CLEAN

The following despatch from Woodbridge, Ont., was published recently in one of the Toronto papers:

"As in the case of all fairs throughout the country, the confidence men and owners of chance games were on hand in force. So prominent did two of the layouts become that Magistrate Sam McClure took a hand in the proceedings and made a summary conviction on the grounds, both owners being assessed \$20 and costs. The arrests and convictions were so quickly and promptly effected that the crowd was not aware of what had taken place. The directors stated that they intended to enforce the law in this regard."

It is most remarkable that every time a society is caught running games of chance upon their grounds, and the sharps are convicted, that the directors always declare that they had no idea that such things were taking place on the grounds. If they do not know the nature of the games being operated, then they are not proper men for directors. Ignorance is no excuse. The law states that a society that runs games of chance on its grounds shall forfeit its government grant for the year next ensuing.

One reason why **Farm and Dairy** keeps hammering at this question is because it is constantly receiving evidence of the manner in which these sharps defraud the public. Within the past few days our corre-

spondent in King's Co., N. S., writes us as follows:—

"There were several fakirs playing their games of chance at our fair at which small youngsters lost heavily." The fakirs and the societies which permit them to operate should both be taught a severe lesson. This is the only way in which this evil can be driven out of the country. We must keep our fairs clean.

### A Remedy Needed

(Peterborough Examiner)

In another column of this page is reproduced an important article from "**Farm and Dairy**." It is well worth the study of every farmer. "The unfair burden on the farmer" is additional to what he has to bear in respect to bad roads. If, as asserted in the article named, the farmer is subjected to bearing an unfair share of taxation to the advantage and relief of the cities and towns, he creates and maintains, a remedy should be provided. But who could be brought to believe that the farmer or realizes the burden of unfair taxation, if he quietly submits, as he has done and is doing, to the burden of bad roads? "**Farm and Dairy**" pertinently inquires: "If our farmers are increasing the value of land in cities, should they not reap their share of the unbalanced value?" In justice they should do so. But the remedy proposed—the single tax principle—will be slow of attainment and will only remedy, if it does that, one part of the burden that oppresses the farmer. It may readjust taxation more fairly, but it still leaves the burden of bad roads to be entirely borne by the farmer.

### Why Do They Do it?

(Toronto Star)

On a beautiful sunlight October day two passengers were looking out of their car window and admiring the rich coloring of the Ontario woods, when one of them invited the other to observe the farm houses along the line. For the most part they were handsome brick dwellings, each attended by large frame barns, set on stone foundations.

But do you notice that in these houses every window is tight shut? Where there are shutters the shutters are closed too. Take that house—the kitchen door is open, but that is for convenience, no doubt, not for fresh air. All the windows are closed down fast."

It was true. All along the line for miles the houses were sealed up close, except for an occasional door, in which usually the figure of a woman would appear as the train went by. The day was warm, and the golden sun and fine air of October carried life and energy wherever it reached. But the farm houses within sight of that railway line on that day were shut and barred against sun and breeze, as if they carried pestilence instead of death.

Why is it? Is it the habit of winter carried into summer? If so, the sealed house, even in winter, is a mistake, for cold air is as bad as hot if not fresh and new. Or are these hand-

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some farm houses kept closed so that flies may not get in, or that dust be kept out, or that the beams of the sun may not fade the finery of the parlor or spare bedroom.

Whatever the reason it is a poor one. A house is not fit to live in unless the outdoor breezes are allowed to blow through it, and the beams of both summer and winter sun are welcomed through open windows and doors.

In the cities more and more people every year are sleeping in verandah bedrooms, or in rooms with windows wide open the year around. The man who does this for a while soon feels that he would stifle in his sleep were the room closed.

The gospel of fresh air it seems, has not as yet been preached enough.

**Creamery Department**

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

**Dairy Progress in Saskatchewan**

With the rapid development of the Province the extension of the dairy work, under the supervision of W. A. Wilson, Superintendent of Dairying, is showing results in keeping with the Government's efforts to encourage and develop this branch of farming. Many people are in the habit of measuring the success of the dairy industry by the number of creameries in operation. It has not been the policy of the Saskatchewan Government to encourage the erection of creameries unless there is every assurance given that the undertaking will be a success.

Table with 2 columns: Creamery Name and Lbs. of Butter. Rows include Qu'Appelle, Moosemount, Tantallon, Langenburg, Birch Hills, and Lloydminster.

The above figures show the output of butter at the respective creameries from May 1st to the end of September. Lloydminster creamery opened on July 22nd, 1909 and the make is the result of nine weeks operations.

The total make of butter to the end of September last year was 194,617 pounds, while this season shows a make of 291,863 pounds. That the butter is rapidly marketed is evident from the fact that everything that has been sold and although in the six creameries the weekly make is about

12,000 pounds, it is not enough to fill the orders that are being received by Mr. Wilson.

Out of the six creameries, four have signified their intention of operating during the winter months. This, in view of the good crops that have been harvested and the splendid price that is being received for the product, is evidence of how our farmers are viewing the dairy work.

**U. S. Duty on Cream**

Recent changes in the United States tariff in regard to cream have resulted in a considerable advantage to patrons of creameries located near the border and even to some located at a considerable distance from the international boundary.

Mr. J. A. Kuddick, Dominion Dairy Commissioner in a press report calls attention to an unexpected advantage accruing to Canadian dairymen as a result of the adoption of the new tariff in the United States. Under the old tariff, the duty on cream was five cents a lb. Under the new tariff it is five cents a gallon.

The change is thought to have been a clerical error, but the effect of it is to send a large quantity of Canadian cream across the border. Some 12 or 15 creameries have already begun to ship their whole output of cream, and note the patrons about 27 cents a pound for butterfat.

**Cream on the Farm**

The dairy industry is not the main business of farmers, but rather a side issue, forced upon them by adverse conditions or aggressive creamery agents. The farmer seldom gives serious attention to the careful handling of his cream. He has the cows and the separator and the market that takes his cream asks but little of him in the way of quality. Naturally but little has been done to keep the product pure from the time the cow is milked. Now, however, times are changing rapidly in this respect. Creameries are requiring quality tests to be made of the patron's cream, and are paying for it on that basis. The only way to bring the farmer face to face with the new proposition. He must learn how to care for his cream in such a way that he may deliver it to the creamery in perfect condition.

The milking is the starting point of most of the trouble. The milker sits down with a pail, open at the top, and begins to milk. Any dust, straw or manure that may be hanging to the udder is gradually dislodged and finds its way into the milk. Every particle of such dirt carries with it a quota of germ life, which consists of minute plants or bacteria, so small that they cannot be seen without the aid of a microscope. The function of this plant is to cause decay. All decay is brought about by the action of bacteria. Germ life requires certain things to promote growth, just the same as does corn, wheat or any other plant with which the farmer is familiar. The corn requires food, moisture and warmth to make it grow and thrive. These must be furnished at the right time and in the right form or the corn does not thrive. It is just so with germ life. In order to grow, warmth and moisture. All of the conditions which best promote the growth of these minute invisible plants are found in warm milk as it is drawn from the udder. Thus while the dairyman milks he unconsciously plants; he plants the seed of destruction in the very product he is going to market. The destruction begins at once and is carried on very rapidly so long as the proper temperatures are maintained.

The remedy would naturally suggest itself. Stop the dirt from getting into the milk. This can be done easily and quickly. If the milker will carry with



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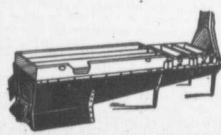
him a damp cloth and carefully wipe off the udder and the parts immediately around it, the trouble will to a great extent be prevented. All of the coarser particles of dirt will be rubbed off and the finer particles of dust dampened, so that they will not fall into the pail. This work will require but a few moments of extra time and prevent much after trouble in the way of sour and ill-flavored cream. The cow should be milked in a place in which the air is free from dust. In the winter or when the cows are kept in the stable, never feed, or do anything to stir up dust or strong smells just before milking.

The cream should be separated at once after milking, while the milk still has the animal heat in it. The work of the day should be so arranged that this can be done. Do not use a cloth strainer. The separator will remove all the solid dirt that may be in the milk

much better than it can be done with a strainer. There never was a cloth strainer used that would not in a few days become yellow and smell bad. Under the best conditions, where steam can be used to help in cleaning, the cloth strainer is a source of danger rather than a benefit. A well-made wire strainer might be used, but there is no need of any strainer. Pour the fresh, warm milk directly into the separator and send it through as quickly as possible.—Ed. H. Webster, in Bulletin.

De Laval.—Through an oversight it was omitted to state in connection with the article on "The Cleanest of Dairies" appearing in Farm and Dairy, October 14th, that it was produced by courtesy of the "De Laval Monthly." The illustration used in connection with this article was kindly loaned by the De Laval Separator Company.

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How can you reasonably expect to receive good returns from out-of-date kettles and pans? Give your maple grove a show by using a **Champion Evaporator** and you will obtain the quickest and best returns for the time spent of any work on your farm. This crop requires no fertilizing, ploughing, seeding, harrowing or cultivating, and comes at a season of the year when other farm work is not pressing. In 22 different sizes.

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

## Cheese Department

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

### Concerning the Makers' Wages

Ed. Farm and Dairy.—From time to time we hear a great deal about the remuneration of cheesemakers being inadequate. I notice however that it is only the money received by the man, who is proprietor, or by him who takes charge of a Company factory for so much per 100 lbs. that is ever discussed.

Throughout the Western section there are a great many men owning factories who, though professedly cheesemakers, are either too lazy or too much behind the times, to actively manage the actual making.

Such men require and depend on what is termed a "First man." The wages paid such a man, to whose skill and exertion, the real success of the factory is due, are something like \$30 or \$35 a month; in some extreme cases \$40; with board of course. In large factories there may be two or three as well as a 3rd man, the second receiving \$25 to \$30 and the 3rd, \$15 to \$20.

Contrast this remuneration with what these same men, with as much or less experience in butter-making, can demand. Incidentally I may remark that am in the position of comparative experience in both cheese and butter making, so I can speak from experience. For a first man, butter-maker, \$65 to \$75 and even \$80 a month are paid (board at \$16 a month) made by deducting making \$49, \$59, \$64. No man can make me believe that butter-making is as hard physical labor, that it requires as much experience, that it requires as much study, or mental activity as in cheesemaking. Why this disparity?

When I started in to make butter, I had previously chiefly made cheese. I was told by a cheese factory proprietor as described in the foregoing that no doubt I would get a little more money for the present, working for another man but when I was owning a factory of my own, I would be much better off with a cheese factory.

If this is so, why don't the proprietors pay wages to those who make their conditions better than the owner of the creamery. Is it any wonder that so many promising young cheesemakers, switch around and go off butter-making?

### CREAMERY WANTED

With Good Facilities for securing good supplies of Cream winter and summer. State full particulars.

BOX No. 45, FARM AND DAIRY.

## Cheese and Butter Maker Wanted

THE MARION BEAVER CHEESE AND BUTTER CO. will receive tenders up to Nov. 15th for a cheese and butter maker for the season of 1910. The maker to furnish all supplies—box the cream ready for shipment. All supplies for the manufacture of butter to be supplied by maker. Applicant must be strictly temperate. Tenders will be opened at the Council Chamber, Palmerston, on NOVEMBER 15, at 2 p.m.

Tenders must be addressed to  
**G. V. POOLE, PALMERSTON**  
SECRETARY OF THE CO.

The make is about 100 tons of cheese.

It is always said that cheese factory proprietors are so jealous in their various districts that they cannot unite. On this question of paying starvation wages, they seem to unite very completely.—Ronald Macdonald.

### Pasteurizing Whey of Great Benefit

Ed. Farm and Dairy.—Allow me through the medium of your valuable paper, to give my experience of the benefit derived from pasteurizing whey. Ours was one of the first factories in Western Ontario to start pasteurizing whey. It has proved to be very beneficial, both to the patrons and the makers and has helped in many ways to produce a far better article.

I have found since pasteurizing the whey that our cheese has greatly improved in flavor. This improvement can be easily seen to the changed condition of the cans due to the whey being heated up to 160 degrees. It is thus returned in a sweet condition at a temperature of about 140 degrees, when sealed in the cans, thus making them far easier for the patrons to keep sweet and clean. Before the whey was pasteurized the cans were more or less empty. Any curd which adhered, making it more difficult for the patrons to keep them sweet and clean, unless scrupulously was exercised in cleaning the cans.

With regard to the patrons (of whom there are over 180) as to the condition of the whey sent home, they all speak very highly of it for feeding purposes, and many have personally told me they would rather be without the whey, than have it returned not pasteurized.

Pasteurizing has been a preventive of the bitter or yeasty flavor in cheese. This flavor was certainly a very great source of trouble to makers before the whey was pasteurized, but now I am glad to say that I have not had one single cheese with this flavor since pasteurizing the whey. I certainly think from my observation of the condition of the milk which is now being sent in, that the patrons are taking greater care and trouble over their milk, especially as they find that the cans are far easier to keep sweet and clean than before.

With regard to the whey-tanks, the task of keeping these clean, which was a very difficult thing before pasteurizing, is now comparatively easy. The tanks can be easily washed in a few minutes.—Roland Johnston, cheese-maker.

Bright Factory, Oxford Co., Ont.

### Over Ripe Milk

What is over-ripe milk? It is milk with one of the agents used in cheesemaking out of proportion; or milk with the lactic acid developed to too great a degree in order to obtain the very best result in entering the milk into cheese. What are the agents used in separating the solids from the moisture or water content of the milk? They are rennet, heat and acid development, together with the cutting of the curd to get it into a convenient condition for the escape of the moisture. The heat should not be applied until enough milk is in sight to fill the vat. Why? Because as we raise the temperature we make more favorable conditions for the development of acid. Heat as quickly as possible to 82 or 83 degrees Fahrenheit and after testing for acidity set at this temperature. Why? Because, first, 82 deg. is less favorable for acid development than 86 deg. Fahrenheit; and the time or heating to 86 deg. is saved; and what is more important, you are able to get the rennet in sooner and a large quantity of it, thereby getting the acidity under control more quickly; if not un-

der control it is difficult to get it over in conjunction with the other agents, which contract and expel moisture from the curd.

In handling over-ripe milk we think it is always advisable to use more rennet—at least one ounce more per thousand pounds of milk, for several reasons: first, that it may coagulate the milk more quickly; second, it gives a firmer curd more quickly and is less liable to be broken when handling it, thereby saving to a great extent the great loss which usually is sustained from making over-ripe milk into the cheese. It also helps to break down the caseous matter in the cheese, giving it a better texture. Commence cutting the curd early and cut rapidly so as to keep pace with the rapid firming of the curd. If this is not done the curd will get into a condition which makes it very hard to cut properly. Use the one-quarter inch knife rather than cut the curd four times, as it leaves the curd more uniform and in better condition than when it is chopped finely. Heat quickly, and if necessary raise the temperature two or three degrees higher than for normal milk.

Here is where a great many cheesemakers make a mistake, by stopping the stirring and running off part of the whey when the curd is quite soft; while the whey is running off the curd is matting, then they go at it with the little rake and break it all up, thereby liberating a lot of the milk acids, giving them a high acid reaction in the whey, and the result is they have a sweet curd and a sweet cheese.

Just stop and think for a minute which is likely to do the more effective work, you with a rake, or the acid development in conjunction with the heat and rennet action? The natural tendency in this kind of curd is to run together, so the best way is to keep it stirred in all the whey until it firms up a little. Hard raking does not firm the curd, except so far as it breaks the curd. If agitators are used the curd can be kept apart and the whey lowered to quite soon enough without resorting to this high raking. One can readily see that if the whey is lowered quite close to the curd while it is in a soft condition it will be quite difficult to keep it from matting; and while you are keeping it matting with a small rake you are breaking it up, causing a loss, and also causing rough texture in the cheese.

It is always advisable to have the whey run down shortly before the dipping point is reached to avoid being caught with too much acid. When the curd is in a soft condition it is advisable to dip with a loose open condition in the curd sinks into it, and the surplus moisture is drained from the curd. If the curd is still a little weak, milk slightly earlier than usual. If not, treat as normal curd. Mature the curd well before salting. C.H.R.

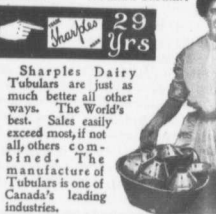
A word to the cheese maker: Attend some dairy school, as it will make you a stronger and more competent man in your profession. It breaks down and say the owners or managers of factories should insist upon their makers attending some dairy school, if they have not the cost of so doing. It will save them more in purchasing and saving with the product they manufacture.—J. Howie.

I have just received from Matthew Standish, of Rougemont, Que. a Chester White pig, as a premium for securing seven new subscriptions to Farm and Dairy. The pig was seven weeks old and proved to be a good specimen of the Chester White breed. Accept my thanks for my valuable premium, which has amply repaid my subscription for securing the new subscribers.—John Manson, Waterville.

## TWO WOMEN

These women start to wash their cream separators. The upper woman has a simple, sanitary Sharples Dairy Tubular Separator—with nothing inside the bowl—but the tiny piece here shown in the dish pan—and washes the entire bowl in two minutes.

The lower woman has a common, disk-filled cream separator—with 40 to 60 disks inside the bowl—and spends twenty minutes washing the bowl. She wishes she had a Tubular.



Sharples Dairy Tubulars are just as much better all other ways. The World's best. Sales have exceeded most, if not all, others combined. The manufacturer of Tubulars is one of Canada's leading industries.

WRITE FOR CATALOGUE NO. 252.

THE SHARPLES SEPARATOR CO.

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General Business College

Located at Young and Gerrard Sts., Toronto, and 128 Dundas St. West Toronto, prepare young men and women for earning good salaries. Fall Term now open. Enter any day. Part-time sent on request by postal, or telephone Miss 2388.

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Are Manufacturers of a large line of Wooden ware, such as:

**Step Ladders,**  
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AGENTS WANTED in every village in the Counties of Peterborough, Durham, Victoria and Huron.

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**TWO CENTS A WORD CASH WITH ORDER**

**CHEESEMAKER WANTED**—Half interest in up to date factory, and make the cheese, \$1,000—Box 15, Farm and Dairy, Peterborough.

**WANTED**—Cheese factory to rent, or make by contract. Apply to Box 77, Farm and Dairy, Peterboro, Ont.

**CHEESEMAKERS**—Can secure good winter employment by working for Farm and Dairy. If you make business and are anxious to earn a good sum weekly write for full particulars to Christian Knicker, Farm and Dairy, Peterboro, Ont.



## The Upward Look

### The Decision Rests with Us

And ye will not come to me, that ye might have life. John 5. 40.

We sometimes hear people express wonder as to why it is that God permits so much sin and misery in the world. They say that if God is a God of love, as the Bible states, He must have known that people would sin before He created them and yet He permitted them to be born. How could He do this, if He loved them in the Bible?

There are many things in the Bible that we can never hope to understand in this world. Unless we can trust God's love we can have no part with Him. This, however, is not one of those things. God knew that people would sin but at the same time He warned them not to. He told them what would be the consequences of their sin. He gave them the Book of Life as a guide to keep them from evil. He promised to give them good gifts in this world and eternal life in the world to come if they would but have faith in Him and strive to please Him in all things. Our Saviour not only came down among us to show us how to live but He gave His life in order that we might have some compensation of His love for us as well as to redeem us from our sins. Christ said: Him that cometh to Me I will in no wise cast out. (John 6. 37). We are told also: Though your sins be as scarlet they shall be as white as snow; though they be red like crimson, they shall be as wool. (Isaiah 1. 18). When therefore, we refuse to recognize God's love and spurn His proffered gifts we become responsible for our own sins and for their consequences. With what agony of spirit

the words of our text must have been wrung from our Lord when He said: And ye will not come to me that ye might have life.

Why, some people ask, did not God make us all good? Because if He had we would not be despoiling of the gifts that He has promised us. We would be no better than horses or dogs that have no power to discern the difference between good and evil. God has better things in store for us than He has for mere brute animals. In order that we may deserve them He has given us a conscience that enables us to tell what is right and what is wrong. This, of itself, is a wonderful gift and it is our duty to use it wisely and prayerfully. When, however, we refuse to take advantage of this power and refuse God's proffered love we only are responsible.

As I live, saith the Lord God, I have no pleasure in the death of the wicked, but rather that he will turn from his way and live; turn ye from your evil ways; for why will ye die? Ezekiel 33. 11.—I.H.N.

### A Modern Water Supply

An attractive farm home is shown on page 15, the home of Mr. J. W. Richardson, of Haldimand Co., Ontario, Canada. The pleasing features of this home is the concrete walks around the house, and the profusion of flower beds and plants. The exterior of the home is even more attractive and pleasing.

#### THE WATER SYSTEM.

The water system and bath room in the home of Mr. Richardson will appeal to every farm wife, who knows the need and comforts derived from an abundant supply of good pure water, both hot and cold. Miss Richardson writes Farm and Dairy:

"Our hot water is pumped and has one window overlooking the back yard. It is situated near the centre of the second floor. The walls are painted, and a light oilcloth covers the floor.

The water is supplied from a tank lined with lead, which is about 3 x 3 x 14 ft, and is placed over one end of the bathroom and the back hallway. The rain water runs off the roof into this tank, but in times of shortage water can be pumped up by a windmill from a soft water cistern at the barn. We have both hot and cold water. The hot water is heated by a range in the kitchen at little or no expense.

The bathroom is properly fitted up, and plumbing was done by a qualified plumber several years ago at a cost of a little over \$1.

All sewage from the house is connected with a 4 inch tile, which empties about 20 feet from the house. All pipes emptying into the sewer are properly fitted with traps, preventing any odors from escaping.

We find the bathroom very convenient and would not like to do without it, as it saves many steps in cases of sickness."

\*\*\*

### Conveniences on the Farm

Laura Rose, Guelph

Every farmer should endeavor to put up ice for use in the summer. Then would it be possible to have a refrigerator of some kind of an ice box in the home. At a place where I visit occasionally, they have a large well-made cupboard. The top was made into a tight fitting lid and had a tin pan made to fit down into the cupboard, sufficiently large and strong to hold a good sized cake of ice. A drain pipe carried off the water from the melted ice and emptied outside, so there was no drip or water running over. Perforated tin shelves completed this home-constructed refrigerator. It stood at the kitchen door in the woodshed. The people always put up plenty of ice and did not mind being extravagant with it.

There is no running downstairs with catables in that house.

The pulley clothes line is another contrivance that a kitchen hand put up for his wife. She can stand in a sheltered corner of the back porch and hang her clothes out without having to be in the hot sun of summer or tramp through the snow in winter.

Another much appreciated comfort is the screened-in porch. I have seen it at the screened-in porch, and sometimes the back porch and sometimes the front porch all screened, and have felt the luxury of either working or lying in a hammock untroubled by the tiresome flies and irritating mosquitoes. When the porch is large enough I have seen it used as a summer dining room.

\*\*\*

### A Practical Kitchen

By Fleta Wheeler.

The kitchen has been called "the pulse of the home," and it would seem a good simile for when things go wrong in the kitchen the trouble is apt to extend all through the house.

The very keynote of up-to-date home making is the saving of steps, the elimination of unnecessary labor, and the lightening in every possible way of work that is necessary. The day of the large kitchen, in which the housekeeper walked miles during the week, is gone by, and these

old-time rooms have given place to what seems, in comparison, a more box or cabinet; yet, these modern kitchens are so complete, being planned with an eye to convenience and the saving of steps, that it is often possible to stand in the middle of the kitchen and reach every part of it, and in such a way that many a housewife finds herself able to do her own housework.

In the kitchen of a large house, it is necessary to study the matter carefully, and the first step is to remove all furniture except that which is really useful for unnecessary furniture means extra labor in dusting and cleaning.

#### PROPER HEIGHT.

Make sure that the stove, the table and sink are of suitable height for your inches. Women are taller than they were a generation ago, and it may save a doctor's bill, not to mention the suffering involved, if the stove be set on bricks, the table on blocks, and the sink rebuilt to a convenient height. The back-breaking angle assumed by many women while in the kitchen is the reason for that weary, harassed expression and for much real suffering. A high stool is usually to be found in every kitchen, and nothing that can be done while sitting should be done standing. This stool may be pushed under the table and out of the way when not in use. A second stool,

a little like the kitchen many women set on it, the user leaning on clothes basket instead of the wicker one, was used on from the purchase.

Perfect kitchen the house,

### Improved Roller Gear

OF THE

## "Puritan"

### Reacting Washing Machine

This special feature alone, makes the "Puritan" the easiest running washing machine made. And the "Puritan" has several other improvements that are almost as important, to the woman who is going to use the "Puritan".

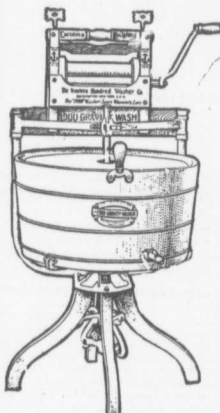


### "Favorite" Churn

is the favorite. There are more "Favorite" churns sold in Canada than at all other makes combined. Patent foot and lever drive. Made in 8 sizes to churn from 1/2 to 30 gallons of cream.

If your dealer does not handle these household favorites, write us.

DAVID MAXWELL & SONS  
St. Mary's Cove



## Do You Want to Save \$62 a Year?

You must pay the washerwomen fifteen cents an hour.

It is hard earned money at that. If you do your own washing or have the servant do it, this steaming, back-breaking, hand-chapping, so-called, "hand-wringing" method costs you more than 15 cents an hour in the end.

It takes eight hours' hard labor to do the average family wash.

Eight hours, at 15 cents, cost you \$2 per week for washing.

This means \$62.40 per year, without reckoning fuel for fires or wear on clothes.

We will save you half of that—or No Pay.

We will send any reliable person our "1900 Gravity" Washer on a full month's free trial.

We don't want a cent of your money nor a note when we ship you the Washer on trial. We even pay all the freight out of our pockets, so that you may test the machine as long as you like before you agree to buy it.

Use it a full month at our expense. If you like it, send it back to the railway station, with our order.

We will then pay the freight back, too, without a murmur.

But if the month's test convinces you that our "1900 Gravity" Washer actually does 8 hours' washing in 4 hours' time—does it twice as easy—far better, without wearing the clothes, breaking a button or tearing of lace, then you write and tell us so.

From that time on you pay us every week, part of what our machine saves you, say 50 cents per week, until we are paid for.

Each "1900 Gravity" Washer lasts at least five years, yet a very few months, at 50 cents per week, makes it entirely your own, out of what it saves you on each washing.

Every year our Washer will save you about \$62.00. Yet the "1900 Gravity" Washer won't cost you a cent under our plan, because we let it pay for itself. You need not take our word for it, you prove all we say, at our expense, before you decide to buy it on these terms.

Could we risk the freight both ways with thousands of people if we did not know our "1900 Gravity" Washer would save you so much as this?

It costs you only the two-cent stamp on a letter to us to bring this quick and easy Washer to your door on a month's trial.

That month's free use of it will save you about \$1.00. You thus risk nothing but the postage stamp to prove our claims, and we practically pay you \$2.00 to try it.

This offer may be withdrawn at any time if it crowds our factory.

Therefore, WRITE TO-DAY, while the offer is open, and while you think of it. A postcard will do.

Address me personally for this offer, viz., F. D. Y. BACH, Manager "The Washer Company, 327 Yonge street, Toronto, Ont.

The above offer is not good in Toronto or Montreal and suburbs—special arrangements are made for these districts.

a little lower, should also be kept in the kitchen; it will prove useful in many ways. The mop-pail may be set on it, instead of on the floor, and the user can stand upright, instead of leaning over to wring the mop. The clothes basket may be placed upon it, instead of on the floor, when wringing out the wash, and when nuzzing the same wash upon the line, setting the basket on the stool saves the worker from bending over for each separate piece.

**VENTILATION.**

Perfect ventilation is another essential which is more necessary in the kitchen than in any other room in the house, unless one excepts the sleep-

ing rooms. Holes may be bored in the top of the window sash, this affords a constant current of air that keeps the kitchen well ventilated; lit-ranges, which may be placed on coal through the stove pipe, all odors of cookery; it is also possible to attach to the range an "incinerator," into which all the dry garbage may be placed and burned without odor.



Attractive Home of Mr. J. W. Richardson, of Haldimand Co., Ont.

This farm is one of the competitors in our "Good Farms" competition this year. See description of bath room and other conveniences in this farm home, on page 14, this issue. The many flower beds and fine walks around this home do not appear, on account of the nearness at which this photograph was taken.

current of air can surround them. If the barrels be set on wooden racks, on touching them may be tipped easily by one hand, they will tip into position as easily, and this allows the air to reach every bottom of the barrels.

The various food supplies may be arranged on shelves in most conveni-

ent manner; keep cereals in glass jars by themselves; small glass crocks hold corn meal, entire wheat and rye flour, sugar and such articles as rice, tapioca, spaghetti, etc. When everything possible is kept in glass, one can see in an instant the contents of each jar.

A word as to proper kitchen garb. A long apron of white butchers' linen, which completely covers the gown of the wearer, with a cap that covers every bit of hair, and oversleeves of gown perfectly, protect one's gown years. Moreover, with white, it is always possible to be sure that absolute cleanliness which makes for good health, is being observed.

**OUR HOME CLUB**

**Boys and Girls on the Farm**

How are we to keep our young people on the farm? This subject should be studied more than it is, or ever has been. Many people say, "make the farm homes more attractive, and provide more music, holidays, etc." This has become an old story.

There are very few farmers that have no music in their homes and as for holidays, the young people on the farms have, I would say, more real holidays than their city friends.

To the boy or girl who is interested in Nature, surely they have every chance to study birds, bees and flowers every day, from seeding in the spring until the frost comes. This is an attraction that any city boy might be led to enjoy. I would like to ask the members of the "Home Club," if they think I am right when I would suggest that to keep our best young people on the farms we must educate them altogether so, early so, in the country. Why not have our High Schools and Colleges in the country?

It seems to me to be unjust, that the towns and cities should have all the good schools and best teachers. When country boys and girls pass the entrance at from eleven to thir-

**RASH WASHING**  
—quick washing.  
That is the kind of washing you do with the

**"New Century" Washing Machine**

Roll-Over means easy turning.  
Powerful Spiral Springs that reverse the motion, make quick work and little effort.

New Winger Attachment allows water to drain right into the tub.  
Only \$25.00—delivered at any railway station in Ontario or Quebec.  
Write for free booklet.

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**FOUNTAIN PEN FREE**

To every lady and gentleman, girl and boy, for sending us 12 packages of our Ant. court plaster, at absolutely free, a Fountain Pen. Do not delay; send to-day; send no money, only your name and address.

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**HOME KNIT HOSIERY**

These stockings can be knit in quantities on Gearhart's Family Knitter. New machine with Ribbing Attachment. Knits everything for home or trade, from factory or home-made yarn. Ribbed on duty orders—charge-free. All year-round. Write to-day for catalog and free samples of work.

Address: J. E. GEARHART, Box 4, CLEARFIELD, PA.

**TREATMENT OF WALLS AND FLOOR.**

The walls should be oiled and then covered with shellac, for this gives a smooth, hard surface, is at the same time inexpensive, and permits washing with soap and water. The wood-work should be given a hard enamel finish, preferably of white or light colors, never of dark paint. When the floor is of soft wood, it is best to cover it with linoleum.

If the floor is of hard wood, it may be finished in oil, and in caring for either the oil finish or the linoleum, do not scrub with soap and hot water, or the finish will be ruined, but add a cup of kerosene, linseed oil or furniture polish to half a pail of tepid water, and merely wipe the floor with a clean mop, wrung out of this. If everything that stains the floor is wiped up at once, it is only necessary to remove the dust occasionally.

**OTHER CONVENIENCES.**

Two necessities for the convenient kitchen are a comfortable rocker, preferably of wicker, and a clock that keeps perfect time; many a moment of rest may be taken in the rocker, which should have cushions with washable covers; and without a reliable timepiece it is impossible to cook perfectly and serve meals always on time.

The arrangement of the pantry, with its stores and utensils, if done with care, will save much time and labor. The pantry should be very near the sink and table, and there should be a broad shelf on which much of the cooking may be prepared. Every pantry should have a window,

**MUSIC FOLIOS FREE**  
CONTENTS OF SOME OF THE FOLIOS GIVEN AWAY

- PARLOR SONGS**
- CONTENTS:**
- Comin' Thro' the Rye
  - Listen to the Mocking Bird
  - Ben Bolt / Don't You Remember (Sweet Alice)
  - Mama's in the Cold Ground
  - Kilmarney
  - How Can I Leave Thee
  - Juanita
  - Call Me Back Again
  - Heart Broken Down
  - La Paloma
  - The Dove
- HOME SONGS, VOL. 2**
- CONTENTS:**
- Annie Laurie
  - Believe Me if all Those Endearing Young Charms
  - Old Black Joe
  - Dixie's Land (I Wish I was in Dixie)
  - Rocked in the Cradle of the Deep
  - The Blue Belle of Scotland
  - I Cannot Sing the Old Songs
  - Darling Nellie Gray
  - The Spanish Cavalier
  - Then You'll Remember Me (When Other Lips and Other Hearts)
- HOME SONGS, VOL. 1**
- CONTENTS:**
- Home Sweet Home
  - The Old Folks at Home



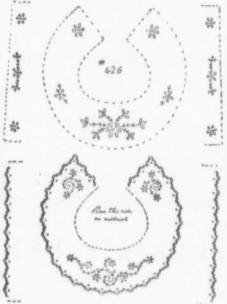
- Way Down upon the Suwanee
- River
- My Old Kentucky Home
- The Old Oaken Bucket
- Nearer My God to Thee
- Afterwards
- One Sweetly Solemn Thought
- The Last Link of Summer
- Love's Old Song
- Alice Where Art Thou
- POPULAR PARLOR PIECES**  
Vol. 1
- CONTENTS:**
- The Shepherd Boy
  - The Maiden's Prayer
  - Flower Song
  - Black Hawk Waltz
  - Secret Love Gavotte
  - Remember Me
  - La Paloma
  - Warblings at Eve
- ALBUM OF FAMOUS SONGS**
- CONTENTS:**
- Creole Love Song
  - The Monarch of the Woods
  - Tell Her I Love Her So
  - O Happy Day
  - The Yeoman's Wedding Song
  - The Minstrel Boy
  - I've Something Sweet to Tell You
  - Flee as a Bird
  - It was a Dream
  - Thy Face

We have arranged with one of the largest music publishing houses in the country to supply our readers with any of these folios, absolutely free of cost. The selections in each volume would cost you from \$1.00 to \$2.00 if purchased separately. Look over the list, see once. Address.

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

**Embroidery Designs**

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



426 Designs for Embroidering Infants' Dresses.

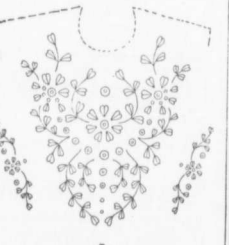
Stamped patterns for two yokes and two sleeve-bands to match each are given, one set plain, one with scalloped edges. The petals of the flowers and the leaves are designed to be worked either in solid embroidery or as eyelets, the stems are designed to be outlined and the dots can be made either solid or as eyelets. The scalloped edges are all to be padded and buttonholed.



427 Design for Braiding a Blouse and Sleeves.

Patterns for stamping front and back with strips for shoulders and sleeves are given.

Soutache braid (silk, mohair and cotton) and rat-tail cord are appropriate.



424 Design for Embroidering a Blouse or Shirt Waist in Wallachian Style. Designs for front, collar and sleeves are given. All the flowers, leaves and dots are designed to be worked in Wallachian stitch, the stems to be outlined.

teen years, they must either remain on the farm with no more education, or else are sent to town or city before their characteristics and habits are formed. Often they grow up thinking as the town boys do "that it is too slow for them on the farm."

Who is to blame for this state of affairs. Should the intelligent farmers of Ontario not look into this matter, and see that they stand on an equal basis with the city people for the education of their families?

At least some of the country young people should be able to board at home, and get a good High School education at the same time. They might not enjoy all the advantages of town life, but I am sure that they would not have the temptations all around them that there are in towns.

Where is there a true mother on the farm, but feels lonesome at the thought of John or Mary leaving home so young to go to a higher school? Her heart goes out with them, and if she could have her way a great many temptations of town life would be done away with before they left the home. Why could there not be a first-class college and first-class teachers provided for each county, and in some nice part of the country instead of the towns?

Would we not receive help from some of our best town people to build such a school? Perhaps they would like to send some of their young people to such a school. Would it be an impossibility to have a van to go around in the mornings and gather the children and leave them at their homes at night?

If the young girls would stay on the farms instead of going to towns and cities to stand behind counters for a few years, there would not be so many overworked mothers on the farms.—"The Doctor's Wife."

Our embroidery stamping outfit can be secured for 75 cents, or free, in return for two new yearly subscriptions. Choice of any other three patterns, free in return for one new subscription.

**Write for our New Premium List.**

**Eating for Strength.**

The greatest pleasure to be derived from eating is the pleasure one gets in the knowledge that his food is giving him greater strength and vitality.

Because of this fact there is a constant increase in the consumption of the Quaker Oats; every time the strength making qualities of Quaker Oats have been tested by scientific investigation or by experiments in families it has been found to be a food without an equal.

It builds the muscles and brain without taxing the digestive organs; it costs so little anyone can afford it, and it is so carefully prepared and packed that it is absolutely pure and clean. A Quaker Oats eating family is always a healthy family.

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To every lady and gentleman, girl and boy, for selling only 6 pairs of our patent ink fasteners at 25 cents per pair, we will give absolutely free a fountain pen; do not delay, send to-day; send no money, only your name and address.

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**THE COOK'S CORNER**

Our New Cook Book given free for two new subscribers. Write to Farm and Dairy at 81 each. Recipes for publication and inquiries regarding advertising, cooking, recipes, etc., gladly answered by Household Editor, Farm and Dairy, Peterboro, Ont.

Our New Cook Book free for only two new subscribers.

**VEAL AND HAM PIE.**

Separate about 2 lbs. of veal from the bones, which put over the fire in a kettle of cold water. Cook until the broth will jelly when cold. Cut the meat into small pieces. Make a veal forcemeat by cooking one small cupful of bread crumbs in a cupful of stock until they form a smooth paste. Turn on a plate to cool. Put twice through a meat chopper enough raw veal to fill a large cup when chopped. Add this to the bread paste, season with salt, pepper and nutmeg. Mix thoroughly and add two eggs. Form this forcemeat into small balls and fry brown. Line a baking-dish with good pastry and in the bottom put a layer of veal, and a layer of cold boiled ham, then a layer of forcemeat balls and so alternate layers until the dish is full. Pour over the broth seasoned with salt and paprika, and with pepper, and bake an hour in a moderate oven. Serve cold.

**APPLE PANCAKES.**

Make a simple pudding batter, with baking powder, add finely chopped apples, and fry like ordinary griddle cakes. Serve hot, with sugar.

**APPLE CIDER JELLY.**

To 1 qt. cider allow 2 table-spoon granulated gelatine. Soften the gelatine in a little cold cider. Heat the remainder of the cider to boiling point, then add to it the softened gelatine and 1 lb. sugar. Turn into a wet mold and let it get cold. Serve with top milk or cream.

**CREAM OF CELERY SOUP.**

Wash and cut fine 4 small heads celery, and put in a stew pan with 1 pt. boiling water; cook until tender, with water below boiling point. Put 1 qt. milk over fire in double boiler with a bay leaf in it. Brown 3 table-spoon flour, add 1 table-spoon stir until blended, add 1 onion, sliced, and cook until tender. Note: Mix carefully with milk, stirring constantly till it is of the desired consistency. Rub the cooked celery through a puree sieve into this cream sauce, add pepper and salt to taste, and serve at once. If you do not wish to brown the flour use table-spoon less.

**SALMON LOAF.**

Drain off liquor from a can of salmon, and wash with a fork pick the fish and skin out the bones. To the fish add 1 cup bread crumbs, yolks of 4 eggs beaten light, 4 table-spoon melted butter, 1/2 teasp salt, a scant 1/2 teasp pepper, 1/2 teasp finely chopped parsley, and lastly the whites of the eggs beaten stiff. Turn the mixture into buttered baking dish, and shape into a loaf. Bake 1/2 hour.

**SALMON CROQUETTES.**

To a 1/2-lb. can salmon, after picking bones and skin out, add 1 cup cold mashed potatoes, 1 egg, onion cut fine, pepper and salt. Mix thoroughly, make into balls, roll in cornmeal, fry in deep fat, and serve hot.

I received the hammock for securing a club of two new subscribers to Farm and Dairy and am well pleased with it. I will try and secure some more subscribers for Farm and Dairy very soon. Thos. Thomson, Dundas Co., Ont.

For cleaning stained sinks and granite-ware nothing is better than a little hard coat ashes put through a fine strainer.

**The Sewing Room**

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

**CHILD'S DRESS 6428**

Here is a pretty, dainty little frock that can be made from border material or flouncing and with straight banding used for the body portion, and which consequently is simple in the extreme.



Material required, for medium size (4 yrs) 1 1/2 yds of flouncing 20 in wide with 1/4 yds of banding 1 1/2 wide, 1/2 yd of material 3/4 in wide for sleeves, 5/8 yd of tuckings 1/2 wide, 2 1/2 yds of plain material 3/4, 1 1/2 yds 2 1/2, 1 1/2 yds 2 1/2, 1 1/2 yds 2 1/2.

The pattern is cut in sizes for girls of 1, 2 and 3 yrs of age and will be mailed on receipt of 10 cts.

**WAIST WITH GARNITURE 6403**

A waist that is trimmed with such a garniture as this one is both new and attractive. It can be utilized with any skirt, but is especially well suited to the semi-princess gown.



There are applique plaits over the shoulders which mean be considered fullness, and there are sleeves of the very newest design. The chemise and the under-sleeves are of cream-colored lawn, and are a bit of brightness and reality to the whole. Material required for medium size is 1 1/2 yds 24, 2 1/2 yds 32, or 1 1/2 yds 44 in wide; 1/2 yd 24 for cuffs, 1/2 yd 24 for collar, 1/2 yds 18 in wide for chemise and under-sleeves.

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

**FANCY BLOUSE 6401**

The blouse that is close at the left of the front is one of the very newest and attractive. This one includes that feature and also sleeves that are made with inset puffs that are in the very latest style. If plain sleeves are preferred they can be substituted as shown in the back view. The blouse is very well adapted to the odd waist and to the entire gown.

Material required for medium size is 3/4 yds 21 or 27, or 1 1/2 yds 41 in wide, and 3/4 yds 24 for collar and cuffs, 3/4 yds of banding.

The pattern is cut for a 32, 34, 36, 38, 40 and 42 in bust, and will be mailed on receipt of 10 cts.

**MISSIE'S SKIRT 6421**

The skirt that is made with a plaid flounce at the waist and back is always a pretty one and is greatly in vogue while it can be counted upon to be absolutely smart for the coming season. The skirt is made of five gores with the straight plaid flounce.

Material required for the 16 yr size is 6 1/2 yds 34, 6 yds 32, 5 yds 30 or 3 1/2 yds 28 in wide.

Send your subscription now.

**ANTIOG**

fair of the Association, October, were being held for which they had three very fine prizes. Most of the girls win classes for purpose horse. Clydesdale Agricultural of the prize, horses in the factory man, horses in the animal show judged their prior lot of 15, though some good even of roots animal prizes receipt of any yet else. In these. Thoroughbred. —Tom Brown.

**NORTH WICKLOW**

favor of the new ones. In some cases to fill commonly a lot as apples have a small position. The best. The best. It has been E. B. H.

**DUPLIN**

BLACKSTONE he completed the grain harvest is good. Some farms have both in quality were very late probably township has only fair. It always lately put down the is yielding m perfect some farms have for, and little

**HAS**

ACTINOLITE throughly. Many farmers their threshing out much better straw was shot Potatoes crop. They are ber in the B two in 2000 good owners were an abundant

**TRIFFE**

don. Farmers yielded. Posa w crop. Apples are being shown for its immunity for however, many a merlike weather month, suddenly and frost, which able to them. Large numbers their crop from rained across the blating all boys are and of than over. One Turk led the to the reserve t overlooked by t



### OUR FARMERS' CLUB

Contributions Invited.

#### NOVA SCOTIA

##### ANTIGONISH CO., N. S.

**ANTIGONISH.**—The fourth annual fall fair of the Antigonish County Farm-women's Association held on the 7th and 8th of October, was a grand success. Both days for which our warm, ideal fall days, are remembered, is noted. In every class for which our year's show was held, a prize was awarded. In the horse racing, there were nearly two hundred entries. Most of the classes were well filled with prize winning animals, particularly the classes for draft colts and young general purpose horses. Burleigh, the imported Clydeville Station, owned by the N. G. Agricultural Society, and the sire of most of the prize winning draft colts and yearlings, is considered one of the best horses in Nova Scotia. Mr. John Hay of Lakeside, Quebec, in a careful and satisfactory manner, placed the draft colts in the show. The special feature of the cattle exhibit was the large number of dairy animals shown. Stanley Logan, who judged them, considered they were a superior lot of dairy cattle. Beef cattle, though small in number, were also a good even lot. There was a fine display of roots and vegetables. Potatoes and apples were prominently to be equal to any yet shown in the Maritime Provinces. There was also a good display of poultry and dairy products.

—Tom Brown.

##### NORTHUMBERLAND CO., ONT.

**WICKLOW.**—The silo seems to be gaining favor among the farmers; several new ones have been built this season. Some silos have been filled; others are yet to fill. The corn seems to be unusually good in quality, there being some frost as yet to hurt it. Many of the apples have been picked. The quantity brought to market is of a superior quality. Some of the quality surpasses expectations. The potato crop is better than in years past. It is generally considered that it has been a good season for dairymen.

—E. B. H.

##### DURHAM CO., ONT.

**BLACKSTOCK.**—Threshing will soon be completed. Taking this into consideration, the grain has turned out well; the quality is good. The show of grain around the town is probably the best crop that our township has ever grown. The corn is very fair. The weather has been very showery lately. Very little corn has been put in the barn. The apple crop is yielding much better than people expected some time ago. Altogether our farmers have a great deal to be thankful for, and little to grumble about.

—R. J. F.

##### HASTINGS CO., ONT.

**ACTINOLITE.**—Plowing has been much delayed on account of dry weather, but the recent rains have built the ground thoroughly, and will facilitate the work. Many farmers have got through with their corn; the grain has turned out much better than was expected. The straw was short, but the grain weight good. Potatoes are an exceptionally good crop. The weather was expected to be a bummer in the fall. They are sowing for the winter. The root crop is not very abundant. The dry fall. Grapes were an abundant crop. The apple crop is poor.

—T. K.

**THRIFPIE.**—Threshing is about half dried. Peas were perhaps the lightest crop. Apples are plentiful and potatoes being sown in fall, put on an account of its immunity from crasshoppers, which, however, may not bother us to such an extent for many years. The bright sun, and the weather in the first part of the month suddenly was succeeded by rain and frost, which would be quite unfavorable to them. The farmers have raised large numbers by several farmers, who have their crops were saved by them from the crasshoppers. The birds advanced across the field like infantry, and killing all hoppers before them. Turnips and corn are in greater favor than ever. One of the farmers said, "Young folks let the way, and left their elders to do a reserve to pick up all stragglers neglected by themselves. The fall fair

held at Bancroft was a success again, in spite of the cold day. Visitors from the south were surprised especially at the display of vegetables and apples. Some of the judges, too, would hardly believe they were grown here, but such was the case, none of them being imported.—W. R. W.

##### PETERBORO CO., ONT.

**NORWOOD.**—The farmers of this district met in the Norwood Council Chamber on the 24th of October 19th, to organize a farmers' club. Mr. H. G. Duff, of the Department of Agriculture, ex-farmers assembled. Officers were elected as follows: President, James Andrews; Vice-President, A. Brothen; Secretary, Andrew Knox; Directors, John Scott, T. H. Burkell. It was arranged to hold meetings upon the second and fourth Tuesdays of each month, beginning with November. At the initial meeting, Mr. Andrew Knox will read a paper on "The Preparation of Stables for the Winter."

—D. O.

##### BRANT CO., ONT.

**FALKLAND.**—Farm work is well advanced. Quite a bit of fall plowing has been done. Potatoes are nearly all dug, and are a fair crop. The white grub attack has had injured them somewhat. As a rule, potatoes are of good size, but are few in the hill. They are now worth from 75c to 80c a bag. Mangels are a fair good crop. The weather is not so affected the yield to a certain extent. Cows have fallen considerably in their milk for some time. It is due to the fact that they are not getting enough of their pasture. There is here, however, few hogs ready for market. The crop of winter apples will be good, especially in orchards where spraying was practiced. Buyers are offering \$1 a bush for wheat, and are waiting for any more rather than risk a decline. The hog market is none too plentiful to carry the stock through the winter; economy will have to be practiced in the coming season.

##### WELLINGTON CO., ONT.

**FERGUS.**—There has been very little rainfall of late; water is scarce and wells are getting low. On October 5th there was a heavy shower. The people had been at their mangels and carts, but the snow put a stop to that work. Both of these showers turned out fairly well, especially potatoes. Turnips are a good crop in most places. Some farmers are shipping them; the price has been very low. The quality is 12c. Threshing is the order of the day. Most farmers are getting a machine with straw blowing attached, thereby saving a good deal of labor. Grain is much lower in price than last year. Pork is still high but lower than some weeks ago.—W. A. M.

##### ELGIN CO., ONT.

**FIOME.**—Silo filling is finished, and threshing is nearly all done. Many silos were not filled this year as the corn was very short. Silos are getting numerous. We all like to let our corn get as ripe as possible before filling. Potatoes are a fair crop. Apples are small and wormy. Good beef cattle seem to be scarce; half fat cattle bring low prices. Hogs are not to be had, unless one buys them from the farm. Some of the best men will have to do business, or raise their own cattle. Eggs are selling for sales for about 85 a dozen. Dressed poultry is selling for 70c to 81 a pair on the city market.

##### HURON CO., ONT.

**GODERICH.**—Silo filling is now almost finished. The corn was not as well matured as usual, but a good crop. No damage was done by frost, even to tomato vines till October 12th, so the corn was quite green when harvested. Within the last few years the corn acreage has greatly increased and new silos have been built. This season a large number of potatoes will be a good crop, the potatoes being very much larger than usual. Apples are mostly being sold as they come from the tree, and are being sold in the packing house for \$1 a bush for winter varieties. In some orchards the trees are loaded with thick clusters of small worthless apples, but these are the exception.

##### ESSEX CO., ONT.

**ESSEX.**—The corn crop in most sections of Essex and Kent has been a great success. There should be a good supply of seed for next season. The good providing proper spring are taken in selecting and storing the crop.—M.

## LIVE HOGS

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

THIS WEEK'S PRICES FOR HOGS DELIVERED AT FACTORY  
**\$7.85 a Cwt.**  
 FOR HOGS WEIGHING 160 TO 220 LBS.

### THE GEO. MATTHEWS CO., LIMITED

#### HOLSTEIN-FRIESIAN NEWS

Farm and Dairy is the official organ of the Canadian Holstein-Friesian Association, all of whose members are readers of the paper. Members of the Association are invited to send for publications in Holstein breeders' columns.

**COW TRANSFERS FOR AUGUST, 1909**  
 The publication of these transfers is paid for by the Holstein-Friesian Breeders' Association:

- Alexandra De Kol, Mary A. Steves to Creamland Bros., Cloverdale, B.C.
- Alice Botsford, D. Steves to A. B. Atkinson, Steveston, B.C.
- Alice Botsford, A. B. Atkinson to J. M. Steves, Steveston, B.C.
- Amelia A. James G. Moorhead to Wm. Higginson, Inkerman, Ont.
- Axie Posh Daisy, Lorne McCallum to B. E. Barr, Harrisville, Ont.
- Axie Posh Snowflake, Lorne McCallum to B. E. Barr, Harrisville, Ont.
- Beauty Queen De Kol, Wm. Johnson to W. A. Bell, Delta, Ont.
- Beauty's May Flower, R. E. Long to Wm. Johnson, Harrisville, Ont.
- Bessie Botsford, A. B. Atkinson to J. M. Steves, Steveston, B.C.
- Bliss Mariah De Kol, Ben Hoppe to William Stephens, Campbellford, Ont.
- Brucyke, Newton Brook, Ont.
- Cornelia Jewel, Cobos Hook to Arthur Walker, Beacomfield, Ont.
- E. E. Armstrong, Waterloo, George Roach to Countess of Waterford, Falmouth, N.S.
- Cress of Pine View Farm, Buni, Holmby to Roy Ferguson, Harrisville, Ont.
- Daisy Canary, Frank Ströbridge to Wm. Goudy, Falmouth, Ont.
- Daisy, Putnam, Ont.
- Deako De Kol, David Caldwell to John W. Purse, Ekron, Que.
- Darford Belle, E. O. Morrow to John Nelson, Darford, Ont.
- Darford Pat, E. O. Morrow to John Nelson, Darford, Ont.
- Dawn of Brooklet, George Lett to D. G. Macdonald, Invergrove, Que.
- Edwyl Floss, D. G. Morrow to Alex. Dour, Starny, Ont.
- Ella Pauline De Kol, William Suhring to G. W. Richardson, Harrisville, Ont.
- Bride to J. W. Richardson, Harrisville, Ont.
- Excelsior Lady De Kol 2nd, H. J. McCord to John B. Hiest, Putnam, Ont.
- Fanny Belle B. D. G. Platt to Roy Nelson, McDonald, Stoco, Ont.
- Favorite Florenz, Ben Hoppe to Thomas McConnell, Norwood, Ont.
- Flora Faustina, George A. Ferguson to

James W. Graydon, South Middleton, Ont.  
 Gnansterlander Mercedes De Kol, J. E. Herriot to E. E. Armstrong, Falmouth, N. S.  
 Gnansterlander Pieterje De Kol; Gnansterlander Wollila; Gnansterlander Wayne; J. A. E. Herriot to E. E. Armstrong, Falmouth, N. S.  
 Georgina E. James G. Moorhead to Wm. Higginson, Inkerman, Ont.  
 Germana M. Milot to Alexis Levasseur, St. Germain, Que.  
 H. G. Page, Shurbrooke, Que.  
 Inka Birko, B. Hurlbut to H. Vincent, Uxbridge, Que.  
 Jeanette Proena, Herriot Milot to Lucien Milot, Yamachouy, Que.  
 Johanna Mechthilde De Kol 2nd, J. E. K. Herriot to E. E. Armstrong, Falmouth, N. S.

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

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A few hours' work and a few dollars will put a modern and permanent culvert structure in place of a ranshackle bridge like this.



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PEDLAR PERFECT  
CORRUGATED  
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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 spring a leak. Send for sample and booklet and you will see why. State your probable needs and we will gladly quote prices.

Made of Special Billet  
Iron, Extra Heavy

In every 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 is 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. It is ABSOLUTELY RUST-PROOF.

Two men can ditch for, and lay more lineal feet of Pedlar Culvert in a day than four men can with any other culvert.



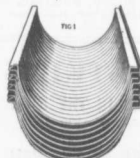
Can be readily laid by unskilled labor. Can't lay it wrong.

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—ENDURING—ECONOMICAL

This Shows How It Is Put Together



Pedlar Culverts are shipped in half-sections, nested—saving freight and making carriage easy in roughest country. Quickly and easily transported anywhere.

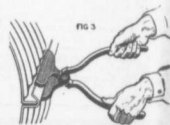
Fig. 1 shows the half-sections or semi-cylinders, nested one within the other for shipment. One of the ribs is a radial flange, the other a re-curved flange. Sections are assembled as shown by Fig. 2.

Note that the ribs are flat, and the curved part of the cylinder deeply corrugated. These ribs add vastly to the culverts' strength. Unskilled labor, with a simple



tool, quickly clamps the flanges together, making a triple-fold joint that is tighter and better than any riveted or bolted joint could possibly be.

Fig. 3 illustrates the simplicity of the Pedlar Perfect Culvert flange-lock—no bolts, no rivets, no makeshifts. This is the only culvert that is laid with broken joints—the overlap between ends comes in the centre of each length. No chance of leakage.



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