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FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

FEBRUARY 3, 1910.



THE MUCH MALIGNED GESE ARE WORTHY OF A PLACE ON THE AVERAGE FARM Poultry is especially adapted to farm conditions, and yields most satisfactory returns when given attention comparable with that bestowed on other classes of farm stock. It is of prime importance in that it thrives on feeds and by-products, much of which otherwise would be waste. Geese excel in this particular, since they subsist and do well on the cheapest rations. They are easily raised and they sell readily at attractive prices. A flock owned by Mr. John Young, Huron Co., Ont., is illustrated.

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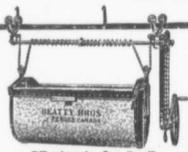
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It is desirable to mention the name of this publication when writing to advertisers.

Field Crop Prize Winners at Ottawa

The grain from the Standing Field Crop Competitions exhibited at the Ottawa Winter Fair was of a high standard and created favorable comment among the many farmers from the different sections of Eastern Ontario, who visited the Exhibition. A portion of the grain which won prizes was retained by the Ontario Department of Agriculture to be used for experimental purposes by the Agricultural Specialists in different sections of the Province. The balance is being shipped to the office of the Ontario Government in London, England, to be used for exhibition purposes.

The grain which did not receive prizes was sold by public auction in the Howick Pavilion, Ottawa. Not since the inauguration of these Field Crop Competitions three years ago were such crowds in attendance, the bidding so spirited or such splendid prices realized. The money received for this grain is being forwarded promptly to exhibitors. Mr. Eddy, of Ottawa, acted as judge and appeared to give excellent satisfaction. The following is a list of the prize winners:—1st, Melville Trewin, Blackstock, oats; 2d, T. Cassins, Whiteby, oats; 3rd, John White, Beachburg, oats; 4th, Peter Drummond, Keene, oats; 5th, Andrew McKay, Woodville, oats; 6th, W. J. Barber, Ameliasburg, oats; 7th, Wm. Lewis, Dunsford, oats; 8th, Jas. Leask, Taunton, oats; 9th, Garfield Kennedy, Bobcaygeon, oats; 10th, Thos. Cosh, Bobcaygeon, oats; 1st, David Malcolm, Nestleton, barley.—J. Lockie Wilson.

Economy of Round Dairy Barns

W. J. Fraser, Urbana, Ill.

The planning, construction, and arrangement of farm buildings do not usually receive the thought and study these subjects warrant. How many dairymen have compared a circular, 10-cow barn with the common rectangular building containing the same area? How many understand that the circular structure is much the stronger; that the rectangular form requires 22 per cent. more wall and foundation to enclose the same space; and that the cost of material is from 34 to 38 per cent. more for the rectangular building?

To the writer's knowledge, heretofore there has never been published a carefully figured out, detailed comparison of a properly constructed circular barn with the rectangular barn. The objections that have been raised to round barns have usually been made by people who have not gotten far enough into the subject to really understand the relative merits of the two forms.

Bulletin No. 143 of the Illinois Experiment Station, upon "The Economy of the Round Dairy Barn," has just gone to press. The bulletin is freely illustrated, and offers practical help to dairymen in the matter of barn construction.

It has been found by comparison and experience that the round barn has many advantages over the rectangular form. In order to compare the amount and cost of material in the round and rectangular barns, the figures given are based on the careful, detailed estimates of an expert barn builder. Two comparisons, figured on wood construction throughout, are made, in which round barns 60 feet with both plank and mortar frame rectangular barns containing the same number of square feet of floor space, respectively.

SUMMARY OF BULLETIN NO. 143

1. Round barns would be more generally built if their advantages were known and if the few which have been erected had been rightly constructed.

2. The round dairy barn offers greater convenience in storing, handling and distributing the feed.

3. In the circular construction, much greater strength is secured with less lumber.

4. Detailed account, with cuts showing how the round barn at the university was built.

5. Itemized statement of cost of a 60-foot round barn.

6. Brief descriptions with cuts and plans of several round dairy barns in actual use.

CONCLUSIONS

In summing up the data given in this bulletin, it is obvious that the advantages of the round barn are convenience, strength, and cheapness.

The round barn is more convenient because of the greater ease and fewer steps with which its feed can be gotten to the cows, owing to the central location of the supply, and because of the unobstructed mow, which reduces the labor required in mowing hay.

The circular construction is the strongest because advantage is taken of the lineal strength of the lumber. All exposed surfaces are circular, and withstand greater wind pressure because the wind can get no direct hold, as on the sides or gable ends of a rectangular barn.

In round numbers, rectangular barns require, according to their construction, from 34 to 38 per cent. more in cost of material than round barns of the same area and built of the same grade of material.

Improvements in Dairying

"The average quality of the cheese manufactured has been of an exceptionally high standard. There were fewer rejections of cheese by the buyers on account of bad quality than in any previous year," said Mr. C. P. Huber, Chief Dairy Instructor for Eastern Ontario, in presenting his report at the recent Dairymen's Convention in Belleville.

"The efforts we have been putting forth to put the dairy business on a more substantial and prosperous basis are beginning to show very encouraging results. Among the factorymen we find a greater enthusiasm and confidence in the work than ever before. The new factories that have been erected have an appearance of permanency about them that go to show that the factorymen feel confident that the future of the industry warrants the expenditures they have made.

"The foul smelling, dilapidated factories which used to be so common, will soon be things of the past, as the factorymen are making the required improvements about as quickly as their profits will allow.

Among the patrons, 1070 silos were erected during the past summer alone, and I believe that there were never so many new milk stands, with facilities for cooling the milk, erected in one season. Greater attention is being given to the selection and care of the dairy herds, and everything points to an increase of interest and further improvements on the part of those who furnish the raw material.

"Although less cows were milked last year than during 1908, the average production of milk was higher. In five years I expect that the average production of our cows will show an increase of 2,000 lbs. of milk a year."

The Eleventh Annual Convention of the Canadian Forestry Association for the consideration of forestry problems will be held in the Legislative Buildings, Fredericton, N.B., on Wednesday and Thursday, Feb. 23rd and 24th. It is expected that the President, Mr. Thomas Southworth of Toronto, will preside. Cheap rates have been arranged for with the railroads.

SOME OF THE FIRST PRINCIPLES OF POULTRY KEEPING

A. G. Gilbert, Mgr. Poultry Division, C.E.F., Ottawa, Ont.

Elementary Presentation of Some Truths Sometimes Little Heeded, but Which are All Important Means to Success. The Classification of Breeds.

OUR symposium at this time is in relation to some of the guiding principles of poultry keeping proper. Our study may be of an elementary nature but it mayhap be useful. The great poultry family is—as generally known—divided into land and water fowls. On the present occasion, we deal with the domestic fowl (*Gallus domesticus*). Fowls are divided into various breeds, some of which are sitters and others non-sitters. The former hatch their young, the non-sitters (when young and strictly pure) do not exhibit the broody instinct. They may be distinguished as follows:

Breeds that hatch out their young:—Among the best known of the sitting varieties are Plymouth Rocks, Wyandottes, Orpingtons, Brahmas and Cochins.

Non-sitting breeds:—The following are well known breeds of non-sitters: Leghorns, Minorcas, Andalusians and Hamburgs.

Breeds are again divided into varieties. What is the difference between breed and variety? A breed is a group or family of fowls embracing several varieties. For instance, take the family of Plymouth Rocks, just mentioned, and we find that they are divided into three varieties, viz.:—Barred, White and Buff. The Wyandotte family is composed of Silver Laced, White, Buff, Golden, Black, Partridge and Columbian varieties. The Orpington group has no less than 10 different varieties. The Leghorn family includes several varieties, the best known of which are White, Brown, Buff, Black, Dominique and Silver Duckwing varieties.

The Brahma, Cochin and Spanish breeds also embrace many varieties as do numerous other groups, but the instances given are enough for our purpose. It should be stated in order to be strictly accurate that several of the varieties—more particularly of the Leghorn group—are again divided into Rose comb and Straight comb varieties.

BREDS SUITED TO FARMER, FANCIER AND EXHIBITOR
Among the different varieties of fowl there is ample room for choice on the part of the farmer who is always our first consideration. We have no hesitation in recommending to the farmer one of the dual purpose varieties. What do you mean by the dual purpose fowl? By the dual purpose

fowl, we mean a fowl that is an excellent egg layer and a good market type combined, a fowl that is really good for both eggs and flesh; one which possesses the dual qualifications of egg layer and table fowl, so making money both ways. With such fowl in his possession, the farmer should make money from eggs during the winter and by hatching and rearing chickens in summer.



Breeding Stock of that King of Table Fowl—the Turkey

Turkeys in recent years have commanded prices that should make them a most attractive proposition. The photo reproduced shows Mr. Thos. Elliott, of Bayfield, Ont., and some of his stock.

We say to a farmer or indeed to any other poultry keeper, "There is a bird that is good for eggs but no good for table use." "Oh," he replies, "If I keep that kind of bird will I not be getting less value for my feed and care as compared with the dual purpose fowl?" And he would not be far wrong from his standpoint. The dairyman has difficulty in getting the milk cow and beef animal combined. Happily, in poultry keeping, by making choice of one of the Plymouth, Wyandotte, or Orpington varieties, it is quite possible to have egg layers and table fowl combined. If only eggs are desired, there should be

no trouble in being suited by choosing one of the Leghorn or Mediterranean varieties. The fancier or exhibitor who breeds for show purposes should find a field for his skill in any or all varieties.

A MUCH USED AND ABUSED TERM

I am not going to use a word that is frequently misused and that is the term "Utility." We frequently read of the "Utility breeds." What is utility? Is not a fowl that is a money maker, whether as egg layer and market type combined, or purely an egg layer, or it may be a show bird—for many of the latter make considerable money for their owners—a useful fowl? It need not follow that because certain breeds are money makers from an egg and flesh standpoint that other breeds should not also be useful as purely egg layers or even as a show bird. I fancy most of us would call any variety of fowls useful that made money for its owner. We must neither be narrow nor unfair. At this point, I do not wish to be misunderstood. I do not advise farmers to breed show birds, but I do certainly advise them to keep and develop fowls that are good egg layers and the best market types. But if the farmer desires to keep a variety that is good for egg laying only, or, for show purposes, by all means let him do so. My aim is to have him make whatever variety of fowl he has to pay well, as properly managed fowls will surely do.

SUITABLE BREEDS

I may be permitted to suggest the following order of choice:—

For farmers:—one of the dual purpose fowls, or, money makers for both eggs and flesh.

For farmer or fancier who desire eggs only,—one of the Leghorn or Spanish family.

For the show breeder:—What his inclination prompts in any variety, but he should be careful not to sacrifice the egg laying property in his struggle for the red ticket.

CROSSING DIFFERENT VARIETIES

Would you advise crossing different varieties of pure bred fowls? No,—although a great deal depends upon circumstances. No,—because the cross to be a true first cross, should be made every year. And this is tantamount to keeping two varieties. Then there is always the risk of the cross degenerating into nondescripts. And again for the very important reason that it should be the constant effort of every poultry keeper to develop or keep intact the good points of his fowls whether these points are egg laying and flesh combined, egg laying alone or for exhibition. This

work can only be satisfactorily accomplished with pure bred fowls.

As to mating a large pure bred male with a small mongrel hen or vice versa, with the object of increasing the size of the progeny, the object is certainly laudable but the result unsatisfactory for while you improve upon the size of the smaller parent bird, you also pull down the size of the larger parent. The offspring after all, is only a compromise. By all means keep to the pure breeds. See to it should you purchase fowls that they come from a strain of prolific layers, or if you buy eggs, that they have been laid by birds that are equally good layers. After all, it is really a matter of strain.

STRAIN ALL IMPORTANT

And what is strain? Strain is the development and perpetuation by careful selection and breeding of the best points of any variety you may choose. Having procured fowls of a good strain, it is up to you to retain, improve upon, or mar the excellence of that strain. If you have one of the Rock, Wyandotte, Orpington, Leghorn or Minorca varieties see to it that it is of the very best strains. And if you cannot get such a strain as you wish, set to work and make it. It makes me very tired when a man says he has poor egg layers, or fowls of poor egg strain, or fowls of poor market type, or, it may be "eternal sitters." Why, get rid of the birds of such characteristics or breed the bad points out of them! The late Philander Williams originated and for years advertised a non-setting strain of Light Brahmas. They were advertised as the "Autocrat" strain of non-setting Brahmas. Now if Philander Williams could bring about such a revolution—for Brahmas are noted as sitters—by persistent and careful breeding, other poultry keepers can surely bring about desirable strains. It is surely evident that careful and skilled effort should be made in order to do away with the drones, which are present in almost every pen, and which are surely detracting from the profits made by the good layers. Trap nests will give you mechanically correct results.

OTHER MATTERS

Above all, the different varieties to suit our cold winter climates should be hardy and the cotton front, or house of similar construction is a means to this end. But our study for this time is long enough.

Where Ducks are Profitable

"It is just a question in my mind whether there is anything in ducks for the farmer if he raises them for the ordinary market," said Mr. T. J. Cole of Durham Co., Ont., to an editor of Farm and Dairy recently. "Many farmers, however, make money out of ducks by forcing them and marketing them while young. Their eating qualities are the outstanding qualities of this class of poultry. The most profitable means of disposing of ducks is when they can be sold for breeders.

"The Pekin is my favorite breed. They are the largest ducks and I always aim to select a big strain of the breed.

"Ducks must be fed while young. They will not forage like a goose. I feed whole oats principally. When fitting them for the shows, corn is added to their ration. They seem to grow better on corn; of course of course is better for fattening.

"Ducks do not need a warm place in winter. I provide them with a shed. They only require shelter from storms, the same as the goose.

"I keep whole oats in a feed box before my ducks all the time. A nearby stream to which they have access furnishes them with water. Oats are the staple food for the ducks at all times. Chopped stuff is provided for the ducklings.

"The point in duck raising for profit is to have pure bred stuff and to dispose of them for breeding purposes. When marketing them in the or-

dinary way, one must force the ducks and sell them while young. To let them run all summer, as does the average man, they will eat their heads off.

"This much can be said of both ducks and geese, that you never see a sick one. They are not like hens in this respect, so there are no losses to reckon on from that score."

The Natural Means of Hatching

Geo. Robertson, Carleton Co., Ont.

From the standpoint of the fancier, I recommend the hen for hatching purposes. For a farmer or a poultryman raising chickens in a commercial way to be placed upon the market, the incubator is most useful. Only with the machine can he hatch his birds early enough and in sufficiently large numbers. For raising breeding stock or exhibition stock, the hen is to be preferred. The machine will hatch some good breeding and exhibition birds but in my experience it will not give the same average of good ones as we secure from the old mother hen.

After getting the eggs for setting, the first thing to do is to get the nest ready. The nest is the most important point in the business.



In Close Touch With Nature

Chickens are a constant delight to children. The boys and girls may well be allowed to interest themselves in poultry, in the care of which they will acquire valuable training. The photo was taken on Mr. Rod. Young's farm, Carleton, Ont.

The biggest mistake made in setting hens is in making the nest altogether too small. I use a box that is plenty large enough. Fourteen inches square is about the right size. Exercise care in forming the nest. I put earth in the bottom. A shovelful of loam is sufficient. This should be shaped with the hands, not made too deep in the centre, then a handful of straw should be placed on top.

CONFINE HENS WHILE SETTING

I always confine my hens when they are setting otherwise there is bound to be trouble. I place a piece of burlap over the top and down the sides of the nest. The nest being ready, I take my setting hen and place her on the nest in the evening, covering her up with the burlap.

I always look after the setting hens at night making this chore the last work of the day. If the hen does not go back on to the nest, I put her back. I dust each hen with insect powder when she is set, again at the eighteenth day. A dust bath is always provided which the hen can go to while off the nest.

It is a great mistake to use too many eggs under the hen. It is O.K. late in the summer but is N.G. in February. The hen in turning the eggs pushes them one by one to the outside. The eggs are thus chilled in turn and when the chicks do come, if there are any, they will not

possess that vitality that would have been theirs had they received sufficient heat and not have been chilled in the winter time or in the cold days in spring. I always cover up the eggs with a cloth when the hens are taken off. This cloth is removed when the hen is ready to go back. While corn exclusively is furnished the hen while setting.

There is a big difference in setting hens. The best results will be secured from those hens with the hottest bodies. This can be discovered by placing the hand under the hen. Those that feel the hottest are sure to hatch the most chicks and those chicks are sure to possess the most vitality. A small hen is generally hotter than a larger hen and for a small number of eggs the small hen will invariably give good results. The big hen, being generally loose feathered, is better for taking care of the chicks.

It is well to leave the chicks in the nest with the hen just as long as they will stay there. I always try to set several hens at the same time. The eggs can then be tested out and it is possible to reset one or two of the hens. As the chicks are taken from the nest, I go over them all carefully and cull them. I kill all that are deformed in any way as well as those giving indications of being unsuitable to breed from after they are grown.

Rations for Winter Layers

H. B. Webster, Perth Co., Ont.

My system of winter feeding hens (100) is as follows: Early in the morning 10 pounds of wheat is fed in heavy litter. An hour later all the skim-milk they will drink is given them. In the middle of the forenoon they get mangels, and clean water with the chill removed. At noon I feed a mash consisting of four quarts of hot, curdled buttermilk, mixed dry with a mixture of equal parts by bulk of bran and ground mixed grains. On mild days when hens are out, less of this is fed.

At four in the afternoon the evening feed is given. This consists of 10 to 12 pounds of mixed grains—oats, barley, wheat, peas, and corn when available. This is fed so it may be easily picked up. This is supplemented with about five pounds of dry mash fed in small boxes attached to the wall. The advantage of feeding this is that it is unpalatable, but the hens will eat it rather than go to roost hungry. If all is not eaten, the hens first stir in the morning—the laying ones—finish it. I would not risk having mash before them all the time.

Clover hay is given occasionally for a change. Broken green bone is given when it can be produced, and coal ashes is supplied in abundance. This method of feeding costs about 35c a day, but when eggs are selling for 35 and 32 cents a dozen, it pays double over, even in January.

Feeding Chickens.—A common mistake prevalent among poultrymen is to feed chickens before they are 36 hours old. The yolk sack of the egg is contained within the young chicken's body, it gradually dissolves and furnishes nourishment for the first 36 or 48 hours. An addition of other food often causes constitutional disorders in the shape of diarrhoea and thus increases the mortality rate.—Miss Mary Yates, Guelph, Ont.

Those weeds, the seed of which is blown and spread by the wind, such as the sow thistle and wild cotton, should be dealt with by legislation. Where farmers do not cut such weeds the law should have inspectors appointed to cut or pull the weeds in grain as well as in pasture fields and charge the expense to the owners of the fields as is done in Manitoba.—Wm. F. Payne, Peterboro Co., Ont.

Photos of farm buildings, farm houses and rural scenes are always welcome for publication.

Geese as Profit Makers

T. J. Cole, Durham Co., Ont.

Geese are the cheapest fowl to raise. Throughout the summer they do not require feed at all, simply allow them to run in the pasture field. I never feed a gosling and I take no trouble whatever with them after they get so that they can run around and keep up with the old ones. The geese run with the hogs in the winter time and subsist on mangels. They keep in good shape in winter on mangels alone, and in summer, pasture is their sole diet. They are simply allowed to forage. The Toulouse (Grey English) is the best farmer's breed of geese. The Embden is the second choice. The Toulouse are very prolific and lay from 30 to 40 eggs each.

"I put the first eggs under hens. This is necessary as the Toulouse geese cannot cover all the eggs she lays. After the goslings are hatched, they need to be looked after for a week or two, else the old goose will run them too much. After they once get so that they can trot around, they are all right. Until they reach this stage I yard them in by putting up a few boards a foot wide. This will effectually detain the goslings. The old one will stay right there with them. In case of rain, the goslings must be looked after as wet on their backs before the feathers come is fatal.

The raising of geese is worthy of consideration when prices are such as they have been in recent years—\$1.00 and \$1.65 for any little bird. When one can sell stock for breeding purposes he is that much better off. I do not raise so very many, for when I have a ready market for all goose eggs at 50 cents a piece, I let them go rather than raise them.

Why Some Fail With Poultry

J. Wesley Bean, Welland Co., Ont.

It is altogether too true that those who often have the best opportunities to succeed in any undertaking, still, for certain reasons fail. It is undeniable that many farmers do not raise poultry profitably. The reasons are many but we shall mention only a few.

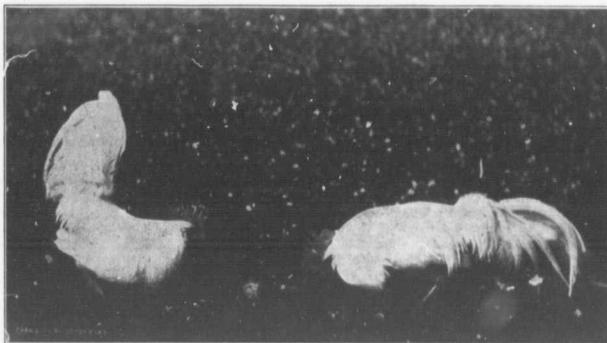
Lack of Accommodation:—Poultry, to do well, must be comfortably housed. This is essential and herein many farmers fail. The quality of stock will not make up for lack of adequate and proper protection from the elements particularly during the severe seasons of the year. The poultry house should be roomy, draught-proof, and well lighted. And it should not be forgotten that fowls need plenty of fresh air.

Errors in Feeding:—That method of feeding is best which compels hens to work for their living. The active scratching bird is always the most profitable. Grain should always be scattered in litter several inches deep. Except on rare occasions, shelled corn should never be fed. The proper way to feed corn is to feed it on the cob, roasted, with some of the grains well charred. Charcoal is easily made from corn cobs and is highly relished by the fowls. Apart from the solid grain fed, hens need bulk in the shape of vegetables and roots, short-cut alfalfa and bran. They do best when these are always before them. In feeding, it is always well to remember that variety is better than any one kind of grain or feed no matter how good that may be. A change of diet is beneficial and is oftentimes exactly what a hen needs. Plenty of grit, oyster shell and pure water should naturally always be provided.

Poor Stock:—Granted proper quarters and excellent, intelligent care, still no one need expect to succeed with poultry unless the stock be good. It is with fowls as with other stock—blood tells and blood pays—other things being equal. Good money paid for good, well-bred birds is always well invested. Of the many pure-bred varieties of poultry now in the Standard, no one should find trouble in finding his favorite breed. The favorite breed is always the best breed. Or, should

he prefer a cross, he can easily, by wise and careful mating, produce the cross desired. But in the writer's opinion there is very little to be gained and much to be lost by crossing as thus

powder. When the young birds appear I keep them in the nest for at least two days. At the end of this time the mother is quite anxious to come off and the young ones ready for their food.



Get Off the Place; It's Mine.

we obtain neither the one nor the other while the various pure breeds supply every want.

Management and Care of Turkeys

Mrs. B. Kearns, Middlesex Co., Ont.

Some years' experience have taught me that to insure success in raising turkeys, the breeding hens and male bird must be of no blood relation.

During the late winter months the turkeys should be fed lightly, the only grain given should be oats, this to be thrown in some straw so they will have to scratch for it. Stronger grain produces too much fat. The barn is the best place to house the turkeys. On no account should they be allowed to live in the hen house.

In spring I provide nests where I wish them to lay and hatch; if possible the nests are located on the ground. When the turkeys commence to lay I gather the eggs every day, leaving an ordinary hen's egg in the nest. The eggs should be packed in oats and kept in a cool place and turned occasionally.

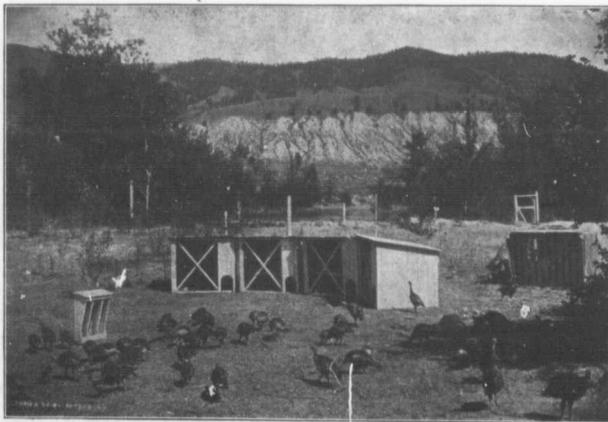
During the hatching season keep the hen as quiet as possible. About a week before the hatch is due I dust the nest and hen well with insect

This first meal consists of bread, soaked in new milk with a very small quantity of poultry pancrea and a dash of black pepper. I keep the poult enclosed in a board pen for a few hours or until they learn to follow their mother at which time I give them the range of the orchard. I always keep them well supplied with fresh water. For the first two weeks about four or five meals a day is necessary. Then I feed less frequently and begin to substitute oat meal and cracked wheat for the bread.

After they have "shot the red," young turkeys are as a rule very hardy. They will live on a little wheat, grain and anything they can pick. They are more healthy if allowed to roost in the open air or in a shed. Confinement of any kind is detrimental since it always causes discontent.

A most essential thing is to dust the young birds individually when about 10 days old with insect powder, also the mother; another dust bath at about the age of three weeks is about all that is necessary to keep them free from the vermin, which if allowed to exist on them means sure death.

The Bronze variety I consider the best and is the breed I am raising.



The Young Birds on a Turkey Ranch in the Kamloops District, British Columbia

Turkeys do best on high dry land and when given free range. They cannot be raised successfully in confinement. The location illustrated is an ideal one for turkeys. Photo courtesy Dept. of Agri. B. C.

How to Wean Young Pigs

D. D. Gray, Farm Foreman, C.E.F., Ottawa

Little pigs should be encouraged to eat at as early a date as possible. To encourage them part of the pen should be fenced off to allow the little ones, but not the sow, to get into the enclosure. Place in the enclosure a flat trough and put a little warm milk or diluted whole milk in it. The milk should be changed often to keep it from souring until the little ones begin to drink out of the trough well. A little meal should then be added to the milk.

At the end of seven or eight weeks they should be ready to wean. During the last week of the nursing period, the sow should be gradually cut down in her ration to cease the milk flow. The little ones should all be taken off at once and let back again the next day and then again in a couple of days to drain out the sows mammary glands.

The practice followed by many, that of leaving a couple of pigs on the sow for a few days, often causes trouble as they are so accustomed to nursing the one teat that they will not change, and of course this does more harm than good, as it keeps the sow in milk to the detriment of the remaining and untouched glands.

Profits from a 25-Acre Farm in Poultry, Fruit and Honey

J. W. Clark, Brant Co., Ont.

It is a well known fact that far too many of the farmers in the province of Ontario are endeavoring to work more land than can profitably be handled. If the same amount of labor and fertilizer, in most instances, were put on one-half the amount of land more money would be realized therefrom.

If our farmers would specialize in poultry, commercial apple growing, or honey, they would soon realize that any one of these branches were profitable. A combination of the three work well together, and if managed properly return a good revenue.

The figures given below are the approximate returns from my 25 acre farm for 1909:

Poultry, (200 breeders kept) eggs sold for hatching in season.....	\$ 595.00
Eggs sold for market.....	125.00
Stock sold for breeding purposes.....	875.00
Poultry sold for market purposes.....	75.00
	\$1670.00
FRUIT	
500 barrels apples at \$1.25 on trees.....	\$ 625.00
300 baskets grapes at 15 cents.....	45.00
1 acre strawberries.....	150.00
1½ acres raspberries.....	95.00
1 acre tomatoes.....	100.00
Plums, pears, currants, etc.....	45.00
	\$1060.00

HONEY

2 ton clover No. 1 at 9½ cents.....	\$ 380.00
700 lbs. alfalfa and buckwheat mixed at 8c.....	56.00

\$436.00

Besides this I have had most of my living. I keep three horses, two cows, and pigs for home use.

Secrets of Successful Incubation

W. Williams, Northumberland Co., Ont.

I have had considerable experience with fowl both in this country and in others. The first two things that make successful incubation sure are a good machine and good eggs. The most important thing is the selecting of the eggs. Never put extra large ones in and always select the whitest and lightest colored eggs for the incubator. Rich brown eggs are 30 per cent. hard-

er in lining than are light colored ones. This is a secret I have always kept to myself, but perhaps the community at large would like to try it. I have tried it many times and know the benefits of it.

When the eggs have been 12 days in the machine, and have been tested, take a basin of water heated to about 105 degrees and every other day until the 18th day, as you cool them, take the fore finger and wet the eggs straight around the middle and you will find this is a thing worth the trouble.

Marketing British Columbia Eggs

M. A. Jull, B.S.A., Poultry Expert, B.C.

The egg is at its best when just laid. The longer it takes to place it in the consumer's hands, the less it is worth. Eggs when prepared for market should be spotlessly clean. They should be packed in clean cases; absolutely clean fillers



Strictly New Laid—Quality Sells Itself

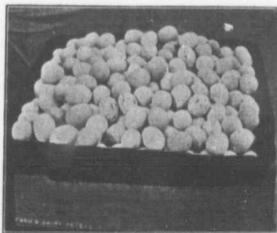
The egg crate as sent out from the creamery at Duncan, B. C. The eggs are candled, numbered and packed in individual dozen cases

and cardboard should be used. The quality of the eggs should be unquestionable.

A large part of the profits in poultry keeping depends on the marketing of the products. The poultryman must be a good salesman as well as a good raiser of poultry. He must have good markets to begin with, or know how to create them. The nearer the producer can come to the consumer in selling his products the higher will be the prices realized and the less will be the expense of marketing. The producer should strive to eliminate the "middleman" and thus receive his due share of the profits. The largest profits must come from superior marketing and from special market advantages in selling eggs and other produce.

SPECIAL ADVANTAGES

A special market advantage has been introduced into British Columbia at Duncan where a co-



Country Eggs as Delivered at the Grocery Store

These are in marked contrast to those put up at Duncan, B. C. and they realize a correspondingly lower price. It pays to market eggs clean and graded to size. Photos, courtesy Dept. of Agri., B. C.

operative egg station has been established. This is only one instance of the many co-operative establishments which might be advantageously introduced into this and other provinces. There are a number of creameries that could adopt the system of marketing eggs as used at the Cowichan Creamery at Duncan. The eggs when marketed in this way bring top prices and through this sys-

tem of co-operation the expenses of marketing are greatly reduced.

The egg industry of Denmark has been enormously improved owing to the application of the principle of co-operation to the collecting, grading and marketing of the eggs. The great progress of Denmark during the past 50 years may be at once attributed to the wonderful system of education available for its people, and to the extent to which the principle of co-operation has been adopted in every part of the country and in every phase of its national industry.

THE PURPOSE OF THE "EGG STATION"

There has recently been formed a Poultry Producers' Association in Eastern Canada, based on the co-operative system. Prof. F. C. Elford of McDonald College is doing much to improve the poultry industry throughout Ontario and as Secretary of the Poultry Producers' Association he says:—"We do not hope at first to revolutionize or change the whole poultry industry, but we do hope to remedy certain existing conditions, which are greatly to the disadvantage of the industry as a whole." This is also the purpose of the "Egg Station" at Duncan and it is hoped that many more similar stations will be in operation in the near future.

At present thousands of dollars are lost annually in British Columbia through bad eggs. The majority of these losses arise through the importation of eastern eggs, consequently it is of vital importance that the poultrymen throughout British Columbia produce sufficient quantities to supply the home trade. Finally, to solve the problem, we must have, first, a campaign of education among the egg producers and second, a system of buying eggs that will guarantee a price according to quality.

The Value of Feed Records

C. F. Whitely, Ottawa, Ont.

Without a knowledge of the cost of feed per cow, the milk record stops just short of its logical outcome. Does a cow consume \$25 worth or \$45 worth? Or, what net profit does each cow bring? If crops are sold on the market the cash return and the profit are easily calculated, but if the crop is marketed through the cow as milk, where does one stand? Is each cow worthy your attention and thought, or is she simply a makeshift?

Records enable one to ascertain the profit made by each cow. Some are apparently not capable of giving any profit at all. Large numbers are left to browse contentedly in the residential section of many communities, they need moving up to the business district. The extraordinary variations in this respect suggest the need of vigilant study of individual performance. The business like cow, the one returning a large profit, is the kind needed on every farm. She is to be found in increasing numbers only where careful records are kept.

A WIDE VARIATION

From feed worth one dollar, five cows in a herd gave milk worth 70 cents, 89 cents, \$1.20, \$1.49 and \$1.70, or a variation from a bad loss up to 70 per cent. return on the investment. Many farmers loan money and expect good interest, but with cows it seems different, feed is loaned and no returns looked for.

A storekeeper would be running on a loose principle if he said, "I have sold a few eggs of nails, a chest or two of tea and a good many pairs of boots and have taken in plenty of cash this year. A lot of goods have gone out on credit and I didn't bother keeping track of who got them, some will come in and pay up. Possibly some won't but I don't lose much." It is precisely so with cows. Too many cows have had extended credit, their bills are long overdue, some are regular "dead beats" and will never pay. Feed records give most valuable information

regarding the capacity of each cow in the herd, at the same time enabling one to feed economically by adjusting the character and quality of the feed to individual tastes and requirements with the object of obtaining the largest possible net profit. A cow may produce milk at a cost of 90 cents, or \$1.25 or even \$2.00 a cwt., but another in the same herd may give her owner the benefit of such a low cost as 70 cents, or 63 cents, or even 50 cents. This is where records are of immense value.

More Sheep and Fewer Weeds

T. G. Baynor, B. S. A. Seed Branch, Ottawa.

With the decreased number of sheep kept on Canadian farms there is an increase in the number of weeds. Especially is this true of those weeds which flourish on the roadsides, in fence corners, along ditches and in other waste places on the farm. Since the year 1900 there has been a steady decrease in the number of sheep kept in the Province of Ontario, according to the Bureau of Industries report for 1907, and it is quite possible that similar conditions have prevailed in the other provinces. Such a state of affairs should not obtain, as sheep are proverbial for having the golden hoof and mean so much to the land in keeping up the fertility of the soil as well as in keeping down the spread of noxious weed life.

There are very few weeds indeed that sheep will not tackle and turn into loth wool and mutton. But if some weeds are allowed to grow and produce seed, as, for instance, the members of the bur family, they greatly depreciate the value of the wool where sheep are kept.

SHEEP ON ROADSIDES.

It has been my observation that where sheep have been allowed to pasture on the roadsides that very few weeds escape destruction, and of what few there are rarely any of them mature seed. Where the herd law is enforced I would favor its relaxation to allow sheep to pasture on the roadsides even if it should cause some young men on their way home from visiting their sweethearts some inconvenience in being suddenly awakened from a snatch nap by the wheels of their buggies occasionally striking a sheep or lamb that was putting up for the night on the dry place which the road provides.

It would be better were the sheep herded on some field during the night, where their droppings would count for more than they do on the road or roadside. Sheep usually prefer the knolls of a field, too, for lying upon at night, and these are most in need of just such fertilizers as sheep leave. Their droppings, especially the liquid parts, are much richer in nitrogen than is the manure from either cattle or horses. The stable manure which they make in a cool shed during the winter is of the very best.

Why could not more of the weed seed nuisance of the West, that too frequently finds its way in feed grain to the East, be utilized at Port Arthur or Fort William, say by feeding the weed seeds to fattening sheep and lambs to make wool and mutton, rather than to bring these seeds East to make extra work for our now altogether too busy farmers? Let us as farmers agree upon keeping more sheep and less weeds.

Bridle Breaking the Colt

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

Many a colt has his mouth injured for life by his first experience of the bridle. The careful trainer will always see to it that the colt's lips and gums are not bruised and broken by the bit when the bridle is put on for the first time. Many men do not consider how important it is to gradually harden the colt's mouth before placing any restraint on the bit. It should not be taken for granted that because we can place a bit in an old horse's mouth and put considerable pressure

on the reins without causing the animal any pain that a colt will stand the same treatment. The old horse's mouth has been hardened by the pressure of the bit for years, while the colt's is as tender as the mouth of the man who is training it, and I venture to say that he would object to having an iron bar put in his mouth with reins attached and pulled first to one side and then to the other as a careless trainer might see fit.

When a bridle is put on a colt for the first time it should be quietly adjusted and the animal let go at once, care being taken to put no pressure on the bit; turn the colt in a yard or box stall and leave him alone for the space of half a day. Then take the bridle off, being careful not to frighten nor hurt him. Repeat this operation every day for a week. At the end of the week



The Kind that Sell

Daisy of Boreland (imp.) (\$9,527), vol. 29, s., by Dunflower, and her foal of 1909, by Prince Priam (imp.) owned by Mr. T. Baker & Son, a prize winner in the Special Good Farms' Competition for Durham Co., Ont.

the colt will have become used to the bit and will feel perfectly at ease with the bridle on. More than that, his mouth will have become considerably hardened by the daily friction of the bit, and the colt will never have been hurt by the bridle, his lips will not have been bruised nor his gums torn, as too often happens to colts which are bridled for the first time.

The writer has seen a bridle put on for the first time and the colt make little or no resistance, but after being jerked from side to side by a thoughtless trainer till the blood ran from its mouth it had such an unpleasant experience of the bridle that when an attempt was made to put it on the second time the creature resisted to its utmost. It had been so punished by its

first experience that it had seen all of a bridle that it wanted and looked upon this most necessary part of the harness as an instrument of torture—all this because of the lack of a little consideration.

A Few Facts About Bee-Keeping

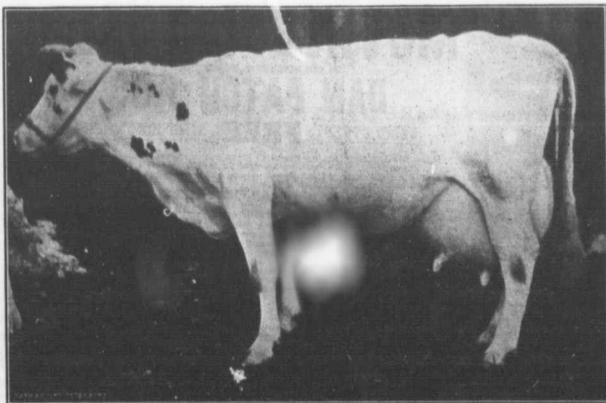
D. Anguish, Middlesex Co., Ont.

Few people realize the importance and possibilities of the bee-keeping industry in Ontario. Those who are exceedingly engaged in it generally fail to comprehend what an important factor agriculture is as a whole, or the importance of the honey bee in collecting nectar and storing it to produce a commercial product. The all-wise Creator in placing the drop of nectar in the flower intended that it should attract the insects and bees for the purpose of fertilization. Man has taken advantage of those conditions and is using the bee to convert this wise provision into an article of commerce, and although the total value of the bee product is small as compared with the value of the product of many other branches of agriculture, it nevertheless has an importance which should not be overlooked.

Few other pursuits have made greater progress during the past half century than has bee-keeping. Before that time bees in this country were kept in box hives and, as a result the average per colony was very small. With the movable frame hives and our studying the nature of bees, and with our other inventions coupled with careful study, bee-keepers have become better educated and the industry has advanced to its present important place.

In addition to the revenue derived from the bee in the production of honey, we must not lose sight of the great value of the honey bee as a pollinating agent. Other insects, of course, aid in this way, but the honey bee occupies a unique position. No other insect appears in such vast numbers at this very important time in the spring when their agency is so much needed to fertilize orchard and small fruit blossoms.

The bee-keeper is now at his leisure, as far as manual labor is concerned, as he has his bees all housed for the winter. But his mind is not at rest, for if he is a progressive bee-keeper, he is busy preparing for next season in ordering sections, hives, pails and a great many other things that are needed. It is to every bee-keeper's interest to have everything in readiness for the honey harvest.



Daisy B. De Kol 2nd, Pauline (2'623, C.H.B.) (114256, H.F.H.B.)

A first prize winner at Eastern fairs last fall, exhibited as a dry cow. She is a great producer, giving 71 lbs. of milk a day at 5 years old, and is a member of the Maple Grange Herd, owned by M. E. Woodworth, Haverhill, Mass.

Opportunity Returned

At the request of a number of our readers, who were disappointed in not having secured seed of "O. A. C. No. 21" barley, Farm and Dairy has again completed arrangements whereby seed of this great barley can be secured in return for new subscriptions to Farm and Dairy. The offer is:

Two Bushels "O. A. C. No. 21" barley to only four New Subscriptions to Farm and Dairy.

One Bushel for Two New Subscriptions.

Subscriptions to be taken at \$1.00 each in both cases.

The barley will be delivered f.o.b. Brantford, Ont.

Now is the time to take advantage of this opportunity. Show this copy of Farm and Dairy to your friends. Tell them that it is but one of the Eight Special Magazine Numbers of Farm and Dairy for this year. Secure their subscriptions, and send them in to:

Circulation Department
FARM AND DAIRY
PETERBORO, ONT.

Bedford District, Que., Dairy-men Meet

The district of Bedford, Que., Dairy-men's Association met in annual convention at Cowansville last week. The speakers at the convention were Mr. Geo. H. Barr, Chief of the Dairy Division, Ottawa; Mr. J. H. Grisdale, C.E.F.; Ottawa; Mr. John Fixter, Farm Superintendent, Macdonald College; Dr. H. T. Gussow, Botanist of the C.E.F.; Ottawa; Mr. J. C. Cole and Mr. E. D. Eddy of the Seed Branch, Ottawa. The meetings were well attended and spirited discussions took place. The addresses not reported elsewhere in this issue will be given later.

The officers elected for the coming year were: Pres., H. S. Foster of Knowlton; Sec.-Treas., P. C. Duboy, Cowansville; directors, for Mississauga, Messrs. W. W. Martindale, Stanbridge East; John Butler, Sweetsburg, and Andrew Ruitter of Cowansville. Directors for Bromo, H. S. Foster, J. E. Millar of Sweetsburg, and William Curley of Sutton. Directors for Shefford, Messrs. H. L.

Lawrence, Edward Dunlavy and J. A. Hayes of West Shefford and Sheffington.

Winter Eggs

Prof. W. R. Graham, O.A.C., Guelph

There appears to be a feeling as if there was more or less of a hidden secret in connection with the securing of eggs in winter. Farmers generally do not have many eggs to sell when prices are high and if they get their pullets laying by January first, they feel that they have done well. As far as I am aware there are no secrets in this proposition; but I am free to admit that there is more than the simple throwing down of the feed. Housing, breeding and feeding are factors that have been discussed time and again, they are almost thread bare.

At the request of the editor of Farm and Dairy I give below a few figures from our birds, not of the entire flock but of those birds that are on experiments where the food is weighed and we know the amount of food consumed. We do not weigh clover hay or roots but the amount consumed is not large and therefore would not add much to the cost of maintenance.

THE RECORD OF TWO FLOCKS

We shall consider the record of two flocks, each of 23 April hatched pullets, and two males to the pen, or, a total of 46 pullets and four males. The house is not warm and the small holes through which the birds pass to the yards have not been closed but two days this winter. What is more, these holes face the North-west; this is certainly not a warm house.

The birds, when taken from the farm fields in September, were then about ready to lay. They had been raised in colony houses and had free range. We feed corn, wheat and oats in equal proportion in the litter or straw on the pen floor. This is fed night and morning. In each pen is a grain bin which holds about 75 pounds; this is refilled when empty. This saves the trouble of weighing each feed and I believe is more accurate for yearly records, though it is likely to be in excess for monthly records for the reason that the bins are not weighed at the end of the month and whatever grain may be left over is charged. The only time the grain in the bin is weighed is at the end of the experiments, I give this explanation

for the reasons that those pens are really charged with more food than they had consumed up to Jan. 1st, 1910. I can not add January records until the month is completed.

Eggs laid by 230 pullets in December 545, November 572, December 561 or a total of 1679.

Food consumed, mixed grains, 900 lbs., dry mash, which was fed in hoppers, 200 lbs., in front of them, 87 lbs., This mash was rolled oats as they are rolled for horse feed. Sour milk as drink 1,059 lbs.

Cost of food—380 lbs. mixed grains at \$1.50 a cwt., \$5.70; 87 lbs. of oats at \$1.50 a cwt., \$1.31; 1,059 milk at 20 cents a cwt., \$2.12; total, \$18.79.

Revenue—1679 eggs at 36 cents a dozen, \$50.37, or a profit of \$31.58.

We sold the October eggs at 30 cents, the November eggs at 40 cents and most of the December eggs at 50 cents a dozen; I am therefore considering a flat rate of 36 cents a dozen to be a reasonable one.

\$100 PROFIT FOR DECEMBER

During December we had 418 pullets on experimental work. These were raised as the above 46 but most of them were not as old, some were

Sold Him Out

Last year I placed a two inch advertisement in four issues of Farm and Dairy advertising seed oats for sale. I received 70 replies, and got 27 orders, ranging all the way from two to 100 bushels. I sold over 800 bushels, and received orders which I was unable to fill. It pays to advertise in Farm and Dairy.—A Forster, Markham, Ont.

on feeding test, but in the main the foods would be much the same. They represent Plymouth Rock, Rhode Island Reds, Orpingtons and Leghorns. These birds were hatched during April, May and June. There were 100 Leghorn pullets, about half of which were hatched May 10 and the balance June 7th, therefore some were rather immature. The 418 pullets and the cockerets for which numbers 33 consumed as follows:

Mixed grains, 1,900 lbs. at	\$1.50 a cwt.	\$28.40
Dry mash, 417 lbs. at \$1.50 a cwt.	6.26	
Sour milk, 1,965 lbs. at 20c a cwt.	3.93	
Total	\$38.40	

The pullets laid for this month, 4,120 eggs, which were worth 42 cents a dozen, if not more, or a cash value of \$144.20.

This shows a profit of over \$100. The hay and roots fed at noon would not exceed \$3 in value and possible one dollar's worth of grit might be added to the feed bill.

Corn for Leeds Co., Ont.

That is the best kind of corn to plant in this part of Ontario near Brockville, for silo and for husking. Would you advise King Philip; have read about it?—C. C. W. Glen Elbe, Ont.

For silo use equal areas of Longfellow, White Cap, Yellow Dent and Leaming. For husking use Quebec Yellow, King Philip, Compton's Early, North Dakotas, White Flint or Longfellow.—J.H.G.

There is not another such an important requirement of a shaker or a pig pen as ventilation. I would advise every farmer to read the article on ventilation by Mr. J. H. Grisdale, Agriculturist, Central Experimental Farm, Ottawa, which is found in the Live Stock Association report for 1909, page 176.—John Riddle, Peterborough Co., Ont.

Renew your subscription now.

ANNUAL POULTRY CONVENTION

AT THE

ONTARIO AGRICULTURAL COLLEGE
GUELPH, CANADA

FEBRUARY 8, 9, 10

This is the most important Poultry Institute held in Ontario during the year. Persons interested in Poultry should make a special effort to be present.

The speakers on this occasion will be—

JNO. ROBINSON, Editor of Farm Poultry, Boston, Mass.

W. H. CARD, Manchester, Conn.

PETER WHITE, Pembroke, Ont.

JNO. CLARK, Cainsville, Ont.

F. C. ELFORD, St. Annes, Quebec.

VICTOR FORTIER, Experimental Farm, Ottawa.

Prof. W. R. GRAHAM, O. A. College, Guelph.

We have made arrangements with the Grand Trunk and Canadian Pacific Railways for Reduced Rates to our Short Courses. In buying your ticket for Guelph ask for a Single Fare First Class ticket, and secure from the ticket agent a Standard Certificate. This Certificate, when signed at the College, will entitle you to reduced rate for the return trip.

MOVING PICTURES

DAN PATCH 1:55

OF THE WONDERFUL WORLD CHAMPION

ABSOLUTELY FREE TO STOCKOWNERS



It is a new invention that you can carry in your pocket and show your friends instantly, day or night, either once or a hundred times and without a machine, certain or light. The original is the first successful moving picture ever taken of a World Champion Horse in his wonderful hour of speed.

A MILE OF 2400 MOVING RACE PICTURES OF DAN PATCH 1:55

Each every picture shows the King of all Horses. Creation as plainly as if you stood on the track and actually saw Dan Patch 1:55 in one of his Thrilling Speed Exhibitions for a full mile, 2400 distinct moving pictures taken of Dan in one minute and fifty-five seconds—twenty-one pictures every second, all secure from the wind and tire track from the back seat of a high power automobile. You can see Dan shake his head to let his driver know that he is ready for a supreme effort and when you can watch every movement of his legs as he flies through the air with his tremendous stride you can see his driver diamond and look at his watch while thousands of people cheer around you, you can see his care taker force his way through the crowd and throw a beautiful woolen blanket over Dan to prevent his catching cold and then you can follow him up the track before the Muddy Cheering Multitudes. As a Study of Horse Motion it is foot of the entire mile. When first shown to the public this marvelous picture caused people to stand up all over the theatre calling "Come on Dan"—"Come on Dan."

This Remarkable Moving Picture is the Most Realistic and the Most Thrilling ever presented to the public. I have taken a part of the Original 2400 Wonderful and Sensational Pictures and made them into a Newly Invented Moving Picture that you can carry in your pocket and show to your friends at any time, day or night. It does not need a machine, it does not need a certain, and it does not need a light.

MY NEW MOVING PICTURES MAILED FREE TO STOCKMAN, postage prepaid, IF YOU ANSWER THESE THREE QUESTIONS

1st. In what power did you see my Moving Picture Offer? And, How many head Each of Horses, Cattle, Sheep, Hogs and Poultry do you own?

2nd. How many acres of land do you own or how many acres of land do you rent?

3rd. How many acres of land do you own or how many acres of land do you own or how many acres of land do you own or how many acres of land do you own?

If you are not a STOCKWEEPER and WANT THE MOVING PICTURES SEND ME 25 CENTS FOR POSTAGE. For Packing, etc., in Silver or Stamps and I will mail you this Wonderful Moving Picture of Dan Patch 1:55, The Fastest Horse Ever in the World His Driver and his Driver.

Address - - INTERNATIONAL STOCK FOOD CO., E. B. SAVAGE, Proprietor, TORONTO, CANADA. 49

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

AYRSHIRE BREEDERS PLEASED AND OPTIMISTIC

The Ayrshire breeders of Canada have reason to feel much pleased as a result of the annual meeting of the Association held in Toronto on Wednesday of last week. The reports presented showed an increase in membership of 134, or a total membership of 630, being the greatest membership in the history of the Association. The financial statement showed that the receipts had increased during the year by hundreds of dollars, leaving the substantial balance of \$622.02 cash on hand.

NEW RECORDS.

The report that probably caused the most enthusiasm, however, was the announcement that Canadian bred cattle during the past year had established new Canadian and American Ayrshire records in the produc-

tion of milk and butter. The reports presented showed an increase in membership of 134, or a total membership of 630, being the greatest membership in the history of the Association. The financial statement showed that the receipts had increased during the year by hundreds of dollars, leaving the substantial balance of \$622.02 cash on hand.

FAVOR RECKONING COST OF FEED.

Believing that in the dairy tests held at the winter fairs are unfair to Ayrshire cattle, in that they do not go into the consideration of the cost of feeds the members of the Association decided unanimously to see if the tests cannot be so amended as to include the cost of feed. On motion, the officers of the Association were instructed to confer with the other cattle breeders' associations in regard to having the rules governing the dairy tests at the winter fairs so amended that it will be possible hereafter to take into consideration the cost of the feed consumed by the cattle in the test for at least three days before the test starts as well as while the test is in progress.

While this matter was under discussion it was pointed out that the fair buildings are seldom heated long enough in advance to make it possible to have the cows on hand long before the fairs start as well as necessary if the cost of the feed is to be considered. Last year the Ayrshire Breeders' Association granted \$50 towards the prize money offered at both the Ottawa and Amherst Winter fairs and \$57 to the Guelph Winter Fair. On motion of N. Cahoon, of Harrietsville, seconded by Wm. Hunt, of Woodside, the Association decided to double these grants provided that the management of these fairs will arrange to take the cost of feed into consideration.

Farm and Dairy was again ap-

pointed the official journal of the Association and will be sent during 1910 to all the members of the Association. The members of the Association were urged by the officers to send more articles for publication in Farm and Dairy during 1910.

THOSE PRESENT.

The members and directors present were: Messrs. W. W. Ballantyne, Stratiord; Wm. Stewart, Menie; Jas. Boden, Danville, Que.; Geo. McIntyre, Sussex, N. B.; Wm. Hunter, Maxville, Ont.; W. H. Fran, Cedar Grove, Ont.; A. Kains, Byron; N. Dymont, Clappison, Ont.; A. S. Turner, Ryckman's Corners; Wm. Thorne, Lynedoch; N. Cahoon, Harrietsville; H. C. Hamill, Loyal, Ont.; W. F. Stephen, Huntingdon, Que.; J. McKee, Norwich; Robt. Ness and R. R. Ness, Howick, Que.; James Bryson, Brysonville, Que.; Hector Gordon, Howick, Que.; J. J. Woodside, Hothsday, Ont.; J. R. Ross, Streetsville.

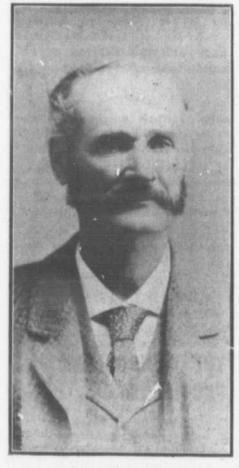
THE PRESENT'S ADDRESS.

President W. W. Ballantyne presented an unusually interesting report. This report will be published in full in the Ayrshire Breeders' Department of Farm and Dairy. Breeders were urged to send nothing but the best class of animals to Western Canada, where there is a large market for good Ayrshire stock. While in Scotland last summer, many magnificent Ayrshire cattle were seen. The Record of Performance test and the Co-operative Cow Testing Associations were commended. The members were urged to take the action later finally decided upon, viz., to endeavor to have the cost of feed taken into consideration in the dairy tests at the winter fairs.

Few associations have such an efficient secretary as the Ayrshire breeders in W. F. Stephen of Huntingdon, Que. During the past year, Mr. Stephen visited practically all parts of Canada and portions of the United States as well. The information thus gathered made his report most valuable and interesting. It will be published in full in the Ayrshire Department of Farm and Dairy. Mr. Stephen reported a great enquiry for knowledge concerning Ayrshires from people not now breeding them, more sales being made, more new herds being established, more Ayrshires winning first honors in competition with other breeds, a higher class of exhibits at the prominent shows and a greater interest in the Record of Performance Test, and claimed that these were signs showing an awakening interest in Ayrshire cattle. Reference was made to the hardiness and easy keeping qualities of Ayrshires as well as to their ability to rustle and do good on poor roughage, making them economical milk producers.

Ayrshire breeders were becoming more enthusiastic and throwing off the timidity caused largely by lack of knowledge of the possibilities of Ayrshires, which has hindered them from booming the breed in the past as its merits have justified. Mr. Stephen reported that at the Alaska-Vancouver Exposition, where the dairy test was conducted in the Model Barn, the Ayrshires returned a profit of \$10.63; Jerseys, a profit of \$27.71; Guerneys, a profit of \$11.34, and the Holsteins a profit of \$1.63. Reference was made to the large ex-

(Continued on page 15)



Jas. Bryson, Brysonville, Que., President of the Canadian Ayrshire Breeders' Association for 1910.

tion of milk and butter. Primrose of Tangleweild (15,945), owned by Woodside Bros., Rothsay, Ont., in the Record of Performance Test, produced last year 13,836 lbs. of milk testing 3.90 per cent. fat, yielding a total of 520 lbs. of butter fat. This is a new Canadian record for both milk and fat.

The three-year-old cow Canadian Princess (20,108), owned by A. S. Turner, Ryckman's Corners, produced 13,377 lbs. of milk testing 4.29 and yielding 521.91 lbs. of butter fat, making not only a Canadian but the best known world's record for Ayrshires of that age for both milk and fat. The two-year-old Ayrshire, Jemima of Springbank, also owned by Mr. Turner, beat the record for butter fat with a record of 8,839 lbs. of milk testing 4.47 per cent. fat, equal to 461 lbs. of butter. It was further announced that the Ayrshire cow Annie Laurie, owned by Mr. N. Cahoon, of Harrietsville, and bred by Messrs. H. & J. McKee, of Norwich, Ont., would probably beat both the Canadian and American tests for milk production. The test for this cow will be completed on February 5th. It was anticipated that her record would be about 15,085 lbs. of milk, with an average test of 4 per cent. Should she succeed in making this record, she will beat the American record for milk production by a few pounds. It was further announced that cows now



The only way to arrive at a correct conclusion as to which roofing is the best investment is to compare their cost per year of service.

Wooden shingles, of medium grade, in most parts of Ontario, cost at least \$1.50 per square—100 square feet of surface.

29c. per Square
They may last twelve years. Chances are they will be rotted through long before then. However, let us divide \$1.50 by 12, that gives us their cost per year of service, which is 23 1/2¢ per square per year.

Ready roofing is an even poorer investment. The best does not last more than 10 years. At \$1.50 per square, that cost per year is 15¢.

Slate is easily twice as good an investment as wooden shingles. A slate roof will last 50 years. At \$1.00 per square the cost per year figures out as 1¢.

Better Than Slate

PRESTON Safe-Lock Galvanized Steel Shingles are an even better investment than slate. They will at least last as long as slate.

All slate roofs, you know,

have galvanized steel valleys, huds and ridges—the most exposed portions of the roof. That proves good steel roofing is as durable as slate.

9c. per Square

But PRESTON Shingles only cost \$4.50 per square. Allowing for 55 years of service their cost per year is 8c per square, as against 14c for slate, 23 1/2¢ for wooden shingles, 15¢ for ready roofing.

PRESTON Safe-Lock Shingles should last 100 years. They are the only shingles made and galvanized to pass the British Government's Salt Test. Shingles that will pass this test are practically everlasting. Yet PRESTON Shingles easily pass this severe test.

As PRESTON Shingles are made on improved automatic machinery, the locks are accurately formed, they fit together quickly.

Lay Them Faster

A man and a helper can lay 10 squares of PRESTON Safe-Lock Shingles in a day, whereas 4 or 5 squares would be a good average with wood shingles and other

Prepared roofing, another poor investment

metal shingles. If you have a large surface to roof that saving of time and labor means a good deal to you.

Remember, it takes half again as long to lay wooden shingles as PRESTON Shingles. Twice as long to lay slate.

Besides, wooden shingles and ready roofing cost something for repairing and repainting every three or four years. You save all this expense with PRESTON Shingles.

Less Insurance

Also, the insurance rate for barns covered with wooden shingles is far higher than for PRESTON

Shingles—often as much as 50 per cent. more. But before making any decision as to the kind of roofing you will buy, send for our new booklet, "Truth About Roofing."

Booklet Reward

This booklet contains information of real value to anyone who has a building to roof. It explains PRESTON Safe-Lock construction fully and contains a copy of our Free Lifetime Guarantee. We shall mail the booklet, but we will send it FREE as a reward to all who will cut out and mail the coupon to us.

Send for it to-day, or you'll forget it.

METAL SHINGLE AND SIDING COMPANY, Limited

HEAD OFFICE, DOVER ST., FACTORY, PRESTON, ONT. BRANCH OFFICE AND FACTORY, MONTREAL, QUEBEC.



Please send me your new booklet, "Truth About Roofing." I am interested in roofing, and would like complete information about PRESTON Safe-Lock Shingles.

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PRESTON SAFE-LOCK SHINGLES

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HORTICULTURE

Meetings in Niagara District

Since the annual meeting of the Niagara Peninsula Fruit Growers' Association that was held in St. Catharines on Jan. 13, and which was reported in recent issues of Farm and Dairy, the directors and transactors, considerable business. The following officers were elected: Pres. Murray Pettit, Winona; vice-presidents, Robt. Thompson, St. Catharines, J. W. Smith, Winona, Geo. C. Brown, Pelham; H. St. Clair, Fisher, Queenston; sec-treas., Carl E. Fisher, St. Catharines. Committees on statistics, transportation and fruit distribution were appointed.

Fruit institute meetings will be held as follows with subjects named, dates to be arranged later: St. Davids, spraying; St. Catharines, transportation, distribution and marketing; Jordan, peaches and berries; Beamsville, apples, pears and grapes; Winona, spraying; Fonhill, peaches.

Cutting Big Limbs from Trees

"How soon will it do to cut big limbs of apple trees, some limbs being as much as eight to ten inches in diameter. We want to have the trees low enough to be easily sprayed for the control of the San Jose scale and other insect pests. Some of the trees are nearly 40 feet high. Do you think it safe to cut them, or would the cutting off of such large limbs be likely to kill the trees?"

The above was contained in a letter recently received by Professor H. A. Surface, State Zoologist of Pennsylvania. As this question is of direct interest to many Canadian fruit growers, they will be interested in Professor Surface's reply, as follows:

"This can be done at any time while the trees are dormant. Paint the stubs with oil paint, made as thick as for painting a building. It is safe to cut parts of the tops out of large trees. Cut them back and force them to throw out new limbs farther down. However, I do not think it best to remove all of the living top of an apple tree at one time. I should certainly prefer to cut it off at the upper branches rather than at the lower, and thus bring the top down. It will in part invigorate or renew the tree to prune it."

Pruning Peaches, Plums and Apples

Jos. Tweedie, Wentworth Co., Ont.

Prune pears according to the previous season's growth, to the amount of fruit buds in sight and to the presence or prospect of fire blight. In our own practice, we first cut out any existing blight well below the affected parts, using a five per cent. solution of carbolic acid for disinfecting the tools continuously and also the cuts to avoid carrying the infection from diseased to healthy parts. Then we

start a gang, consisting of a competent foreman and three men mounted on two single fruit wagons, one on each side of the row, the foreman overseeing and directing the work and at the same time pruning his share of the tree. He corrects mistakes, and quickly teaches the men with him the "why and how" to prune into proper shape the varying forms and conditions of each tree.

We may approach a tree with very little new growth, and set too full of fruit buds. Such a tree probably would set so much fruit (if left unpruned) that the whole crop would be so far below normal or good size that all would be unsalable. We thin this crop by pruning back to reduce the fruit buds fully 30 to 40 per cent. Then we thin freely to give light and

Pruning in the Niagara Fruit District

Note that a wagon is used on each side of the row for the men to stand on. Row on left is partly pruned, row on right, unpruned.

air, and to shape the tree generally.

We may come to the opposite conditions and find a tree with strong, thrifty new wood with probably few fruit buds. In such cases, we pursue the opposite course, thinning only for light and air, and as much fruit as we can get by leaving all the buds possible. If we pruned this tree as we did the former, we would get an over-growth of wood and but little fruit. Every fruit spur would grow a shoot one to two feet in length, and the tree would set no more fruit buds for two years or more. Such a condition of growth invites fire blight.

All intermediate conditions of growth and fruit buds occur between the two extremes aforementioned.

They should be pruned with the same purpose in view, that is, to balance the tree for a fair crop of good fruit. Peach and plum trees are pruned by the same rules except that heavy pruning does not hinder fruit bud setting, and that we prune much more severely, heading back nearly all the twigs so as to get large fruit by leaving only 50 per cent. of the fruit buds. Even a small branch overlooked in pruning will produce small fruit.

We find that the use of wagons is a great advantage over ladders. All our tools are carried on the wagons, which can be moved quickly from tree to tree. We use small fruit decks with one board out in the centre to vary our height as needed. Quiet horses are used, with blankets under the harness. We gain 95 per cent. in time by the use of wagons.

Likes Its Tone.—I am pleased with the practical tone of Farm and Dairy. To much space in some of our agricultural papers is taken up with discussions on matters of pure bred stock, which while no doubt they set a valuable standard, they are of little interest to the rank and file of farmers.—Cecil Swale, Bruce Co., Ont.

Practical Horticulture

Fruit growers and gardeners will find much to interest them in the February issue of THE CANADIAN HORTICULTURIST, published at Peterboro, Ont. Spraying is given special prominence. The value and use of the lime-sulphur wash, Bordeaux mixture and other spraying materials is told by competent writers. One of the leading articles is entitled, "Spraying Ten Acres of Apples: Cost and Results." Valuable information for practical fruit growers is given also in articles on pruning apple trees, growing dwarf pears, spraying vineyards, grape culture, planting fruit trees, peach orcharding, growing such trees on plum roots, raising poultry in orchards and many others.

with the subjects of azalea culture, street tree planting, growing bulbs in the house, sweet peas and roses.

With its new cover design and its many illustrations THE CANADIAN HORTICULTURIST is a magazine that is welcomed by all persons that are interested in horticulture for profit or for pleasure. The subscription price is very low, being only 60 cents a year or \$1.00 for two years. Write for a sample copy.

Farm and Dairy deserves my support for the stand it takes on taxing improvements, dressmakings, etc.—G. K. White, Concord, Ont.

Renew your subscription now.

READ THIS

Dairymen who are using THE EASY RUNNING CAPITAL SEPARATOR realize its superior features, but to those that do not know THE CAPITAL we would ask them to try it and be convinced. In offering THE CAPITAL to the Canadian Farmer, we are convinced of the fact that we are offering him the lightest running separator on the market, a feature alone giving it preference. The small bowl and simple gearing found only in the CAPITAL accounts for this. We use the disc system of skimming, but so devised and applied as to insure ease of washing and perfect skimming.

Write us for full particulars.

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Extra First Early First Early Second Early Main Crop Late Main Crop

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Grower of Seed Peas, Beans, Potatoes, Oats and Barley

The Tireless Accurate Iron Hand

You can operate the Aspinwall No. 3 Potato Planter without the assistance of another man. The Aspinwall No. 3 not only saves you the extra man, but also plants one-third faster than machines requiring two men. The hand that handles the seed on the Aspinwall No. 3 is the iron hand. Unlike the human hand, it never gets tired. It drops 99 per cent. good.

You can use different sizes of seed and vary the distance of planting without requiring change of pickers. No other planter can compare with it in accuracy or handle as large a range of seed.

Send for our catalog M. I. We are largest manufacturers of potato machinery in the world, and we can give you valuable facts on profitable potato culture.

The Aspinwall Mfg. Co. Aspinwall

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No. 3 Potato Planter

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ORCHARD AND GARDEN NUMBER

MARCH 3rd, 1910

OUR NEXT SPECIAL ISSUE will be our Orchard and Garden Number. A well kept orchard and garden is a source of pleasure as well as profit to the farmer. This issue will come just at a time when it can be of greatest service in helping the farmer to make the most out of this department of his farm. Articles will be published dealing with selection of varieties, planting, fertilizing, cultivating, pruning, spraying, insect pests, planting and care of the farm garden, and a host of other subjects about which our readers wish to secure special information just at this time. It is going to be a good issue.

WATCH FOR IT

POULTRY YARD

The Incubator on the Farm

F. C. Elford, Macdonald College, Que.

The arrival of the catalogues issued by the manufacturers of incubators reminds one that the incubation season will soon be here. Already correspondents are asking advice about trying, whether a farmer can operate a machine and if so what is the best machine to buy, and so on.

I am not going to attempt to tell a man what machine he should buy and which not to buy any more perhaps than to say that so-called cheap machines are very few "cheap." There are several good makes of incubators on the market, any of which will do good work under most conditions, and these are manufactured by reliable firms. As a rule the low-priced machines guaranteed to be just as good as those costing twice as much are made to sell.

NOT FOR SPECIALISTS ALONE.

It has been said that incubators are as yet too complex for the average farmer, that it is only meant for the specialist. From what I have seen, I am of the opinion that the farmer who operates one or two machines can get just as good results as the man who makes a specialty of it. In many cases his hatches are better. This, however, may be accounted for by the condition of his flock more than in the operation of the machine. In fact, some of the first directions that manufacturers should insist upon are to have the breeding stock healthy and vigorous, given plenty of fresh air and exercise, that they be matured, free from lice, fed well on dry food without stimulants, mated with good, vigorous males and only normal eggs that have not been chilled used.

If such directions were carried out we would propose to operate the machine one year before we expected to set it and better results would be obtained, there would be less mortality among the chicks, and less blame would be attached to the incubators.

CONDITIONS FAVORABLE TO SUCCESS.
Most of these conditions can be obtained on the farm better than at any other place. Where should hens be healthier than on the farm, where there is unlimited range during the summer and a good shed in which to scratch fine days in the winter? It is the farmer who will use the incubator and it is to the farm we must look for the future of the poultry industry.

A Canadian firm of incubator manufacturers last spring instituted what it called "The Peerless for Profit Poultry Club." To the users of its incubators and brooders it sent a circular stating that the firm was putting aside the sum of \$510 to be given in prizes. Prizes were to be given according to the success of the operator. The report asked a number of questions such as name of operator, number of hatches, number of eggs put into machine, number fertilized, number of chicks hatched, num-

ber alive at certain date, any sickness among chicks, any among parent stock, does poultry pay, suggest anything that might help the industry.

REPORTS OF SUCCESS.

There were over 100 of the reports that were complete and the writers of which were entered in the competition. Every province in the Dominion was represented, Ontario leading with 34, Saskatchewan and Alberta coming next, both having 18 to their credit, Manitoba 17, Quebec and Nova Scotia each four, British Columbia three, New Brunswick two and Prince Edward Island one. Thirty-three of the competitors were women, 11 coming from Ontario, eight from Manitoba, seven from Saskatchewan, four from Alberta and two from British Columbia.

The average percentage of the total eggs hatched was 84.5, while the total alive by the first of July was 89%. By provinces the best hatch was in Prince Edward Island (only



"Tolan's" Fresh Air House and a Flock in the Victoria District, B. C.

Poultry raising is growing more and more in popularity in British Columbia. The average farm of the province is not large, and in many cases only part of the land is cleared, much of that being in orchard. Under such conditions, the poultry proves especially profitable, and is a sure source of income.

one competitor) with 84%, after which come Ontario, Nova Scotia and Alberta with an average each of 66%, New Brunswick and Saskatchewan 60%, Manitoba and British Columbia each 55%, Quebec 51%. In livability of chicks Nova Scotia came first with 98% and Saskatchewan lowest with 79%.

The best individual record was from Saskatchewan, where Jacob Whiting had a hatch of 92.6 and 93.8% of the chicks alive. Women came out ahead in Ontario, Manitoba and British Columbia.

A REMARKABLE PROOF.

The whole competition was a most remarkable proof that the incubator could be successfully run on an average farm.

That some farmers are wide awake and know what the industry requires to make it more successful was evidenced by the suggestions offered. Most of them wished for better means of marketing produce. Many suggested some form of co-operation.

This, however, does not belong to the subject and may be treated again.

The Breeding Pen

Wm. A. Henderson, York Co., Ont.

It is well to select as a breeding pen about a dozen hens. These should be mated with a cockerel. Choose those birds with the best records as layers.

Provide them with a house free of draughts and facing a position to the sun. Give plenty of material for scratching and dusting purposes. The nests and perches may be arranged to suit the number and class of fowl you have.

Those birds that are to be used as breeders should not be forced to lay as early in the season as the general layers. It has been shown that where hens lay many eggs during the early winter, those laid during the hatching season sometimes produce meagre chickens. With this fact in view I

ELM GROVE POULTRY FARM

Elm Grove Farm, Lehigh, Silver Gray Dorkings, Light Brahma, Barred Rocks, Mammoth Bronze Turkeys, Embion Geese. Some splendid birds for sale. Catalogue Lehigh Cockerels and Pullets; also in Hohen Bucks. Write your wants. J. H. RUTHERFORD, Box 67 Gates East, Ont. Member of the Lehigh Club of Canada Telephone 7 on E. Holton.

242 EGG STRAIN (Kulp)

Brown Leghorns from the biggest birds and 100 years of big eggs up to 82 oz. per doz. Best business breed in America; hardy, handsome and profitable; lay earliest and longest. Best orientation for guaranteed fertile eggs at \$2.00 per 15. Circulars free.

C. MURRAY SMITH, Brantford, Ont.

PLYMOUTH POULTRY ROUP CURE

Is a sure cure for that deadly disease the roup. Price 50c a package. Little in the drinking water does the trick. Write for the agency for your town.

T. A. LISSAMAN.

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50 VARIETIES OF PURE BREED

chickens, ducks, geese and turkeys, Northern raised, hardy and fine in plumage. Prize winners at World's Fair, Winnipeg, Minneapolis, Chicago, Boston and New York. Lowest prices on stock eggs, incubators and brooders. Large illustrated catalogue mailed for fee postage. C. M. ATWOOD, Dept. 9, Dundee, Minn.

We Will Replace Free

all infertile eggs from our yards of Pure bred heavy laying strains. Write in every pen. Eggs new. Chicks in flesh. Satisfaction Guaranteed. Prices right. Catalogue free to you.

BRANT POULTRY YARDS, Brantford, Ont.

Russell Farm White Wyandottes

have won at the three leading shows this season. Golden Gate, Toronto, Ontario Winter Show, and the Eastern Ontario Fair, Kingston, Ontario. 2 thirds, 5 fourths, 5 fifths and sixths. Stock for sale guaranteed to please.

JOSEPH RUSSELL
1308 Queen Street East Toronto

PARTRIDGE WYANDOTTES

My winnings at the best shows in Canada, and in the strongest competition, demonstrate the superiority of my strain of this magnificent breed of poultry.

With seven entries at Guelph, the greatest show in America, and possibly the strongest class of Partridge Wyandottes ever brought together, I won 1st, 2nd, 3rd, 4th and 5th Pullet, also special for Best Shaped Hen, special for best colored female, special for Cockerel with best leg color, special for best collection, special for exhibitor winning most prizes, and the Canadian Partridge Wyandotte Club's Special each for the best Cocker, best Hen and best Cockerel. At the Western Fair, London, Ontario, I won 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, 28th, 29th, 30th, 31st, 32nd, 33rd, 34th, 35th, 36th, 37th, 38th, 39th, 40th, 41st, 42nd, 43rd, 44th, 45th, 46th, 47th, 48th, 49th, 50th, 51st, 52nd, 53rd, 54th, 55th, 56th, 57th, 58th, 59th, 60th, 61st, 62nd, 63rd, 64th, 65th, 66th, 67th, 68th, 69th, 70th, 71st, 72nd, 73rd, 74th, 75th, 76th, 77th, 78th, 79th, 80th, 81st, 82nd, 83rd, 84th, 85th, 86th, 87th, 88th, 89th, 90th, 91st, 92nd, 93rd, 94th, 95th, 96th, 97th, 98th, 99th, 100th, 101st, 102nd, 103rd, 104th, 105th, 106th, 107th, 108th, 109th, 110th, 111th, 112th, 113th, 114th, 115th, 116th, 117th, 118th, 119th, 120th, 121st, 122nd, 123rd, 124th, 125th, 126th, 127th, 128th, 129th, 130th, 131st, 132nd, 133rd, 134th, 135th, 136th, 137th, 138th, 139th, 140th, 141st, 142nd, 143rd, 144th, 145th, 146th, 147th, 148th, 149th, 150th, 151st, 152nd, 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TEN THOUSAND PEOPLE

are making poultry pay
by The **PEERLESS** Way

You Can Do as Well
as any of them
We'll Help You



Let us ship you this and trust you for it. We pay freight and give you a 10-year guarantee

Hatches Best Everywhere

Stansleigh, Alta.

I bought 200 eggs in the store at Lloydminster and then put them in a lumber wagon and took a five day journey to my homestead. Then put Incubator under canvas tent where the temperature ranged from 59 degrees at night up to 95 when the sun was shining in the day time, and after all this I hatched 114 good, healthy chicks that are doing well. I think your Peerless Incubator about as near perfection as is possible to get.

Yours truly,
B. H. TWEDDLE.

With reference to the Peerless Hot Water Incubator, I may say that I am pleased with it and the results secured in connection with the work at our Provincial Poultry Plant here. There are a large number of them in use in and around Edmonton, and I have heard exceptionally good reports of their hatching results. Your incubator will certainly do good work with good eggs and proper management.

Yours truly,
A. W. FOLEY,
Poultry Supt., Dept. of Agriculture, Edmonton, Alta.

Chesdale, Alta.

My Incubator has proved a wonderful success. I had sold enough of my June hatch already to meet my payment and have a nice lot of poultry left. I am thinking of purchasing another incubator—I have met with grand success this summer and I know that I have the Best Incubator in this settlement. There are no less than four different machines in my neighbourhood—some of them larger ones than mine—but I have raised more chickens than anyone around here. Out of 143 fertile eggs I hatched 130 chickens. I know different persons who intend buying your Peerless Incubator since they have seen my success—probably they will place their orders by this time. Yours truly,

(Sgd.) MRS. FRANK TIFFIN.

Sandy Point, N.S.

I started the machine with 100 eggs. At the end of ten days I tested out twenty-eight and opening the shells I found every one infertile. This left 72 in incubator; of these 61 came out fine healthy chickens, and the balance added in the shell or were too weak to get out.

E. HIRST,

Brighton, Ont.

From my second hatch with the 120 Peerless Incubator I got 36 strong chicks. I am more than pleased with the machine.

MRS. TINSEN.

Valuable Facts and Figures
About Poultry **FREE**
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LEE Manufacturing Co., Ltd. PEMBROKE ONTARIO
155 Pembroke Road CANADA

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

More than ten thousand users of Peerless Incubators in Canada alone—and every one of them satisfied. Satisfied that the Peerless is the machine for practical hatching. Satisfied that poultry-profit is easiest made The Peerless Way. Fully satisfied that the Peerless people not only make good with their hatching and brooding outfits, but actually do give the most valuable kind of help to their customers—help in rearing the chicks after they are hatched; help in feeding them right; help in bringing them quickest to market size or to egg-production; and help in finding a cash buyer who pays highest prices for Peerless poultry-products.

About The Only Business That Isn't Overdone

Poultry-raising, The Peerless Way, is one business there is plenty of room in—plenty.

It pays better for the money and work it takes to run it than anything else you can do on a farm. It can be made to pay in any part of Canada, on a small scale or a big one. (One Peerless customer will sell 200,000 fowl this year—twenty-five CAR-LOADS!

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NOW**

Lads and lasses of twelve are getting good money out of it. It is the one business, and The Peerless Way the one way, that calls for very little capital and no expert knowledge. You certainly ought to learn all about it quick. Ask us to tell you all the facts—they probably will make you open your eyes to the real profit in poultry.

Your Credit Is Good With Us—Use It Now!

You need not let your means limit your ambition. You, or any other honest person, can have a Peerless Outfit on credit; terms that make it so easy to start poultry-raising you never feel the outlay at all. And, when you do start, you are entitled FREE to the advice and help of our Board of Experts—men who developed The Poultry Yards of

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NOW**

Limited, the largest poultry-farm in Canada and one of the most successful in the world. These men will help you over the rough spots; will tell you in detail just what to do and what not to do in order to make a go of poultry-raising for profit. Their knowledge and experience is at your command free of all cost to you. This alone is worth dollars.

We Prepay The Freight To Save You Bother

You need not even pay the freight on the Outfit—we pay that for you, just to save you bother. We do more than that—we will agree to find you a spot-cash buyer who will pay the highest market prices for any poultry or eggs you want to sell. You needn't worry, you see, often finding a market. So, no matter

**START
NOW**

how far away from a town you live, you are sure of a good customer for all you raise. Sit down NOW and ask for the full details of this rare offer. Use a post-card if you haven't a stamp handy. Don't wait any longer. You run no risk at all, first or last, and the profit is waiting for you. Write for the book. Address:



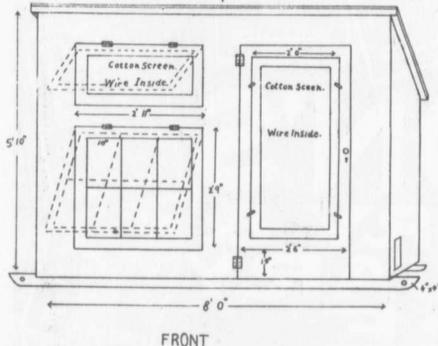
A Colony House Suitable for Every Farm

C.F.W.S. Wellington Co., Ont.

To rear chickens successfully, six things are necessary and should be observed, keep them warm, dry, clean, busy and hungry, and keep them growing. There are several ways of doing this and one of the best is to keep them in colony houses. Much

gether, draughts and cold can be excluded, and if put facing south the house will be practically always dry, even in winter.

The most suitable time to build the house is now during the winter so that it can be ready for use in early spring. It will best accommodate six hens with broods of about ten chickens each, and the birds can be set in the house to hatch out their eggs.



has been said for and against such houses and in the end their number increases and the use of them is becoming more general. In large poultry plants small houses do not answer very well, but for the average farmer with a small stock of birds kept for utility purposes, and also for the farmer who tries his hand at pure breeding, it is hard to find a more useful and effective, and on the whole a cheaper system of housing his birds than on this plan.

If a man intends to set up a poultry plant and to work it as a means of living, such a system as this would not pay as well as a continued line of houses. But on the average farm where the poultry lead a comparatively uncared for existence the greater part of the year, small detached houses are excellent and soon pay for themselves through the increased advantages offered to the birds.

CHEAPLY AND EASILY MADE

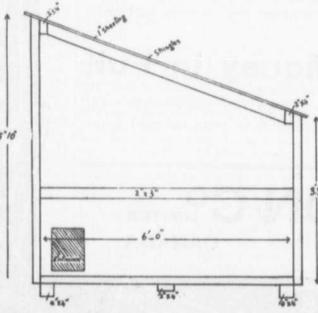
The sketch reproduced herewith more or less drawn to scale, of a small house, and its advantages will be clearly seen and readily understood. It is easy to make and needs only the boards and scantlings that are found around almost all farms. It permits of alteration to suit circumstances and every man who deserves the name of farmer is capable of adjusting convenience to suit himself. Even if it should be necessary to buy the lumber, the cost will not be more than \$10 at the most.

The sketch needs but slight explanation. The runners below the house permit of its being drawn easily by one horse to any position, and it is advisable that the situation be changed from time to time, so that the birds may be able to find greater facilities for picking their food. By nailing the boards close to

If an incubator be used, as many as 100 chickens can be housed as soon as hatched; a brooder should be used to keep them warm.

ADVANTAGES OF THIS HOUSE

The advantages of this house are obvious. It is easily and cheaply built and can be readily moved. The birds can pick up the greater part of their living through the summer and can roam around getting plenty of the exercise so necessary to their health; they will remain out practically all day in the clean, pure air, returning to the house for the night. It is not necessary to keep up the scrupulous attention to cleanliness and regular supplies of food which are essential on most poultry farms. No fences need be put up as around a barnyard. The birds become vigorous and healthy, they grow rapidly and lay well. Particular breeds can be kept apart on different parts of the farm, and should disease attack the flock, the healthy birds can at once be isolated.



END.

In winter the colony house may be moved close up to the barn and should be packed around the bottom outside with about two feet of horse manure, which will keep it warm. Inside the house, shavings and chopped straw and hay should be laid to the depth of one foot and the grain should be thrown among the litter so that the hens will have to scratch vigorously all day for their food. Properly

treated in this way they will lay right through the winter. All hens lay up fat for the winter and the accumulation of fat prevents egg-laying. Overcome this by giving the birds fresh air and plenty of exercise and they will lay all winter.

Skim Milk for Poultry

The following questions concerning milk for poultry have been asked by Mr. C. H. Smith, King's Co., N. B. Answers that follow each question are given by Prof. F. C. Elford, Macdonald College:

- 1.—Is separator milk good for poultry? Yes.
- 2.—What quantity should we feed 25 hens daily? All they will drink.
- 3.—Would it be better to let it sour before feeding? Not if it can always be fed sweet.
- 4.—Would linseed meal (boiled) improve it? No.
- 5.—Is it equally as good for chickens two to four months old as for laying hens? Yes.
- 6.—What is the maximum feeding value of milk? We pay 25 cents a ew. for it.
- 7.—Would middlings (or bran) im-

prove the separator milk mixed with it as a ration? It would as a change, but I prefer them separate.

Poultry Institute at O. A. C.

The Poultry Institute and Annual Meeting of the Ontario Branch of the American Poultry Association, February 8, 9, & 10 will be held at the Poultry Department of the Ontario Agricultural College, Guelph. The College authorities have secured possibly the most experienced men in America to assist at this special Institute. Among them are: W. C. Card, Manchester, Conn.; Victor Fortier, C.E.F., Ottawa; Peter White, Pembroke; John Robinson, Boston, Mass.; John Clark, Cainsville and Prof. F. C. Elford of Macdonald College.

Special arrangements on the Standard Certificate plan have been made with the railway companies for reduced rates to the Poultry Institute.

Poultry, when well bred, fed and cared for, is capable of turning a given quantity of raw material into more dollars and cents than any other animal on the farm.

TO OUR ADVERTISERS

Attention is called to the next Special Number of FARM AND DAIRY which will be our

ORCHARD AND GARDEN NUMBER

Out MARCH 3rd, 1910

This is a department of the farm which pays big returns for any investment made in it. FARM AND DAIRY is helping its readers to realize this more than ever before.

This issue will be read with great interest by not only our subscribers, but by several thousand prospective subscribers. It will be a splendid issue in which to advertise Nursery Stock, Spray Pumps, Insecticides and Fungicides, Orchard and Garden Implements and Tools, Fertilizers, Seeds, and in fact everything the farmer buys at this time of year.

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Rates, positions available, and any desired information on application to:

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TO SAVE THE LITTLE CHICKS**

Wrong feeding loses little chicks, just as wrong feeding loses little babies.

The "peepers" that develop into vigorous laying hens and plump, high-priced cocks, are the chicks that add money to your bank account.

PURINA BABY CHICK FEED brings "little peepers" through the first three months with plump bodies, glossy feathers and sturdy legs. Because it is the right feed for rapid development.

PURINA BABY CHICK FEED relieves you of all trouble in mixing or preparing feed. It is a scientific blend of more than a dozen kinds of nutritious grains and seeds—carefully screened, cleaned and ground—free of grit, dust, siftings and meal. And free, too, of drugs and condiments.

If your baby chicks develop Bawl Troubles—are thin, dull and stupid—and especially if you are losing them right along—look into this question of right feeding.

Writes us for prices and free sample of the feed that makes money for you by helping you to bring up every chick that's hatched.

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The values listed therein will convince you that **EATON'S** are leaders for making and distributing merchandise. In fact it contains values which must produce orders, consequently we have made great preparations by obtaining an enormous stock of brand new, up-to-date goods. Every item offers the last word in correct style, and every price is proof of **EATON** economy. Many of the articles are

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These wonderful buying opportunities last for two months only. On February 28th this Great Sale is over, so send us your order at once. Don't delay.

THE **T. EATON CO** LIMITED
TORONTO CANADA

Ayrshire Breeders Pleased

(Continued from page 9)
 habits of Ayrshires was by the leading exhibitors during 1909.

FINANCIAL STATEMENT.

The financial statement showed total receipts of \$3,417.15, leaving a balance on hand of \$622.02. The excess of assets over liabilities was \$3,596.29, showing an increase during 1909 of \$932.67. The principal sources of revenue were cash received from registrations \$2,882, and cash received from members' fees, \$912. The principal items of expense were salaries for the Record Office, \$600; printing and binding of the Herd Book, \$622; Exhibition Grants for 1908, \$285; Secretary's salary, \$750; printing of the Annual, \$225, and for the official organ, \$268.80.

RECORD OFFICE REPORT.

The report of the Record Office was as follows:

RECEIPTS

Received from Association to pay Salaries, 1909	\$ 600 00
Received from Association to pay Refunds, 1909	100 00
Applied from Government Grant, 1909	109 51
Balance owing to Record Committee by Association	108 69
	\$ 909 20

EXPENDITURES

1909 Salaries to Dec. 31, 1909	\$ 794 65
Paid Refunds to Dec. 31, 1909	104 84
Paid for Audit to Dec. 31, 1909	9 75

8909 20
 Cash received at the National Record Office and deposited in the Imperial Ayrshire Breeders' Association.
 January 1st to December 31st, 1909:
 For registrations and membership, \$3489 25
 For Herd Books 8 00

DISTRIBUTION BY PROVINCES

Province	Registrations	Transfers	Duplicates	Issued new Certificates
Ontario	62	58	13	2
Manitoba	6	12	3	2
Saskatchewan	13	12	3	2
Alberta	222	132	3	2
British Columbia	27	3	1	1
Quebec	1159	427	40	2
New Brunswick	90	35	3	2
New Scotia	64	7	2	1
Prince Ed. Island	29	35	2	1
United States	47	2	1	1

GRANTS TO FAIRS.

It was decided on motion of Mr. R. R. Ness, seconded by Mr. Wm. Stewart, not to make grants to any fairs during 1910 excepting the three Winter Fairs at Guelph, Ottawa and Amherst. A year ago, owing to grants having been made to numerous fairs, the finances of the Association reached a low ebb. During 1909 no grants were made, with the result that the finances of the Association improved greatly during the year. It was decided, therefore, that it would not be wise to start making grants again until the Association is still stronger financially. Regret was felt that it was impossible to make grants to some of the Maritime and Western fairs especially.

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 Cuba—Address Office nearest Via
 Write for Quotations

President Ballantyne reported that when he was in Scotland last summer, he had been requested by leading Ayrshire breeders to see if something could not be done to have a uniform system of testing the milk production of cows adopted for use by both Canadian and Scottish breeders. Secretary Stephen read a memorial that he had received from Scotland in which the matter was dealt with in great length. The Scottish breeders desired that Canadian breeders should practically adopt the Scottish test.

The proposal was discussed both at a directors' meeting and later at the members' meeting, with the result that it was unanimously decided that, everything considered, the Canadian test is conducted under the supervision of the Dominion Government and that as it is the same test that is used by the Holstein and Jersey Breeders' Associations, it could not readily be changed. It was decided, therefore, not to take any action in the matter. Messrs. Ballantyne, R. R. Ness, Wm. Hunter and W. F. Stephen were appointed a committee to draft a report and forward it to the Scottish breeders explaining the situation.

DESCRIPTION OF CATTLE.

It was pointed out by the Secretary that the system that has been followed of describing animals on the back of

and sometimes causes trouble. On motion it was decided to double the fee for recording transfers when such transfers are not recorded within 90 days after the sale.

A MARITIME DIRECTOR

The resignation having been received of Mr. Geo. Langelier, Cap Rouge, Que., as a director of the Association, Mr. Geo. McIntyre of Sussex, N.B., on motion of Mr. H. Gordon, seconded by Mr. Jas. Boden, was appointed by the directors to fill the vacancy thus created on the board. Mr. McIntyre, who was present will hold office during the unexpired portion of Mr. Langelier's term of office, namely, one year.

HERD COMPETITION

A brief discussion took place in regard to the advisability of having the different leading exhibitions hold uniform herd competitions. It was pointed out that where prizes are offered for a bull and four females it is more difficult for the small exhibitors to win than where prizes are offered for a graded herd. Messrs. R. R. Ness, Wm. Stewart and Wm. Hunter all expressed themselves as favoring the graded herd although it was pointed out that exhibits of mature herds always make a splendid showing.

It was decided on motion of Wm. Hunter, seconded by John McKee, to



Yearling Triplet Heifers, the Property of John A. Mc'Bride, Norfolk Co. Ont.
 Can any other Farm and Dairy reader show as thrifty a bunch of triplet calves as these? They are an Ayrshire-Holstein cross.

the registration forms was so indefinite that it was possible sometimes for the descriptions given to apply to any one of a number of animals. A lengthy discussion took place over the best means of improving this matter. It was pointed out that some of the other societies have a diagram of the animals printed on the back of the forms and require their members to draw in on these forms the color markings of the animals, marking the colors white or red as the case may be. A number of the members favored the adoption of this system. Others thought that it was possibly too complicated, and that the members, especially some in the Province of Quebec, would find it difficult to make proper drawings. They favored the giving of a more complete description of the animal than has been customary in which mention would have to be made of some distinguishing color marking on each animal. The matter finally went to a vote, which resulted in a tie. President Ballantyne gave his casting vote in favor of the use of the diagram system. Hereafter, therefore, members will be required to fill in the diagram showing the color markings on the back of the animal. These diagrams will appear on the back of the registration forms.

FEES WILL BE DOUBLED.

It was reported that members of the Association sometimes get one and two years behind in the recording of transfers and in recording stock. This causes a great deal of inconvenience

British Columbia—A. C. Wells, Sardis.
 Prince Edward Island—W. H. Simons, Charlottetown.
 Nova Scotia—F. S. Black, Amherst.
 New Brunswick—W. H. Parlee, Sussex, N.B.

DIRECTORS, WESTERN

Alex. Home, Menie, Ont.
 John McKee, Gorwich, Ont.
 W. W. Ballantyne, Stratford, Ont.
 Robert Hunter, Maxville, Ont.
 A. Kains, Byron, Ont.
 Wm. Stewart, Menie, Ont.
 N. Dymott, Chappin, Ont.
 Executive Committee (Eastern Division): R. R. Ness, Nap. Lachapelle and Senator Owens.

DIRECTORS, EASTERN

R. R. Ness, Howick, Que.
 Hon. Wm. Owens, Montreal, Que.
 N. Lachapelle, St. Paul, l'Ermite, Jas. Bryson, Brysonville, Que.
 Hector Gordon, Howick, Que.
 Jas. Boden, Danville, Que.
 Geo. Langelier, Cap Rouge, Que.
 Executive Committee (Western Division): A. Kains, Wm. Stewart, and Wm. Ballantyne.
 Registrars' Committee: R. R. Ness, W. F. Stephen.
 Secretary-treasurer: W. F. Stephen, Huntenday, Que.
 Registrar: J. W. Nimmo, Ottawa, Ont.

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 Delegates to Western Fair: A. Kains, Byron, Ont.; Geo. Hill, Delaware, Ont.
 Delegate to Canada Central, Ottawa: Wm. Hunter, Maxville, Ont.
 Delegate to Sherbrooke: Jas. Boden, Danville, Que.
 Delegate to St. John: Geo. C. P. McIntyre, Sussex, N.B.
 Delegate to Halifax: C. A. Archibald, Truro, N.S.
 Delegate to Charlottetown, P.E.I.: Jas. Gaston, Charlottetown, P.E.I.
 Delegate, Chatham, N.B.: Geo. E. Fisher, Chatham.
 Delegate to Amherst Winter Fair: F. S. Black, Amherst.
 Delegates to Dominion Cattle Breeders' Association: W. F. Stephen and W. W. Ballantyne.
 Delegate to Ottawa Winter Fair: Jas. Bryson, Brysonville, Que.
 Delegates to Winnipeg Exhibition: Geo. Steele, Glenboro, Man.
 Delegate to Regina Exhibition: J. C. Pope, Regina.
 Delegate to Calgary Exhibition: S. M. Woolf, Cardiston, Alta.
 Delegate to Edmonton Exhibition: A. H. Trimble, Red Deer.
 Delegate to New Westminster: A. C. Wells, Sardis, B.C.

JUDGES RECOMMENDED

Toronto Industrial: A. Kains; reserve, Wm. Stewart.
 London Western: Geo. McCormack, Rockton; reserve E. Cahoon, Harrietsville.
 Ottawa Central: Jas. Bryson; reserve, Wm. Stewart.
 Sherbrooke: Prof. Arkell; reserve, Thos. Drysdale, Allan.
 St. John: W. W. Ballantyne; reserve, Wm. Stewart.
 Halifax: W. F. Stephen; reserve, Jas. Boden, Red Deer.
 Winnipeg: A. Kains; reserve, Jas. Boden.
 Brandon: W. F. Stephen; reserve, A. Kains.
 Regina: W. F. Stephen; reserve, A. Kains.
 Calgary: W. F. Stephen; reserve, A. Kains.
 New Westminster: A. Kains; reserve, W. F. Stephen.
 Charlottetown: Jas. Bryson; reserve, Jas. Boden.
 Chatham: Hector Gordon; reserve, P. D. McArthur.

DON'T PUT OFF

Seeing your friends and having them join in for a club of subscribers to Farm and Dairy.

OFFICERS ELECTED
 The election of officers resulted as follows:—
 Honorary President,
 President, Jas. Bryson, Brysonville, Que.
 Vice-president, John McKee, Norfolk, Ont.
VICE-PRESIDENTS
 Ontario—Wm. Thos. Lynedoch.
 Quebec—Robt. Ness, Howick.
 Manitoba—Wellington Hardy, Roland.
 Saskatchewan—J. C. Pope, Regina.
 Alberta—A. H. Trimble, Red Deer.

FARM AND DAIRY

AND RURAL HOME

Published by The Rural Publishing Company, Limited.



FARM AND DAIRY is published every Thursday. It is the largest organ of the British Columbia, Manitoba, Oregon and Western Ontario, and Bedford District, Quebec, Dairywomen's Associations, and of the Canadian Holstein, Ayrshire, and Jersey Cattle Breeders' Associations.

SUBSCRIPTION PRICE, \$1.00 a year, strictly in advance. Great Britain, \$1.25 a year. For all countries, except Canada and Great Britain, add \$1.00 for postage. A year's subscription free for a club of two new subscribers.

3. REMITTANCES should be made by Post Office or Money Order, or Registered Letter. Postage stamps accepted for amounts less than \$1.00. On all checks add 30 cents for exchange fee required at the banks.

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

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

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

CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed 7,825. The actual circulation of each issue, including copies of the paper sent subscribers who do not send in arrears, and sample copies, varies from 1,000 to 1,500 copies. No subscriptions are accepted at less than the full subscription rates. Thus our mailing lists do not contain any dead names.

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

OUR PROTECTIVE POLICY

We want the readers of Farm and Dairy to feel that they can deal with our advertisers with our assurance of our advertisers' reliability. We try to admit to our columns only the most reliable advertisers. Should any subscriber have cause to be dissatisfied with the treatment he receives from any of our advertisers, we will investigate the circumstances fully. Should we find reason to believe that any of our advertisers are unreliable, even if a stated objection, we will discontinue immediately the publication of their advertisements. Should the circumstances arise, we will expose them through the columns of the paper. Thus we will not only protect our readers, but our reputable advertisers as well. All that is necessary to entitle you to the benefits of this Protective Policy is that you include in all your letters to advertisers the words, "I saw your ad. in Farm and Dairy." Complaints should be sent to us as soon as possible after reason for dissatisfaction has been found.

FARM AND DAIRY

PETERBORO, ONT.

A GREAT FIELD FOR POULTRY

There is an immense field for the poultry business. The market cannot be supplied. Strictly reliable new-laid eggs are ever in demand. Good poultry also is eagerly snapped up. When turkeys command prices anywhere up to 25 cents a pound, chickens from 14 to 18 cents a pound, ducks, 18 cents and dressed geese—almost any kind of specimen commands at least \$1.50—the poultry business surely does look good.

The fowls on the average farm do not get their just deserts. They often are despised. They are looked upon as being necessary evils. But let anyone give his flock proper care and keep track of expenses and relative profits of different departments of the farm, and the poultry department will soon vindicate itself and poultry will prove to be the most profitable of all stock.

We need more and better flocks, more and better eggs, and a far better quality of poultry to satisfy the market that seems to have no limit. Upon the thought and study and attendant practice in this department,

depends the ultimate profitability of poultry to the producer. Elsewhere in this issue, is mentioned what one man made from 25 acres with poultry and other lines adapted to it. This record furnishes a strong argument for the small farm well cultivated and for poultry keeping as a large adjunct. Such an instance is but one of many that may be duplicated. It shows that poultry is worthy of a larger place upon the average farm.

A WORK OF REAL BENEFIT

Short courses in stock and seed judging bid fair to become a potent factor in the general up-lift of agriculture. The courses held last week in Peterboro, Almonte and Lindsay were most successful. They were attended largely by crowds of farmers that evinced the most intense interest in the proceedings. They seemed imbued with a veritable thirst for knowledge concerning stock and seed. Their one regret was that the course was not of longer duration.

When farmers, who previously have had no organization, especially as was the case at Peterboro, will turn out in hundreds and return day after day eager for the instruction that is given pertaining to those things in which they are vitally interested, stock and seed, it looks as if these short courses have come to stay. It is only a question of time when each county in the Province will have one or more of these annual short courses. Whether or not each county has a short course, and the benefits derived from these events, depend largely upon the people themselves. Upon their initiative in going after these privileges and upon the hearty support tendered these events depends the success of the movement.

TURKEYS WORTH MORE ATTENTION

The turkey business needs more attention. Turkeys have become exceedingly scarce and prices, to our city friends at least have become too high. There is no reason for this scarcity of turkeys, except that black-head has caused ravages in countless flocks and has made it a difficult matter to raise this class of fowl.

Black-head is a very insidious disease and is highly dangerous. The great danger lies in the fact that it usually is not noticed until it is too late to deal with it. Black-head is a germ disease. It is disseminated largely through flock-owners purchasing stock that has been contaminated with the disease. A single infected bird taken into a district may be responsible for disseminating the disease to the neighborhood. It is highly advisable that the utmost care be exercised when purchasing stock to get birds that are absolutely free from black-head, through not having come in contact with the disease.

Since each year, turkeys have become scarcer and prices higher and since it is more difficult to breed them now by reason of this disease, black-head, those in a position to do so should give the turkey the best possible attention this coming season.

They are sure to be well repaid with the high prices that are altogether likely to prevail next fall. The turkey, that king of table fowl, needs a higher place in our agriculture.

SELL EGGS WHILE NEWLY LAID

Strictly new-laid eggs are very high in price. New-laid eggs that were absolutely reliable were quoted recently at 40, 50 and as high as 60 cents a dozen in Toronto. Why are more farmers not able to take advantage of these high prices? Why are there not more new-laid eggs to meet this demand? We need not go far for the answer. It is owing entirely to the abominable habit we as farmers have of holding eggs until they are stale in order that we may get enough for market.

This fact was well illustrated in an Ottawa grocery store the other day. The grocery clerks quite evidently know their business. A farmer called and asked, "Do you want any eggs." "Yes," said the clerk, "How many have you?" "Twenty dozen," replied the farmer. "How many months old are they?" said the clerk. "You can't bluff me," replied the farmer, "They are not old, they are fresh." "How many hens have you?" enquired the clerk.

Needless to say the clerk had the letter of the argument then, although he did not stop to convince his customer. He knew that those eggs must be pretty stale and he then offered a price which was from 15 to 20 cents below the market price for reliable, strictly new-laid eggs.

This should not be. While it is unreasonable to ask that we go to market too often, by co-operating with our neighbors, and by marketing eggs at least weekly, or better still twice a week, we can furnish the strictly new-laid article so much in demand and for which such high prices are offered.

HOLSTEINS AND JERSEYS AT OTTAWA

The members of the Canadian Jersey Cattle Club and of the Canadian Holstein-Friesian Association, during their annual meetings in Toronto this week and next, should not let the opportunity slip to place themselves on record in regard to the fact that no animals of either of these breeds are kept at the Central Experimental Farm, Ottawa. Both Associations will do well to not only pass resolutions urging the Dominion Department of Agriculture to deal with this matter, but they should appoint deputations to wait on Honorable Sydney Fisher and see that stock of these breeds are kept at Ottawa hereafter. More than this—the members of these associations should be prepared, if necessary, to speak to their local members and gain their support. There are thousands of Jersey and Holstein cattle breeders throughout Canada. It lies with them to make their influence felt should such action prove necessary.

As was pointed out in Farm and Dairy some time ago, many thousands of farmers visit the Experi-

mental Farm at Ottawa each year. This being the case, it cannot help but be an injury to the interests of the Jersey and Holstein breeders that representative animals of these breeds are not kept at the Farm. In this connection, it might be well for both the Associations to make enquiries to ascertain what breeds of cattle are kept at the other experimental farms conducted by the Dominion Government throughout Canada.

When we remember that some seven million dollars are spent each year by the Dominion Government for militia and defence and that it is now proposed to increase this expenditure by some three millions of dollars a year for a Canadian navy, while only about one million dollars are spent for the promotion of agriculture, it will be seen that the expense that would be involved in maintaining representative herds of Jerseys and Holsteins at Ottawa would be a mere bagatelle compared with the expenditures that are incurred for less useful purposes. Not only the breeders but the farmers of Canada are interested in this question. Both Associations, therefore, should speak out on this matter in no uncertain terms. Honorable Sydney Fisher has shown himself willing to assist our farmers. We feel sure that he will do so in this case once the Associations have made their desires known.

HORSES THAT SELL

Elsewhere in this issue, we illustrate a mare and her foal that show a type we need more of—the kind that sells. And herein lies a danger. The horse breeding interests of this country repeatedly have been jeopardized through the very fact that these good ones of this popular class will sell. Too many have been sacrificed for fancy prices and too few have been kept as breeders.

The heavy horse business offers one of the best opportunities of the day to the average farmer. The market for the right stamp, and the subjects just referred to are such, is a sure one. Having secured breeding stock of this class, we need to develop that courage of conviction, which will not suffer these being sacrificed to another fellow who offers big money in order that he may profit from what he knows is our loss but which at the time looks to us like gain.

A SIGN OF THE TIMES

Possibly no better barometers of the prosperity of the country can be had than that of the annual reports of chartered banks. These institutions are vitally concerned in our general progress and prosperity. We find them each year figuring on the characters of the harvest, the value of the crops, the state of immigration and all that is connected with our national financial welfare.

During the year now past business has been active, crops have been good and our banks have been more than prosperous, if the record of The Traders Bank as published elsewhere may be taken as an indication. This record makes interesting reading and is worthy of careful study.

ILLUSTRATED SECTION

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Only \$1.00
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Vol. XXIX.

FOR WEEK ENDING FEBRUARY 3, 1910.

No. 5

SMITH & RICHARDSON COLUMBUS, ONT.



BLACK IVORY



BARON CRAWFORD



QUEEN MINNIE



ROYAL GREटना

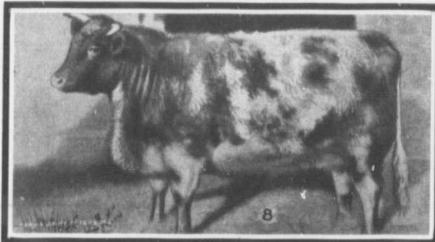
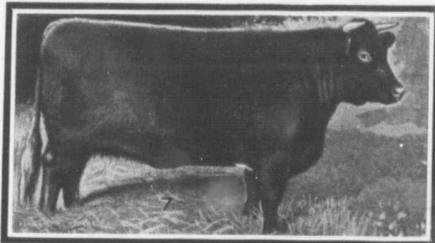
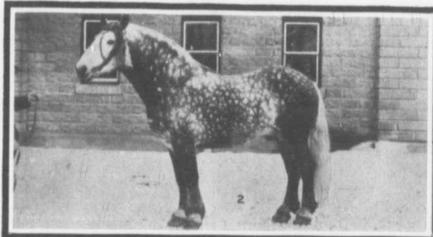
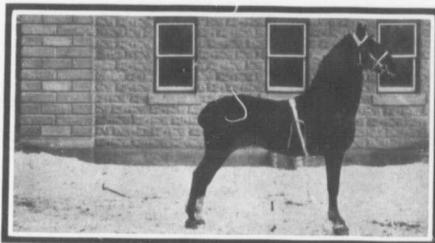
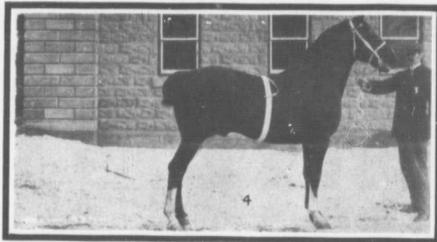
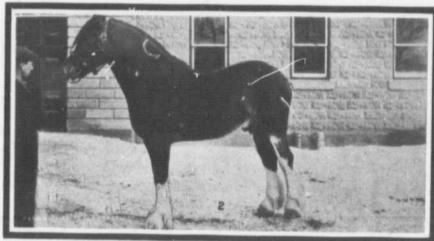
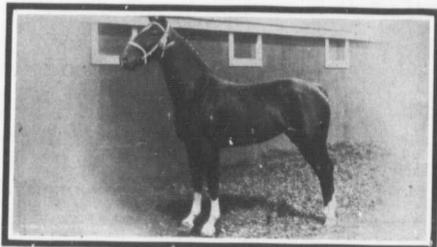


DUNURE SHAPELY

Black Ivory, winner at Castle Douglas, Scotland, as a two year old, beating the Royal winner. He was first in Toronto as a three year old, and first in Toronto and reserve champion as a four year old in the strongest class that ever was shown in Toronto or in Canada. He was first in Ottawa as a three year old and as a four year old.

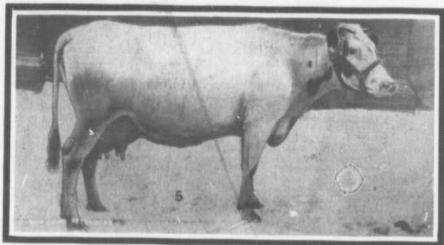
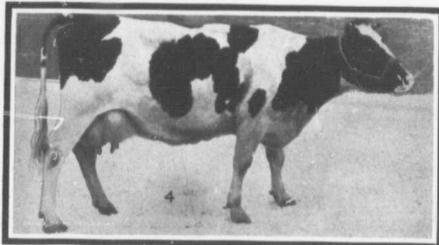
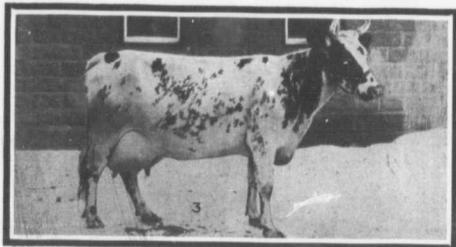
Baron Crawford was second in Toronto at the National, and first in Ottawa last fall, second in Guelph at the Fat Stock Show and first in Ottawa last month. Queen Minnie was the winner of over 20 first prizes and seven championships in Scotland. She won first at the Grand National as a three year old in 1899; first and championship at Ottawa last fall; first and championship at Ogdenburg, N. Y.; first and championship at Guelph in December, 1909, and first and championship at Royal Gretna, winner of the third prize at the Highland Show in Aberdeen in 1908, as a three year old; winner of the first and championship at Ottawa Fat Stock Show.

Dunure Shapely, a successful prize winner at both Ottawa and Guelph Winter Fairs, in large classes.



Some of the Championship and Prize Winning Live Stock at the Ottawa Winter Fair

- 1.—Ophelia's Heiress, Imp. 481—(18815) sire,—Polonia 4931; dam Towthorpe Girl, by Revival 7236; owned by T. B. Macaulay, winner of 1st prize for Hackney mare, any age, at Eastern Live Stock and Poultry Show, Ottawa, 1910; Champion Hackney mare, any age, at Ottawa Fall Fair, 1909; Reserve Champion at Ogdensburg, N.Y. 1909. 2.—Koyama (8029) first prize in the aged class and won the championship for Canadian bred Clydesdales, 1910, thus duplicating its winnings in Ottawa for 1909; also reserve championship for best Clydesdale stallion imported or home bred in the show. Owned by Robert Hunter & Sons, Maxville, Ont. The illustration does not do Peggy 4th, uterine sister of Darnley, third dam Keir Peggy dam of Darnley, shown by B. Bothwell, Hillsdale Farm, Ottawa, winner of 5th prize in a large class. 4.—Dainty Duke of Connaught, Imp. 3631—Six year old Hackney, owned by B. Rothwell, Hillsdale Farm, Ottawa, and winner of second prize at Ottawa Winter Fair. Dainty Duke was bred by Lovel Danby, Malton, Yorkshire, England, sire Garton Duke of Connaught, dam Dainty by Denmark. 1.—Derwent Performer (Imp.) 429, Hackney Stallion, owned and exhibited by Mr. G. H. Pickering, of Brampton, winner of 1st prize and championship. This stallion has exceptionally fine action, and attracted general attention. 2.—The Imported six year o'd Percheron Stallion, Charles 2nd, owned by J. Lumsden, Lumsden Mills, Que. This animal weighs 2040 lbs., and was shown at Ottawa Winter Fair, but could not compete, there not being a class for Percherons. It caused much favorable comment. 7.—Missie of Pine Grove 9th—first prize yearling at Ottawa Winter Fair. 8.—Emma 47th, dam Emma 37th, sire Missie Champion, owned by W. C. Edwards, Rockland, Ont. Winner of the championship for best Shorthorn shown at the Ottawa Winter Fair. She beat the Guelph championship steer. Both these animals are to be sold in the auction sale that will be held by Senator Edwards in Toronto, February 2 and 3.



Dairy Cattle that Won Prizes in the Dairy Tests at the Ottawa Winter Fair

3.—Spottie (18651), the pure bred Ayrshire cow owned by H. & J. McKee, of Norwich, Ontario, which won first prize in the dairy test at the Ottawa Winter Fair for Ayrshires 28 months and over. She gave 126 lbs. of milk, testing 3.8 per cent. fat, during the three days of the test. As a yearling, she won first prize at the National Dairy Show, Chicago, in February, 1906. 4.—Rhoda's Queen (6032), this six year old Holstein cow, owned by Neil Sangster of Ormstown, Quebec, won the championship in the Dairy Test at the Ottawa Winter Fair, making the highest score of any animal entered. She gave 237 lbs. of milk, testing 3 per cent. fat, during the three days of the test. She has an official record as a two year old of 15 lbs. of butter in 7 days. As a four year old she gave 16,553 lbs. of milk in six months. 5.—Maudie De Kol, the pure bred Holstein cow, owned by T. A. Spratt, Cummings Bridge, Ont., that won third prize in the aged class for pure bred Holsteins, at Ottawa Winter Fair. This cow gave 835 lbs., testing 3.7 per cent. fat, during the three days of the test. The remarkable point about this record is that this cow had been milking for over a year, she having freshened on January 10, 1909. She has milked continuously ever since, and will freshen again about March 1st. In the dairy test at Ottawa a year ago, she gave 79 lbs. of milk in one day, two days later giving 88 lbs. 6.—Maggie, grade Holstein cow, owned by T. A. Spratt, Cummings Bridge, Ont., that won first prize in the dairy test in the grade class. She gave 209.5 lbs. of milk, testing 3.6 during the three days of the test, and came only seven points behind the pure bred Holstein cow that won the championship.

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Cattle Wash and Disinfectant

A preparation combining the well-known properties of Carbolic Acid, Cresols and other powerful disinfecting agents, in a form which renders its use as a **Dip and Disinfectant Safe, Certain, Cheap, Efficient.**

One gallon making 100 gallons of Dip.

One gallon making 80 gallons of Lice Killer.

Imperial Quart **50 cents**, express paid.

Imperial Gallon **\$1.50**, express paid.

Manufactured only by
WM. COOPER & NEPHEWS, Toronto

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The Forest and Mineral Wealth of Northern Ontario has attracted many people from all parts of the civilized world.

One-ninth of the world's reported output of Silver in 1908 was taken from Ontario Mines.

New discoveries of undoubted richness are being constantly reported from sections far distant from the famed Cobalt. Yet a more certain reward is insured to the Settler who acquires for himself

160 Acres of the Rich Agricultural Lands

now open for settlement and made accessible through the construction of Railways and Colonization Roads.

The Fertility of the Soil is Unsurpassed

The Timber is in demand at a rising price. Mining, Railway and Colonization Road Construction, Lumbering, etc., afford work in abundance to those who have not the means to remain on their farms continually. These also provide a market for farm produce at prices unequalled anywhere.

Cochrane, the Terminus of the T. & N. O. Ry., on the G. T. P. Transcontinental Railway, now under construction, is in the same latitude as the southern part of Manitoba, and 800 miles nearer the seaboard.

That the experimental stage is past is clearly demonstrated. The country is rapidly filling up with Settlers from many of the other Provinces, the United States and Europe.

For information as to Terms of Sale, Homestead Regulations and for Special Colonization Rates to Settlers and for Settlers' Effects, write to:

D. SUTHERLAND, The Director of Colonization
PARLIAMENT BUILDINGS, TORONTO
HON. J. S. DUFF, Minister of Agriculture



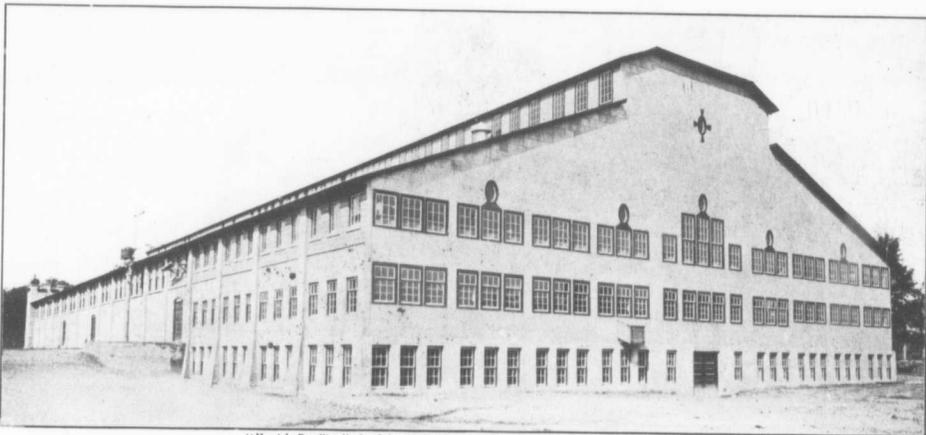
Four Prize Winning Farmers as Seen at The Ottawa Winter Fair

The illustration shows the judge and some of the prize winners in Eastern Ontario, in "Farm and Dairy's" prize farms competition, as they were photographed at the Ottawa Winter Fair. On the right is Mr. R. R. Ness, of Howick, Quebec, the judge, and himself a gold medal winner for the best farm in twenty-two countries in the province of Quebec. The tall gentleman in the centre is Mr. E. Terrill, of Wooler, Ontario, the winner of first prize in district number two. Beside Mr. Terrill is Mrs. Terrill. The gentleman in the fur coat is Mr. Victor Begg, of Moose Creek, winner of first prize in district number one. Mr. Begg started on a farm mostly swamp and brush, and has made it one of the best farms in the province. Beside Mr. Begg is Mr. Angus Grant, of Moose Creek, winner of third prize in district number one, who scored only a few points lower



Standing Field Crop Competition—Grain from Prize Winning Fields Exhibited at Ottawa

The Standing Field Crops Competitions have aroused much interest amongst grain producers and others of this province. The crops are first judged while standing in the fields. The prize winners then exhibit the grain at Guelph or Ottawa, according to the district they are in, for final competition. Prize winning seed at Ottawa was reserved for distribution to farmers through the agricultural specialists, heads of the branch offices of the Department of Agriculture. The rest will be sent to the Immigration office, London, Eng. for advertising purposes. The grain sold at auction realized the highest prices on record, beating under the direction of the superintendent of Agricultural Societies, Mr. J. Lockie Wilson, Parliament Buildings, Toronto, Ont.



"Howick Pavilion" the Splendid Building in which the Ottawa Winter Fair is Held

The building here shown offers ample accommodation for the Ottawa Winter Fair. At the rear end of the Pavilion, in the basement, are shown the sheep, swine and dressed carcasses. The slaughter room is also in the basement. On the front is open to the ceiling. In the centre is a large judging ring, and around the sides are the stalls for the horses. Seats are arranged for the public over the stalls. The building is well suited for the show and gives good satisfaction.

"Ideal" Fence has features that shrewd buyers appreciate

That's why our Agents are so successful

Taking orders for "IDEAL" fence is far easier than you may think. The "IDEAL" has features that shrewd buyers appreciate. The railways buy

"IDEAL" because of its weight and quality, because of the gripping tenacity of the lock on the

"IDEAL" WOVEN WIRE FENCE

It is undoubtedly the strongest fence lock in existence. The farmers buy "IDEAL" for the same reasons as do the railways. "IDEAL" fence is easiest to sell. That is why our agents are so successful.

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WALKERVILLE, ONTARIO

Pointers on Incubation

T. E. Rondeau, Lambton, Co.,

I have been in the poultry business for 10 years, breeding pure-bred stock and experimenting with artificial incubation.

There are two reasons why chicks die in the shell at the time of hatching—they even pip sometimes, but get no further. The causes are: First, too much ventilation, which dries the eggs down too fast. Second, not sufficient moisture. I have tried hatching without moisture and the chicks always stick in the shells. With moisture I always have a good hatch of big, downy fellows—the kind that will dig in and scratch from the start. I am glad to give a few pointers on how I run my incubator and brood the chicks.

My incubator has four holes of the diameter of a lead pencil—two in the bottom and one in each end. These



Madame Dot 3rd Princess, 2822 (C.H.B.) 113,256 (H.F.H.B.)

A cow of almost perfect dairy type, of great capacity, and a phenomenal producer; owned by M. Woodworth, formerly at Lacolle, Que., now at Haverhill, Mass. A fuller account of this cow is given on page 35.

are plenty, as too much ventilation dries down and gums the eggs when pipped. I cover the egg tray with cotton, which makes the heat go to the bottom of the egg. I run the machine at 104 degrees the first week; 103 degrees the second week, and 102 degrees the third week.

The eggs are turned from the second until the 18th day. They are turned and cooled twice each day. In cooling I use my hands, as the guide. When the eggs are as cool as my hands, I turn them and then sprinkle them with warm water. When the egg commences to pip I give them a good sprinkling with warm water. The cotton will be soaking wet and the chicks will pop out soaking wet big fellows. As soon as I take the eggs out to cool, I close the incubator door to keep the heat in.

The last hatch I made, I ran the incubator near the cooking stove on which three meals a day were cooked. Out of 120 eggs that I put in the machine, I hatched 97 big downy chicks. I could not have done this without the additional moisture, as the eggs would have become very dry.

As soon as all the chicks are hatched, I take them out of the incubator, and place them in soap boxes—12 in. each box—for the first two or three days. I use a small mustard jug filled with hot water and covered with a cloth for heat. This jug is placed in one corner of the box, and over the chicks' backs I lay a piece of woolen cloth.

The only feed my chicks receive until they are 60 hours old is grit and water. Out of 332 chicks I hatched last year and attended to in this way, I only lost two and those were smothered.

How to Manage Turkeys

T. J. Cole, Durham Co., Ont.

Turkeys are difficult to raise. I prefer to let someone else raise them. We raise a few each year but for the most part, we sell the eggs for hatching purposes. By breaking up the turkeys that wish to set, they will lay again and again. In this way one secures a greater number of eggs.

Light, dry land and free range is essential for turkeys. Turkeys that are hatched around the barn with a hen are not so thrifty as those hatched with the old mother turkey and allowed free range. The old turkey will



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provided in which the turkeys may roost, they prefer the trees. We hunt or them in this respect unless we anticipate a steepest; then we go to the trouble of driving them into the sheltered roosting quarters.

Grit and Lime for Hens

S. Short, Carleton Co., Ont.

There should be an unlimited supply of grit and oyster shell before laying hens at all times. This is very essential. The grit supplies the stones for the gizzard, through which all the grain passes, and is there ground up. As soon as the stones are worn smooth they are expelled and fresh, sharp ones are swallowed by the fowl to

take the place of those discarded so that if no grit is supplied, the fowls are in danger of having indigestion which is sometimes fatal, and will always prevent the hens from laying. The oyster shell is also a necessity to surely lime for the shells of the eggs.

The layers are able to eat different substances containing lime and manufacture it into egg shell. If there is no lime supply, the shells are very thin and are easily broken. If eggs are broken, the hens will invariably eat the eggs chiefly to get the shell and this forms the egg-eating habit, which soon spreads through the flock, and if so, is exceedingly hard to cure until the fowls leave the winter quarters and get out of doors again.

Where Will You Get Your Seed Corn This Year?

Have you thought of it? Have you in recent years been "stung" on your seed corn? Have you failed to get a satisfactory stand from the first seed planted? Hundreds of Farm and Dairy readers have been badly left on seed corn, time and again. Realizing how difficult it is for the average farmer and dairyman to get first class seed corn, and in order to assist and safeguard him on this point, Farm and Dairy has secured a quantity of **SEED CORN THAT WILL GROW**, and we are now prepared to distribute it. This seed corn is guaranteed, and is from a reliable and well known source in the corn belt of Essex County, Ont. Seed of the following varieties is available:

King Philip (Flint), Early Leeming, White Cap Yellow Dent, North Dakota.

Farm and Dairy offers any one of these varieties as follows: **Two bushels for Four new subscriptions to Farm and Dairy; One bushel for Two new subscriptions.** (Subscriptions to be taken at \$1.00 each). The corn will be delivered F. O. B., at the grower's station in Essex Co., Ont. Think what this great offer means to you as a corn grower! Absolutely reliable seed corn all for the little trouble of canvassing your friends. Since 10 quarts is ample to seed an acre of Ensilage Corn, it means that you would only need to get four subscribers to Farm and Dairy to get enough seed corn for six acres—enough to fill the average silo.

Will you take advantage of this offer? Don't put it off until to-morrow. Do it to-day. Show this copy of Farm and Dairy to your friends. Tell them it is but one of eight Special Magazine Numbers to be published in 1910. They are sure to subscribe. Name the variety that you want, and send in your subscriptions to

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

Creamery Department

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

Another Seconder for Mr. Newman

F. A. Keyes, Huron Co., Ont.

I heartily endorse the sentiments of Mr. Newman in Farm and Dairy of Jan. 22nd. I take much pleasure in seconding his motion and would like to hold up both hands to help it carried.

It has been proven beyond a doubt that weighing the samples is the only proper way to get accurate results. By the use of the pipette we give a premium on this cream, and this is one of the things we are trying to discourage. Then on the other hand the patron who is sending a cream testing over 25 per cent. is not getting his full due.

In the face of all this we have a number of creameries that are still using the pipette for measuring samples. Can we wonder that the patrons persist in sending this cream, and that they tell us that they make more money in this way? We have heard considerable discussion about educating our patrons to send richer and sweeter cream and right we are in doing this, but I consider we ought to turn our attention for a time and

try to educate our creamery owners. It is high time that they were adopting some uniform method of testing and paying for cream.

All of our creamery owners know that weighing the samples is a much more correct way than measuring with the pipette. Why then for the sake of a few dollars spent in buying a set of scales, which will last for years, continue on in the same old way? It does not take any more time to weigh the samples than it does to measure them.

The Only Proper and Accurate Method

J. A. Waddell, Middlesex Co., Ont.

The greatest error in the matter of cream testing is the use of so many different methods of measuring the samples for the test. One man may use a 17.6 c.c. pipette, another an 18 c.c. pipette, and a third may use the scales. If these men are all in opposition to each other there certainly must be a constant uproar among the patrons of all three creameries. They all will think that the man who receives their cream is not doing right and that the other fellow is.

Consequently I say that every creamery in the province should use the same method of testing milk and cream and when reading the samples should give the patron all that is his; then let him kick as much as he may choose.

If every creameryman would use the scales and all would do their work



Are yours, Mr. Reader? Sometimes your whole fortune is stored in those buildings. Fire and lightning are no respecters of persons.

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alike there would not be so much reason for patrons to find fault and possibly to send thin milk or cream to the other creamery where they think they will be used right.

My candid opinion is that the use of the scales is the proper and only accurate method of testing samples for the Babcock test. The use of scales is in favor of rich cream and that is what every creameryman wants to get. A rich cream is also a decided advantage to the patron because he will have less to pay for drawing and rich cream is easier kept than is thin cream.

Creamery work in Saskatchewan

W. A. Wilson, Supt. of Dairying

Continuing the policy of safe-guarding the development of the co-operative dairy industry in the West by encouraging the erection of creameries in districts where circumstances favor success, and discouraging any expenditure where satisfactory proof is not forthcoming respecting a sufficient supply of cream that will warrant a profitable business, the Department of Agriculture, Regina, during 1909 increased the number of creameries under their supervision to six. In Saskatchewan progress is not measured by the number of new creameries put into operation from year to year, but rather by the increase in patronage and butter output at existing creameries. In this particular it is pleasing to note that the number of patrons increased from 573 in 1908 to 876 in 1909 and the make of butter from 220,282 to 313,401 pounds, or about 65 per cent. While it is well to have people provide funds to erect a creamery, it is an entirely different matter to operate that creamery and pay the patrons a satisfactory price, when the make of butter is small.

The fundamental principle underlying the development of this industry is to satisfy the farmers by paying them a good price for their product. This is not accomplished by indiscriminate expenditure in establishing creameries but rather by more or less concentrated work at creameries already in operation. The representatives of the Dairy Branch spend a great deal of time throughout the province in trying to protect the work by explaining to the farmers the advantages derived from concentrated effort as compared with the erection

of creameries at stated points. It is pleasing to note, that, generally speaking, such explanations are understood and the recommendations are followed; otherwise we might now have 30 or 40 creameries struggling for an existence instead of 11 prosperous ones.

The average selling price of butter from the six creameries under government supervision was 23.44 cents a pound. The average manufacturing cost was 2.92 cents a pound of butter. The highest manufacturing cost was 4.23 cents and the lowest was 2.26 cents. The patrons received the gross selling price, less the actual expenses. From this it will be readily observed that the advantages accruing from the reduction in expenses is our strong point with the farmers in a new and sparsely settled district.

The northern part of Saskatchewan is admirably adapted to mixed farming, and dairying is coming into prominence. The older settlements of our province are devoting their time to wheat farming and it is only during the past five years that the northern part of the province received sufficient settlers to make a start in the creamery work. It is for this reason that Saskatchewan has looked upon in the outside world as purely wheat growing. Those familiar with the various districts in the north realize that mixed farming must be adopted and followed.

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Prices will be mailed also.

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Our 1910 Steel Vat is going to be just a little better than ever before. Can't improve much over last year—it was a dandy. The tin lining in this year's vat will be 20 gauges—the heaviest ever used—4 gauges heavier than your loose tin wash tubs. The outside frame is finished all galvanized, no paint about it. It will interest you.

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Cheese Department

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

Some Weak Points in Canadian Dairying*

Geo. H. Barr, Chief, Dairy Division, Ottawa

The first weak point in Canadian Dairying is the dairy cow. Farmers do not take sufficient time and pains to be sure that a cow is producing enough butter fat. This can only be ascertained by weighing and testing milk once a week at least. Some cows produce only 1,760 pounds of milk while others are producing 17,000 pounds a year. Many herds average from 10,000 to 14,000 pounds of milk per annum. If the milk sold for \$1 a cwt, it is easy to see that one cow is making her owner only \$17.60 a year, while the other ones are making their owner from \$100 to \$140 per annum per cow for feed, care and attention. One herd of 11 cows averaged 10,011 pounds of milk a year, the best cow giving 12,227 pounds and the poorest 8,528 pounds. It is easy to pick out neighboring dairies in any section of the country that are paying their owners over \$80 per annum per cow more than the other. These results are only possible through careful weighing and testing. The best way to get the best cow is to breed only from the best sires.

The second weak spot is the cream gathering system imperfectly applied. If perfectly applied and if everyone would use care in handling the milk, the cream gathering would be all right, but where one farmer has his hand-separator set up in his stable where all the impure air generated there can work upon the milk for an hour or more, it is better to take the milk right away out and take it to the creamery without separating. I have watched Eastern Townships' butter for several years and it has steadily deteriorated in quality for the last six years. I think it is due to hand separators being used too extensively instead of leaving the separating to be done at the creamery where conditions are more sanitary and where a more expert man is generally at the helm.

Many farmers have manure pits behind their cattle and under their stables. This accounts for the fact that E. T. butter is coming into Montreal lately with the cow flavor still sticking to it. I advocate skimming the cream very thick and rich in order that it may ripen better. When it is 35 per cent. of butter fat, it makes better butter than to have a larger amount of cream at 17 per cent. The cream must be cooled to at least 50 degrees F. and kept that way until delivered at the creamery. The separator agents have a lot to answer for in telling purchasers that, in winter, the separators can go without

*Part of an address given before the Bedford District, Que. Dairymen's convention held last week at Cowansville.

washing after usage for twice or three times. Here again the creamery has better facilities for washing their one separator than do several different farm houses not fitted with steam heat. The solution of the good butter question depends largely upon getting larger factories with a bigger volume of goods. The creameryman then can afford higher class and higher priced help and can do better work. Any farm of 100 acres should support 20 cows.

The third weak point is the lack of cool curing rooms connected with cheese factories and cold storage connected with the creameries. The fourth weak point is the employment of cheap labor in creameries and cheese factories. In 1911, every butter or cheese-maker in Ontario will be required by the Government to take out a certificate or license. Quebec introduced syndicate inspection and Ontario has copied it and gone away ahead of Quebec in putting it into force. They have government inspectors drawing all their salaries from the Public Funds who have the power to make a butter-maker or cheese-maker shut up his place, if he has unclean or filthy accessories to his establishment. The Inspector is perfectly independent of the farmer or maker and may thus make them come up to the mark better than under the Quebec system, where the Inspector is partially paid by the patrons and maker. The factories are larger in Western Ontario.

A Satisfactory Year for Delaware Factory

Jas. E. Orr, Middlesex Co., Ont. About the business of the Delaware Cheese factory, Mr. Kaiser, the secretary, told the writer the following: "The past season has been the most satisfactory in the output of our factory. In 1908 our sales amounted to over \$30,000, which we thought was good."

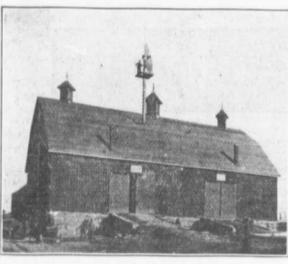
When our business is all completed for 1909, we expect to be far in advance of our 1908 make. Every year our patrons are becoming more enthused with the dairy industry, and are keeping more and better cows, building silos, and growing more corn. Slowly, but with no regrets, the Holsteins are coming to the front, and the overflopping halts that are drawn from them, please their owners wonderfully. The Holsteins are without doubt, our greatest dairy cows.

Our cheese has all been sold to the wholesale grocery firm of A. M. Smith & Co." This firm has taken it for a number of years. We never had a complaint from them, nor a rejected cheese."

Patrons Satisfied.—Acme cheese factory, near Trenton, introduced the pasteurizing of their whey, early last season. Although the work proved more expensive than was anticipated, owing to the fact that it was started too late to enable coal to be purchased at the wholesale prices usually paid, still it proved very successful. At a recent meeting of the patrons, a resolution was unanimously carried, expressing appreciation of the benefits that had followed the pasteurization of the whey.

The great majority of our factories were kept in good sanitary condition. Considerable annoyance was caused at some factories by the whey being allowed to accumulate at the factory until in some instances the tanks overflowed, making conditions decidedly unsanitary and offensive. This practice cannot be allowed, and we hope that arrangements will be made to have the whey all drawn away, so as to allow the whey tanks to be cleaned regularly every week at least.—D. J. Cameron, Dairy Instructor, Campbellcroft.

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Our Peerless Fence made from all No. 9 English wire, is equal to all emergencies. It has more than double the strength required. On account of the superior galvanizing on this wire, it should last more than twice as long as ordinary galvanized wire. It stands the salt,

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This can't-slip lock grips the two wires firmly, yet permits the fence to adjust itself to any surface.

The Peerless Fence never sags nor is it affected by changes of temperature. Its spring coil formation allows for all contraction and expansion, the wires always remaining perfectly taut.

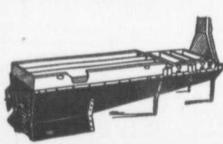
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In others, in thyself may be;
All dust is frail, all flesh is weak;
Be thou the true man thou dost seek. —Whittier.

A Corner in Household Gods

By Sarah Ruth Quigley.

THE little brown house at the north end of Main Street put on mourning one day in early August. Old Dave Martin was dead after suffering fifteen or twenty years from a complication of ailments, a single one of which would have put beyond the vale any other man in Centerville.

On the day of the funeral, Hiram Gray, discoursing with lawyer Sloop on the bench in front of the Palace Hotel, shifted his position and rolled his quid to the other cheek. "That Delie Martin oughter have all the prop'ty and a pension to boot," he declared, "she's took care of that cantankerin' old father for nigh on to sixteen year."

"Yes—but the ain't no will," jerked out the lawyer, catching himself just in time to keep from tilting off to the other end of the bench, "and there's them brothers and sisters of hers," he continued, "his professional draw restored with his equilibrium."

"I s'pose she'll have to marry a home, if she ever gits one," commented old Hiram, chewing industriously. "Well, some folks do say that Nathan Lewis is sweet on her, but," with a knowing twinkle, "I'll bet ye won't ketch an ol' bach as clever as he is harnessin' up after all these years."

"W'y, ain't ye heard 'bout him courtin' that Freeport girl?" asked old Hiram, with an air of superiority. "No!" The lawyer was shocked at his own ignorance of current events.

"Well, it's jest come out within the last week or two explain the informant soothingly. "But them brothers and sisters oughter give Delie the prop'ty—that's my opinion."

The brothers and sisters had long since married and gone from Centerville—the younger sister, Cora, some fifteen years before, when Delia was twenty. The two sisters accompanied by the other John's wife returned to the ancestral and remained for a few days to superintend the settlement of the small estate. Olivia, the oldest, was a widow, stout, self-sufficient and prosperous in a little drug business that her husband had left in a Western town. It was by common consent,—or at least by lack of common dissent that she took charge of affairs.

A few days after the funeral, when all four women were assembled in the sunny little parlor, Olivia broached the subject of dividing up the property.

"I s' suppose we may as well get things together and settle up the business," she began, after exchanging glances with Cora. "Everything'll have to be sold to make it legal," with a meaning look at Addie, the sister-

"And there are two homes open to you Delia," continued Olivia.

"Three, if you'll count mine," added the sister-in-law quickly, giving the widow a sharp look of her yellow-brown eyes. John says you're to be always welcome at his house, Delia."

"But I thought we'd planned—" quavered Cora, dropping the wad of Llack serge she had pleaded with her thin fingers.

"Yes, yes, we planned it all out," interrupted the widow, "Cora needs you, Delia, with all those children."

Delia drew her hand across her forehead, "I—I must see about the supper, she said, rising and making her way to the kitchen like one dazed.

After supper the visitors assembled again in the little parlor. But Delia, when she had hung up her shining dis-pan and set the table for breakfast, slipped out to the kitchen porch. A few stars, still paled by the after-glow of the sun, were beginning to glimmer at the zenith. The wrens were chattering sleepily in the vines overhead. Their snug little home was concealed up there—carefully preserved by Delia—where they returned every year. Their home! Delia thought of her own dream, cherished, though vague, of a home and—love—some time. Her exacting old father had never tolerated the thought of a suitor for her. Nathan Lewis had been admitted to their home for years as a friend of the family, and had won the old man's favor by kindly ministrations.

Delia passed down the steps, where morning-glory vines rattled their ripe seed-pods as she brushed against them, and out into the garden—her own little garden, that she had always tended

with such pride. A few blocks away, over the neighboring houses, rose the white spire of the little church. It reminded Delia of the few bright spots in her dull life of the past few years—the times when Nathan had come to sit with her father so that she might attend service. Nathan's loyalty to her father had led her to honor him as she had never honored another man, and though he had never spoken of love, his friendliness had been her inspiration and had helped her to preserve her youthful enthusiasm through all these years. But now it was all over; the Lills for the sale would be issued on the morrow. The realization brought a sudden lump to Delia's throat. She sank down near a clump of marigolds and bowed her head upon her knees.

When Delia returned to the house she stood in the kitchen and bathed her eyes at the sink before going in to the parlor. Someone was just striding away from the front walk, and

the sisters were engaged in an interested discussion. The widow looked blushing and emplaced.

"To think Nathan would call," she said with a little sigh. "That's something more than manners." "Isn't he married yet?" queried Cora.

"Certainly not," Olivia quickly assured her. Then she explained for the sister-in-law's benefit: "He's the one that used to come to see me before I knew the doctor." She bared her claim upon the ground that Nathan had frequented their home when they were girls, and she had managed to monopolize his attentions. "He was good-looking, but poor's Job's turkey then—how many stores does he own now?" she concluded, turning to Delia, who until then had remained apparently unnoticed.

"Who?" asked Delia absently. "W'y, Nathan Lewis, of course."

"Oh, he owns the general store, and I guess he has a half interest in the hardware and heretofore of the bank." Delia recited this with perfunctory tone and manner.

"He's a nice-looking fellow; I wonder he ain't married long ago," Addie speculated with assumed obtuseness.

The widow shot her a disdainful look.

"But they say he's to be married soon to a Freeport girl."

Addie, who had to guess for gossip, had artfully reserved this announcement for her *coup de grace*.

Delia turned quickly away and busied herself adjusting the tidy on the big chair. During her father's last illness she had known nothing of outside happenings.

The widow was visibly disturbed. "Who said so?" she asked incredulously.

"Mrs. Simms told me about it the first night we came. He's been to Freeport three times within the last week."

"Umph! You never can telvise reports," said Olivia, closing the discussion with her usual dogmatic assurance.

An early date had been set for the sale. The intervening time was spent in getting the well-kept household furnishings ready for the display. Before one o'clock on the appointed day, the townspeople began to arrive, and soon the front yard had overflowed with prospective bidders. Mrs. Bates came to see if any of "Delie's pieced quilts was to be put up." Mrs. Shadley wanted "Delie's blue dishes." Others came, of various ages and conditions and with varied wants.

"I believe everybody in town's here," remarked Squire Beecham, the administrator.

"Mighty fine turnout," admitted the auctioneer, and his dark eyes sparkled as he noticed, entering the gate with several business colleagues, a solid-looking man of medium height, with clean-cut features and a firm mouth.

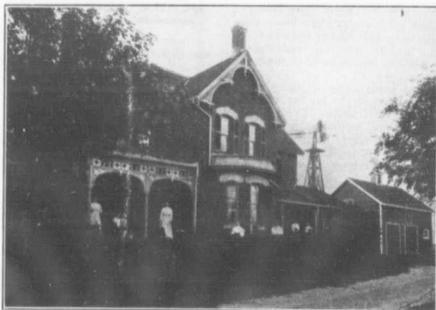
"There's Nathan Lewis," he added. "I s'pose he's got his eye out for knickknacks, gettin' ready for that Freeport girl." He was down there day-before yesterday.

Then he turned to the group about the kitchen furnishings and raised his voice, full and clear, at once persuasive and commanding:

"Here, good people, I want your attention—here—right here now—stand back a little there, please." He put out his hand to prevent a lame old woman from stumbling over a dishpan full of dishes and a firm dressed the crowd again.

"Here's a cook-stove as good as new, with all the utensils complete. What'll ye give me for the outfit—what'll ye give?"

For a moment Delia stood in the empty house with her hand on the knob, trying to summon courage to go out. Then, as old memories came crowding upon her, she forgot her purpose, and began a wandering aimlessly through the naked rooms. In



A Competitor's Home, Hillcrest Farm

Our illustration shows the home and grounds of Mr. O. D. Bales, of York Co. The farm of Mr. Bales scored second place in district number 2, in Farm and Dairy's recent good farm competition. See the interesting letter from Mrs. Bales in this issue, Page 25.

"See here, Delia, you know the pension'll be stopped now that father's gone, and here you are without an income."

"But I'd have the place and the orchard," suggested Delia, her eyes assuming something of their old twinkle.

"That's just it," pursued the widow. "The little fruit there is on the place wouldn't begin to pay the taxes."

"And you'd be on the town," put in Addie. Delia's face clouded.

"I know you've got the sense to listen to reason, Delia," Olivia continued, ignoring Addie's thrust.

"We've talked it over and over, and Addie brings John's verdict, which is to sell the whole thing—furniture and all, and be rid of complications," with another significant glance at the sister-in-law.

There was a brief pause, during which each woman seemed to be intent upon discovering the quality of her own dress goods.

with such pride. A few blocks away, over the neighboring houses, rose the white spire of the little church. It reminded Delia of the few bright spots in her dull life of the past few years—the times when Nathan had come to sit with her father so that she might attend service. Nathan's loyalty to her father had led her to honor him as she had never honored another man, and though he had never spoken of love, his friendliness had been her inspiration and had helped her to preserve her youthful enthusiasm through all these years. But now it was all over; the Lills for the sale would be issued on the morrow. The realization brought a sudden lump to Delia's throat. She sank down near a clump of marigolds and bowed her head upon her knees.

When Delia returned to the house she stood in the kitchen and bathed her eyes at the sink before going in to the parlor. Someone was just striding away from the front walk, and

the sisters were engaged in an interested discussion. The widow looked blushing and emplaced.

"To think Nathan would call," she said with a little sigh. "That's something more than manners." "Isn't he married yet?" queried Cora.

"Certainly not," Olivia quickly assured her. Then she explained for the sister-in-law's benefit: "He's the one that used to come to see me before I knew the doctor." She bared her claim upon the ground that Nathan had frequented their home when they were girls, and she had managed to monopolize his attentions. "He was good-looking, but poor's Job's turkey then—how many stores does he own now?" she concluded, turning to Delia, who until then had remained apparently unnoticed.

"Who?" asked Delia absently. "W'y, Nathan Lewis, of course."

"Oh, he owns the general store, and I guess he has a half interest in the hardware and heretofore of the bank." Delia recited this with perfunctory tone and manner.

"He's a nice-looking fellow; I wonder he ain't married long ago," Addie speculated with assumed obtuseness.

The widow shot her a disdainful look.

"But they say he's to be married soon to a Freeport girl."

Addie, who had to guess for gossip, had artfully reserved this announcement for her *coup de grace*.

Delia turned quickly away and busied herself adjusting the tidy on the big chair. During her father's last illness she had known nothing of outside happenings.

The widow was visibly disturbed. "Who said so?" she asked incredulously.

"Mrs. Simms told me about it the first night we came. He's been to Freeport three times within the last week."

"Umph! You never can telvise reports," said Olivia, closing the discussion with her usual dogmatic assurance.

An early date had been set for the sale. The intervening time was spent in getting the well-kept household furnishings ready for the display. Before one o'clock on the appointed day, the townspeople began to arrive, and soon the front yard had overflowed with prospective bidders. Mrs. Bates came to see if any of "Delie's pieced quilts was to be put up." Mrs. Shadley wanted "Delie's blue dishes." Others came, of various ages and conditions and with varied wants.

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one of her circuits, she found the stairway and escaped to the attic.

Below, the sale was in full sway. Every few seconds the auctioneer's hammer came down like the crack of doom, and his penetrating voice shouted, "Sold!" like the voice of the final judgment.

In the yard, Olivia, Addie and Cora were the center of a group of excited women. Mrs. Dodds, who always boarded the school-teachers, darted through the crowd, with the information that there were motths in the carpets, while her brother-in-law's wife stood in an advantageous position and tried to bid them in. She raised the parlor carpet to eighty cents a yard. The auctioneer shouted:

"Ninety! Ninety! Who'll give ninety?" He looked expectantly toward the edge of his circle and received a nod of assent.

"Sold, to Nathan Lewis!" he cried with a thud of his hammer.

Mrs. Dodds arose and made a dive for the wicker like a mother hen after an intruding cat. "I'll tell you, this is too one-sided, Mrs. Mead," she sputtered; "them Lewises and Biggizes are biddin' in everything in this whole lot that's worth anything. It ain't fair to get us all out here just to see the moneyed folks of the town buy themselves rich."

The widow drew herself up with the air of a woman who had a fitting reply on the end of her tongue. But it was not needed, for Mrs. Dodds just at that moment rushed at the auctioneer, who was holding a pair of pillows at arm's length.

"Are them leathers chickens?" she demanded shrilly.

"Sure!" drawled the auctioneer; "don't you hear the hens squawkin'?" Delia started down from the attic, feeling that she could control herself now. She never tolerated moping, and as for shirking—she would despise herself for that; no doubt there was something for her to do. But at the landing on the second floor, where a small, open window brought every word to her distinctly, she changed her mind. The organ was up now, they were trying it. There were a few notes at random, a crashing discord, and then the first score of "Nearer, My God, to Thee" trembled out. Delia crouched down with her hands tight over her ears, and her eyes closed. She shook violently, for she was afraid that a cry had escaped her on the first impulse. If they would only get through—sell it—and take it away!

"Fifty!" shouted the indefatigable auctioneer "Fifty-five!" It was going higher.

Nathan Lewis no longer kept the edge of the circle. He pushed through the crowd of men, women and children, until he could touch the little old organ with his hand.

"He'll lid it in. You'll see!" exclaimed the widow, nodding to Cora, who stood near her. "Many's the Sunday night I've played and sung on it for him."

Mrs. Clark, Delia's neighbor across the street, overheard this boast. She turned to Olivia with a little twitching smile, and said slowly and distinctly:

"I've seen him often walk by the house three or four times hand-running when Delia was playin' and singin' of a Sunday night."

"Sixty!"

Nathan watched the auctioneer's face with a queer light in his gray eyes; his leathery cheeks showed a faint tinge of color.

No one would bid higher.

"Sold to Mr. Lewis for sixty!"

It was over and the three women were huddled in the empty house.

"Where's Delia?" inquired the widow. "Mrs. Clark's asked us all over to supper; I wonder where..." She opened the door that led to the kitchen and paused agape. Addie

pressed in front of her to take a peep, and then looked back at Cora with malicious twinkle in her yellow-brown eyes.

Nathan and Delia were standing together near the window that opened upon the vine-covered porch. Delia turned quickly, her flushed face reflecting the new, strange light in Nathan's eyes. "Horo I am," she said cheerfully as she started to join her sisters.

Just then Cora jumped and shrieked as a roll of carpet was dropped behind her with a thud.

"Sprad it over the floor and we'll set the furniture right on it," said Nathan Lewis, stepping into the parlor to direct the boy who had brought in the carpet.

"What does this mean?" The widow drew herself up and fixed an accusatory look upon Delia.

Nathan came to Delia's side. "I've been wanting a chance to explain," he said. "But—but I've—that Delia and I have bought all the things, and they're going back into the house just as near like they were as we can put them."

"De—bought!" gasped the widow.

"Delia has just now consented to the partnership." Nathan turned a gentle look to meet Delia's quivering smile of acknowledgment.

"But—but—" Olivia clutched at her last straw, "the house was sold this morning—to a Freeport lawyer."

"The Freeport lawyer was my agent," replied Nathan simply, as he turned to console Delia about the replacing of the organ.

For a moment the three women stood looking from Delia to Nathan, speechless with astonishment. Blank surprise widened Cora's staring eyes. An expression of keen discomfiture reddened the face of the stout widow. Addie was the first to recover herself. She crossed over to Delia and took her hand awkwardly.

"You certainly have surprised me, but I'm glad for you both," she said. Olivia rose gallantly to the occasion.

"I'm not surprised," she announced calmly, meeting the malicious twinkle in Addie's eyes with steady composure. "I've always suspected it."

The Upward Look

Power for Service

And behold I send the promise of my Father upon you; but tarry ye in the city of Jerusalem, until ye be endued with power from on high— Luke 24, 29.

Having considered the various steps that we must take in order that we may receive the baptism of the Holy Spirit or "power from on high," it may be well to study the effect of this baptism before examining the causes that lead to its power to leave us. This baptism is of such a holy character it must be treated with reverence. It is not something to be proved of. It is not intended to make us happy nor even joyful. Its primary purpose is to make us useful both to God and to our fellow men and women.

As we study the passages in the bible that relate to it we find that they refer to testimony and service.

When God gives us this baptism He fits us for service. Without this baptism we are unfit to attempt to do anything for God. In I Cor. 13, 1-13, B. V. we read: "Though I speak with the tongues of men and of angels, and have not love, I am become as sounding brass or a tinkling cymbal. And though I have the gift of prophecy, and understand all mysteries and all knowledge; and though I have all faith so that I could remove mountains and have not love, I am not-

ing. And though I bestow all my goods to feed the poor, and though I give my body to be burned and have not love it profiteth me nothing." Thus we see that though we may have great gifts of character we may still lack that essential quality that enables us to accomplish definite results for Christ. This is the quality we receive when we obtain the baptism of the Holy Spirit.

"We have all says Prof. Henry Drummond, "felt the brazenness of words without emotion, the hollowness, the unaccountable unpersuasiveness of eloquence behind which lies no love. Take into your sphere of labor that simple charm of love and your lifework must succeed. You can take nothing greater, you need take nothing less. It is not worth while noting if you take anything else. You may take every accomplishment; you may be braced for every sacrifice; but if you give your body to be burned and have not love, it will profit you and the cause of Christ nothing."

When God has given us this power from on high we are equipped and ready for service. No matter how humble and poor we may be we will be able to accomplish great things for Christ through the power of Christ within us. Our sins will fall away from us and others, seeing the change that has taken place in us will seek to find the cause and thus we will be able to help them. There will be an influence for good flow from us that all who come in contact with us will feel. As long as we remain close to Christ we will be able to work in his power and our lives will bear good fruit in the Master's service.—I.H.N.

The Fourteen Errors of Life

The fourteen mistakes of life Judge Rentoul told the Bartholomew Club are:

To attempt to set our own standard of right and wrong and expect everybody to conform to it.

To try and measure the enjoyment of others by our own.

To expect uniformity of opinion in this world.

To look for judgment and experience in youth.

To endeavor to mold all dispositions alike.

Not to yield in unimportant trifles.

To look for perfection in our own actions.

To worry ourselves and others about what cannot be remedied.

Not to alleviate, i. e. we can, all that needs alleviation.

Not to make allowances for the weakness of others.

Consider anything impossible that we cannot ourselves perform.

To believe only what our finite hands can grasp.

To live as if the moment, the time, the day were so important that it would last forever.

To estimate people by some outside quality, for it is that which is within which makes the man.

DON'T PUT OFF
 Seeing your friends and having them join in for a club of subscribers to Farm and Dairy.

Hillcrest Farm

The farm home of Mr. G. D. Bales called Hillcrest Farm is situated on the east side of Yonge Street at the summit of York Mills, commanding an extensive view. Equally well it could be described as a "City Home," in the country, or a "Country Home in the City," as one has but to board the Metropolitan Electric car, which stops at the farm gate to find one's self in a very short time in the heart of Toronto, but five miles distant.

The substantial red brick dwelling with its verandas and tastefully painted trimmings, is approached by a short drive way, flanked on the left by a thick spruce hedge. Surrounding the house is a well kept lawn, edged on the side next the hedge with a border of flowers. To the north of the lawn is a double row of tall pines and spruce affording sheltered and inviting nooks for hammocks, while out in the open are groups of evergreens, chestnut and choice shrubs.

INTERIOR ARRANGEMENTS
 The interior of the house is divided into ten rooms. On entering the hall, decorated in soft wood shades, to the right is the winding stairway leading to the sleeping apartments on the second floor. To the left is the drawing room and music room.

At the rear of the hall is the living room and dining room (folding doors connecting all three rooms). There is



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a large bay window to the south where flowers and vines grow in profusion. There is also a door with plate glass and colored transom out of the room leading to the veranda on the west, which makes a very bright and cheerful room. Behind the dining room lies the large winter kitchen with its kitchen cabinet, coal range and well appointed pantry including "dumb waiter," brood shelves, fruit dishes, etc. The back stairs leading to the servants' sleeping apartments goes up from this room.

To the south is a door leading to a vine covered porch (also the south windows) where right at hand is the soft water pump.

To the rear of the winter kitchen is the summer kitchen with its large range, washing machine and commodious cupboard where all cooking utensils can be stored away from flies and dust. A door at the east leads to a cement platform and walk, which leads to the cement cistern and hard water pump.

A large airy cellar with cement floors extends under the entire house. It is divided into four compartments for fruit, vegetables, fuel and hot air furnace. The house is finished in mahogany and cherry. We also have the Bell Telephone which we find a very great convenience and would not like to be without.

EDUCATIONAL ADVANTAGES

Besides the usual daily papers, the following agricultural journals are taken: Farm and Dairy, The Farmers' Advocate, The Canadian Farm, Family Herald and Ladies' Home Journal. No improvements were added after entering the Dairy Farms Competition, but in the near future we hope to have an up-to-date bath room installed.

Rest Room

An Aesthetic Agricultural Society has recently established a recreation and rest room in the village for the use of its members and their families while they are in town. Many prefer meeting at such a place to going to the hotel. In addition they feel it is their place, that they have a perfect right to be there; whereas unless they are prepared to spend a little money at the hotel they don't feel very comfortable about making use of it too often when they come to town.

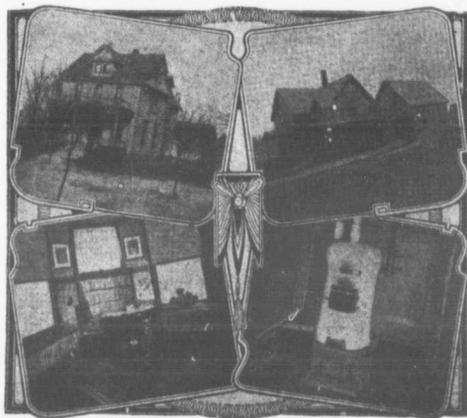
In other places why should not a similar privilege be extended to, and provision made for, the wives, sisters and daughters of members? It is a

good deal harder for them to know what to do with the spare time than even for the men. While they are quite free to go to the hotel parlor, many of them, especially the younger girls, don't care to do so.

A farmer's wife was saying the other day that some of the most tedious and annoying hours she had to put in were those spent waiting for the sometimes inconsiderate men-folk, who left them stranded anywhere at all in the town while they went down to the blacksmith's, or somewhere else, for some little thing, and to get the news

pleasure to look forward to if we could go into town, attend to the things we had to, and then while waiting for the horses to be shod, or the sharpening of the plow share, or whatever it might be, turn in to some comfortable room, there to rest or enjoy a chat with a neighbour in a like position. Instead of starting for home pretty tired, and possibly a bit out of temper, inwardly vowing not to go into town often than could be helped, the homeward drive would be enjoyed.

The cost of maintaining such a room



Heating Farm Houses

The two upper views show comfortable warm farm homes. Two lower views from the same homes show a warmed room; the one on the right with a radiator placed under each window. The one on the left shows the cellar with heater installed. A good time now to consider your heating problem for next winter, if you have not already done so.

of the week retained in longer or shorter fashion.

Or who likes to be left in a store, while waiting for the mail to be sorted? Even though we have one or two friends in the town it is not possible always to go to them. Often it is at a time which would be awkward to our friends, or we expect to have so long a wait it would put them about, and we know they are busy enough anyway. But after the quiet and possible loneliness of the farm, it would be a

in the town would be very small; its furnishing could be of the simplest. Just a few real easy chairs, and maybe a lounge, a picture or two if possible, a mirror, by which to "fix up a bit," some magazines for light reading, or for the sake of interesting the children in the pictures, and all that is necessary is there.

Perhaps in some places this idea has already been carried out, and if so I am sure it has proved a great boon. If you know of any place where it has been tried, please write us about it. Do you think something along this line could be started in your district, or have you some other suggestion to offer of a similar nature?

An Improvised Bath

One of our exchanges tells as follows about how one farmer's wife improvised a bath in the house:

Few farm houses have a bathroom. Many farm houses have large kitchens; also large cisterns, plenty of soft water, and a good kitchen range. Having these just as other women have them, one woman evolved one thing more. For \$10 she bought a zinc bath tub for which she found a place on one side of her kitchen. Her husband being handy with tools soon enclosed the bath tub in a frame made of matched ceiling. The tub was set about four inches from the wall and this four inches was made the base for a lid which could be let down over the bath tub, covering it completely so that it might easily have been mistaken for a large chest.

When the tub was set in place a lead pipe was fitted to the opening in the bottom, carried down through the floor and out to a drain beyond the outside wall. The lumber, the lead pipe together with the trap, the tub

and the work of the tinner were the only expenses incurred. Woman-like she was sure no accident would befall by setting a large screw-eye in the wall and a hook in the lid, so that when the lid was lifted to allow the bath tub to be used it was hooked fast to the wall and was in no danger of falling. A little lather-and-egg mixed he did it all and not a week passed but the family blesses the hour when this bright idea dawned in the mind of someone who had the pluck to carry it out.

What is Home

The golden setting in which the brightest jewel is "mother."

A world of strife shut out, a world of love shut in. An arbor which shades where the sunshine of prosperity becomes too dazzling; a harbor where the human bark finds shelter in the time of adversity.

Home is the blossom of which Heaven is the fruit.

Home is a person's estate obtained without injustice, kept without disturbance; a place where time is spent without repentance, and which is ruled by justice, mercy, and love.

A hive in which, like the industrious bee, youth earns the sweets and memories of life for age to meditate and feed upon.

The best place for a married man after working hours.

Home is the coziest, kindest, sweetest place in all the world, the scene of our truest earthly joys and deepest sorrows.

The place where the great are sometimes small, and the small often great. The father's kingdom, the children's paradise, the mother's world.

The jewel casket containing the most precious of all jewels—domestic happiness.

Where you are treated best and grumble most.

The centre of our affections, around which our heart's best wishes twine.

A popular but paradoxical institution, in which women work in the absence of man, and man rests in the presence of woman.

A working model of Heaven, with real angels in the form of mothers and wives.

A Just Criticism

BY A FARMER'S WIFE

I am glad the "Household Editor" invited criticism on the article, entitled "Tragedy of The Farmer's Wife." Being a farmer's wife and very well acquainted with others of the same occupation, I feel in a position to defend the much abused class. Allow me to say that farmers are good to their wives. If there is one who is mean to his better half, he is not only condemned by the wives but by the farmers themselves. Of course I know we have to do without a great many of the conveniences the city folks enjoy but we have

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many pleasures which they miss too. If a farmer does not get all the things his wife would like to have, it is generally because he cannot afford it not that he would not like to see her enjoy them.

She knows when the bills come due and the wife who is a help mate indeed, is just as anxious to see them paid as the farmer himself.

As to him helping her about the house I know a good many men who are not ashamed to help her get dinner, tend the baby or even help with the churning or washing.

But he hasn't much time to help around the house, as there are many chores to do. A farmer is never idle. In fact he is generally speaking much harder worked than his wife. He gets up first in the morning and is often not in bed till two or three hours later than she in the evening.

At this home, the milking and separating the cream is not considered woman's work, at all, though sometimes I help to milk in the summer time. I have also worked in the field some too, but am never expected to do so. To help one another is the true and only way I think to get along and get the most out of life. Then, too, a farmer's wife has the feeling that she is helping to earn the money that pays for the farm and the improvements, while a clerk's or common working man's wife has just to spend it as best she can.

The farmer and his wife have one pocketbook and they know each other's expenses.

Just a word about the thin woman. I know three women within a mile from home who would each weigh from two hundred to two hundred and twenty-five and they are hard workers, too.

When all is said, shall I tell when I consider the cream is not considered woman's work, at all, though sometimes I help to milk in the summer time. I have also worked in the field some too, but am never expected to do so. To help one another is the true and only way I think to get along and get the most out of life. Then, too, a farmer's wife has the feeling that she is helping to earn the money that pays for the farm and the improvements, while a clerk's or common working man's wife has just to spend it as best she can.

What the Wiser Man Does

Don't look for the flaws as you go thro' life.

And even when you find them, It is wise and kind to be somewhat blind

And look for the virtues behind them.

For the cloudiest night has a hint of light

Somewhere in the shadows hiding; It is better by far to hunt for a star

Than to stare at the sun abiding. The world will never adjust itself

To suit your whims to the letter, Some things must go wrong y'r whole

Life long; And the sooner you know it the better.

It is folly to fight with the infinite, And go under at last in the wrestle;

The wiser man shapes into God's good plan As the water shapes into the vessel.

—E. Wheeler Wilcox.

Salting Meat

Proportions for salting pork, tongue or Leef:—6 lbs. salt to 100 lbs. meat; 2 lbs. coarse brown sugar; 2 oz. saltpetre. Mix well together, pulverizing the saltpetre. Put meat and brine into a stone crock; cover if desired, and leave in the brine for not less than ten days. A little longer in the brine will not harm the meat.

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MASON & RISCH—A 7½ octave Cabinet Grand upright piano by Mason & Risch in ebonized case with plain polished panels, double repeating action, ivory and ebony keys, etc. In first-class order. Original Price, \$425. Special Price..... **\$215**

HEINTZMAN & CO—A 7½ octave Cabinet Grand upright piano by Heintzman & Co., in dark mahogany finished case with plain polished panels, double folding fall board, full overstrung trichord scale, double repeating action. Original Price, \$450. Special Price..... **\$245**

MENDELSSOHN—A 7½ octave upright piano by the Mendelssohn Piano Co., in richly figured walnut case with full length carved panels and Boston fall board, 3 pedals, practice muffler, ivory and ebony keys. In use only six months. Special Price..... **\$245**

MASON & RISCH—A handsome walnut upright piano of the Henry Herbert Model, manufactured by Mason & Risch Co., To-

ronto, in case of modern design, with full length music desk. Boston fall board, 3 pedals, practice muffler, ivory and ebony keys, etc. Cannot be told from new. Special Price..... **\$255**

McMILLAN—A 7½ octave Cabinet Grand upright piano of our own make, "McMillan Model," in rich mahogany case of attractive design, with full length plain panels, Boston fall board, third or sustaining pedal, also practice or dulciphone stop, finest double repeating action, ivory and ebony keys, etc. Has been used less than a year. Special Sale Price..... **\$255**

GERHARD HEINTZMAN—A 7½ octave upright piano by The Gerhard Heintzman Co., Toronto, in handsome walnut case, full length music desk, carved panels, 3 pedals, ivory and ebony keys, etc. Is in first-class order, and looks just like new. Special Sale Price..... **\$265**

MASON & RISCH—A 7½ octave upright piano by Mason & Risch, Toronto in handsome burl walnut case with full length carved panels and music desk, Boston fall board, ivory and ebony keys, etc. In the very best of order, a good, sweet-toned piano. Special Sale Price..... **\$265**

HEINTZMAN & CO—A 7½ octave Cabinet Grand upright piano by Heintzman & Co., in walnut case with plain polished panels, double folding fall board, double repeating action, ivory and ebony keys. A first-class instrument. Special Sale Price..... **\$267**

GERHARD HEINTZMAN—A full sized Cabinet Grand upright piano by the Gerhard Heintzman Co., Toronto, in dark mahogany case of Colonial Design, Boston fall board, 3 pedals, ivory and ebony keys, etc. Special Sale Price..... **\$275**

GOURLAY—A fine New-Grand-Scale Gourlay Piano in exceptionally rich Circassian walnut case of simple Colonial Design with full length plain polished panels, Boston fall board, 3 pedals, ivory and ebony keys, etc. If you were to pay us \$1,000, we could not make you a finer piano than this instrument, the extra money would have to be upon case ornamentation. Special Sale Price..... **\$315**

Gourlay, Winter & Leeming

188 Yonge St., TORONTO

Embroidery Designs

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



390 Initial Letters in Flower Design.



463 Design for Embroidering a Fancy Work Bag in Heart Shape.



465 Design for Embroidering a Rich Turned-Over Collar and Cuffs.



410 Design for Embroidering a Blouse or Shirt Waist.

The roses and leaves are designed to be worked in long and short stitches; the buds, calyxes and turned-over edges of the flower petals in solid embroidery, the stems and veins in outline stitch and the stamens of the smaller roses to be worked in French knots.

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

THE COOK'S CORNER

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

Our New Cook Book free for only two new subscriptions.

To Keep Meat Fresh

Fresh meat is much more desirable than that which has been heavily salted, but unfortunately it is usually considered out of the question on the farm where lutchering is done at home. However, it is not impossible nor even difficult to have a constant supply of fresh meat on hand if only one is willing to take a little extra trouble at time of putting down.

For the last half dozen years we have not been without fresh meat at any time, nor have we had any to spoil. Usually we kill in the spring for warm weather use, but it makes no difference whether for calf just as well be put down in the fall or winter as in the spring as it will keep indefinitely. Beef we can all together, but pork is put down in other ways well.

TO CAN BEEF

To can beef or any other meat, cut it up into pieces small enough to drop easily into Mason fruit jars, salt to taste, put rubbers and covers on and set in a boiler on a thick layer of hay. A common wash boiler will hold half a dozen 2 qt jars, and half as many more of the 1 qt size. Jars should be well packed with meat, but not over full.

When all is ready set the boiler over the fire and fill nearly to the top with cold water. Bring slowly to a boil and keep at that point from three to three and a half hours—three hours for the 1 qt jars, and a half hour longer for the 2 qt is my rule. Keep water boiling constantly, adding more as needed to keep up the required quantity. Jars should never be submerged, but water should always come up nearly to the covers.

At the end of the specified time lift jars from boiler and screw down covers as tightly as possible. Lift the jars one at a time and seal immediately. Replace cover to boil each time a jar is removed, and keep water boiling briskly until the last jar is out. This I consider important.

If any cover or rubber proves defective, it may be replaced with another, but jar should be set back in the boiler again for a time to make sure that any air which is admitted to the heat is thoroughly sterilized. I always use new rubbers and press edges of covers down to rubbers at all points. This I also consider important.

Both jars and covers should be thoroughly sterilized by boiling in water for a few minutes before using. Usually I do this the day before. By having everything in readiness I can easily fill all the jars of either size. I can boil at one time during the forenoon. After dinner I boil and seal them, getting everything done and out of the way in good time for supper.

Meat for bottling should never be put into pickle, even for a day, nor should it be even washed. Trim off soiled and bloody portions and use them some other way, but do not try to cleanse and bottle them. Use no water in the jars. The meat will make its own. One good-sized quarter of beef will fill about 22 qt jars.

THE PORK STUFFY

Usually we do not do a great amount of pork, but fry it down and keep it fresh in that way. Hams and shoulders we always fry down, cut into thick slices, fry in fat until about half cooked, pack into

large jars and cover with hot fat. From time to time, while cooking, pour hot fat over the meat—enough, in fact, to insure each piece being entirely surrounded and covered.

If pork is very fat enough will fry out of the piece for this purpose but if not, some lard must be heated and used. When meat is thoroughly cooled remove weight, salt, cloth or paper over the jar and set away in a cool place.

When wanted for use, take up sufficient for the time, finish cooking and serve. The secret is to thoroughly sterilize meat by partially cooking and then keep all air excluded by surrounding with fat.

Sausage may be kept fresh for a number of weeks by simply packing cold into jars and covering with lard.

I have known it to be kept in fine condition the greater part of the summer just in this way. For long keeping, however, I would prefer to make it up into small rolls, partially cook in fat, pack into jars and cover well with hot lard.

If a little roast beef or pork is wanted for variety, cut shapely pieces, put into small pats and cook in the oven until done. Then cover with fat and set away in a cool place until wanted. To serve, simply re-heat and slice. Juices may be made into gravies in the usual way.

In keeping boiled or roasted meat one thing should be borne in mind, and that is the coating of fat over the top should not be broken. It is then important to set jars where they are to remain, or if they must be moved, to do so with as little jarring as possible. I have frequently kept meat from one year to the next without loss—in fact, of late years have not been without meat in the cellar.

COOKING A POT ROAST

The next time you buy a piece of beef suitable for a pot roast try cooking it in the oven in a deep earthenware dish, tightly covered. It will require a long time to cook, but it will be very tender and better flavored than when cooked on top of the stove. Put in about the usual amount of boiling water to begin with, and after that it requires no attention. There is no danger of it burning. As a variation in the manner of serving, try this: Let it cool in the pot liquor, then take it out, place in a baking pan, cover thickly with a well-seasoned dressing (like poultry dressing, with the addition of egg) and bake until well browned. Serve hot or cold, with a gravy made by slightly thickening the pot liquor.—"Jessie B."

A Portable Clothes Press

If you happen to have a guest chamber that lacks a closet, the following simple contrivance will answer the purpose admirably. Take a board four feet long and four inches wide, and screw clothes hooks into it eight inches apart. Near each end screw a small screw eye; attach strong picture cord to the latter, and suspend the board from two molding hooks. When a guest is expected to stay some time, this is hung up in a convenient place in the guest room; at other times it may be put away in a corner of the storeroom.

Doubly Useful Mucilage

If you make your own mucilage (one heaping teaspoonful of gum arabic to an ordinary mucilage bottle gives it more at a cheaper rate than that bought ready made), you can dispense with court plasters, liquid or otherwise, except where an antiseptic is necessary. Ordinary cuts can be coated with this and it acts as effectively as with the patent preparation. Two coats thoroughly dried will stand the application of water better than anything but the adhesive plaster doctors use—an inconvenient, expensive luxury.

The Sewing Room

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

CHILD'S TUCKED COAT 650A



The tucked coat is always becoming for younger girls. It means enough fullness to be graceful and it is simple without being over severe.

Material required for medium size (4 yrs.) is 3 1/2 yds for 27, 2 yds 44 or 52 in wide.

The pattern is cut for children of 2, 4 and 6 yrs, and will be mailed on receipt of 10 cts.

CHILD'S CAP, COLLAR AND MUFF 658B

Winter comfort demands a comfortable close fitting cap, and little fur sets as these. The cap can be made either plain or with revers. The collar and muff can be made from fur plush.

Material required for medium size (6 yrs) is 1/2 yd 27, 3/4 yd 44 or 1/2 yd 50 wide; the muff and collar 1/2 yd 50 in wide.

The pattern is cut for 4, 6, and 8 yrs and will be mailed on receipt of 10 cts.

SEVEN GORED TUCKED SKIRT 659

This skirt tucks well below the hips, and allowed to fall in soft folds below the hips yet the stitching are always pretty and graceful. They are much in request. The tucks are not too wide to mean bulk over the hips yet they provide becoming fullness at the lower portion of the skirt. These revers at the back are overlapped to provide additional fullness which means additional grace.

The pattern is cut for a 22, 24, 26, 28 and 30 in waist, and will be mailed on receipt of 10 cts.

RUSSIAN TURBAN AND SCOTCH CAP 659B

These hats are exceedingly attractive and smart. The Russian turban is round while the Scotch cap is pointed. Ear muffs can be used or not as preferred.

Material required for medium size (4 years) is, for the Russian cap 1/2 yard 27, 3/4 yard 27, 3/4 yard 50 in. wide for the Scotch cap 1/2 yard 21 or 27, 1/2 yard 50 in. wide with a yard of ribbon for the complete lay-out, and for the lining of ear streamers, and for the lining of cap will be required 1/2 yard of silk.

The pattern is cut for boys of 2, 4 and 6 yrs, and will be mailed on receipt of 10 cts.

INFANT'S LONG DRESS 682.



Panel dresses are always in demand for the complete lay-out. They afford perfect opportunity for the dainty needlework that mothers find so fascinating.

Material required is 4 yds. 36, 2 1/2 yds. 44 in. wide, with 8 1/2 yds. of banding and

6 1/2 yds. of edging. The pattern is cut in one size only and will be mailed on receipt of 10 cts.

HOLSTEINS

MAPLE LEAF STOCK FARM GORDON H. MANHARD

Breeder of Choice Holstein-Friesian Cattle.
At present I will sell 20 young cows, due to freshen in the early part of the winter. Also a few young bulls. E-11-310

FOR SALE, HOLSTEIN BULL CALF

Born, Dec. 21. Dams at 2 years old. Dredged at three years old, 486 lbs. of milk and 21 lbs. of butter. Bull calf, born March 19th, dam Canadian Champion of her age, of fetal record at two years, 434 lbs. of milk and 20 lbs. of butter. E-11

DAVID GAUGHNELL, Yarmouth Centre, Ont.

RIVERVIEW HERD

FOR SALE, 2 Bull Calves, sired by Sir Aggie's Beta's Regis, son of King Regis, world's greatest 5 year old sire, dam Aggie's Lilly Pieterie Bull, champion Jr. 4 year old—23 1/2 lbs. butter 7 days. Dam of calves a 20 lb. 2 year old, and 23 lb. 4 year old. Price reasonable, considering breeding.

P. J. SALLEY
E-10-610 Lachine Rapids, Que.

LAKEVIEW HOLSTEINS

Herd headed by Count Hengerveld De Kol, son of Pieterie Hengerveld's Count De Kol, who has five daughters averaging over 20 lbs. butter in 7 days and whose dam (23 1/2 lbs. in 7 days) has a daughter with a record of over 25 lbs. butter in 7 days. Five bull calves, from 9 months old down. From this sire for sale, G. T. R. and Hamilton Herd, due to farm. Visitors met by appointment. K. T. F.

E. F. OSLER, Bronte, Ont.

HOLSTEINS

SUNNYDALE OFFERS a choice lot of young cows and heifers. Lowest prices; best breeding. Can furnish car load.

A. D. FOSTER
E-5-510 Hallowell St., C.O.R.E. Bloomfield, Ont.

NORTH STAR HOLSTEINS FOR SALE

Bulls ready for service, out of high testing A.B.O. dams, sired by Count Hengerveld De Kol, a son of Sara J. Hengerveld 3rd, the highest tested bull in the world, first priced cow ever in Canada. Also a few females in calf to him. E-11

J. W. STEWART, Lyn, Ont.

HOMM-BRED AND IMPORTED HOLSTEINS

We must sell at least 45 cows and heifers at once, to make room for the natural increase of the herd. There is a chance of a lifetime to get a good bargain, as we have a few young bulls, Pontiac Herms, Imp. son of Hengerveld Dekol, world's greatest sire, head of the herd, and a few more. H. E. GEORGE, CRAMPTON, Ont.
Putnam Stn., 15 miles—C.F.R.—E-421-10

THE SUMMER HILL HEAD OF HOLSTEINS

In making some wonderful Records. This year it has produced the champion Canadian bred butter cow for 7 days record, 23 1/2 lbs. and the champion 2 year old of Canada, for 7 days, 23 1/2 lbs. We have some younger ones that promise to be just as good. We offer for sale ten fine heifers, all of which are imported bull.

Come and make your selections at ONCE. Prices are right and everything guaranteed just as represented.

Trains met at Hamilton if advised.
D. C. FLATT & SON, Millgrove, Ont.
Farm Phone, No. 2471 Hamilton.

HOLSTEINS

WINNERS IN THE RING

Gold Medal Herd at Ottawa Fair

and

WINNERS AT THE PAIL

See Our A.R.O. Records

Just the kind we want. They combine

CONFIRMATION

and

PRODUCTION

Bull and Heifer Calves for Sale from Our Winners

"LES CHENAUX FARMS"

Vaudreuil, Que.

Dr. Harwood, Prop., D. Borden, Mgr.

HOLSTEINS

FOR SALE—Six Holstein bull calves, 8 months old, dams all have good 7 day records; also good yearly records; all sired by Cornelius's Poach, five times first prize bull at Toronto and London fairs. Also a few females of the same quality.

THOS. HARTLEY, Downsview, Ont.

HILL CREST HOLSTEINS

Head your herd with a son of "Butter Boy Calamity." (His sire, "De Kol 2nd, Butter Boy 3rd, surpasses all Holstein sires in his generation in number of lbs. R. O. daughters and grand daughters through his sons.) Their dams can show for themselves. Two choices (just freshened) for sale. Write, or better come and look them over.

G. A. BRETHER, Newwood, Ont.

AVONDALE HOLSTEINS

Offers for sale high class Holsteins, all ages. Herd headed by Prince Hengerveld Pi-11, a son of Pieterie 2nd's Woodcrest laid-out of Princess Hengerveld, a daughter of Hengerveld De Kol with record of 20 1/2 lbs. butter at 23 months. We also offer some fine young Yorkshire pigs of full stock breeding.

ARTHUR C. HARDY, Brockville, Ont.

GLENSPRINGS HOLSTEINS

Are large milkers. Herd averaged for next year 9,776 lbs. Out of herd of 15, nine milked at 22 1/2 lbs. in 7 days. Record of Performance and three in Record of Merit.

At present an offering five young bulls fit for service next spring. Prices and particulars on application.

Also an offering some fine yearling heifers and one cow.

E. B. MALLORY, Frankford, Ont.

MISCELLANEOUS

TAMWORTH AND REKINBEH SWINE—Boars and sows for sale. J. W. Todd, Gorham, Ont. Maple Leaf Stock Farm

SUNNYSIDE STOCK FARM

Chester White Swine, Shropshire Sheep and Mammoth Berkshire Pigs, all of the best quality for sale at all times. Apply to W. E. WRIGHT, O-3-310 Glanworth, Ont. Proprietor

NYTSHIDE FARM, Herd of Large Egg-Laying Hens, including the following: Ver-Grey Dorking Poultry. A number of young birds fit for service. A choice lot of Silver-Grey Cocker's, 83 lbs. each. None but first class registered stock sent out.

E. E. MARTIN, Canning P.O., Paris Station, Oxford Co., Ont.

AYRSHIRES

AYRSHIRES.—Record of Performance work a specialty; young bulls from B. H. F. cow and young Cocker's, 83 lbs. at next freshening. Milk reports of dams, for everything. E-11

JAMES BEGG, Box 88, St. Thomas

AYRSHIRES

Ayrshires of the right stamp for production combined with good type and quality. Write for prices. O-122-10

R. M. HOWDEN, St. Louis Station, Que.

MOSSGILL AYRSHIRES

Bull and heifer calves, and yearling bulls, of good milking strains, for sale at reasonable prices.

J. W. FERGUSON, Lambton Co., Camlachie, Ont.

FOR SALE—AYRSHIRE BULLS

From one month to two years old, all bred from large, good-milking stock. Also Yorkshire pigs. Apply to DANIEL WATT on MON. W. OWENS, Manager, Proprietor, E-10-10 Riverside Farm, Montebello, Que.

"La Bois de la Roches" Stock Farm

Here are kept the choicest strains of AYRSHIRE, imported and home bred. Full size pig of the best bacon type. WHITE ORPINGTON, WHITE WYANDOTTES and RED ROCK Poultry. HON. L. J. FERGUSON, J. A. BIBEAU, Proprietor, Manager, E-8-8-10 Ste Anne de Bellevue, Que.

CHERRY BARK STOCK FARM

FOR SALE—Cows sired by North-heral Milkman, the champion bull of Canada. One bull calf two weeks old, sired by Morton's Champion Junior Champion at Toronto, 1908, and by North-heral Dowie 3rd, a grand Imp. heifer, and a good milk cow, 10 months of age. Satisfaction guaranteed. Nothing but the best in our line. Call on our salesmen. P. D. MCARTHUR, North Georgetown, Howick Station O-6-2-10 Que.

ply the demands of the cities, farmers must turn more attention to the breeding of cattle. Dr. Rutherford says that not only is the supply deficient, but that the care given to what is bred is also lacking, so that Canadian cattle are looked on in the British markets as inferior to Argentine and United States imports. It is readily seen that when our best export cattle are thus characterized, our home consumption becomes most necessarily be of poor quality. It is most demanding immediate attention, more especially from the farmer's standpoint, as nobody knows better than himself that setting of cattle on the farm means eventually exhaustion of the soil.

Prices have been slightly lower this week in the various grades of live stock at the city market but the demand from buyers has been poor. Receipts during the week at the Union Stock Yards amounted to 3111 head of cattle, 1374 sheep and lambs, 2100 hogs, and 219 calves. Prices were as follows: Exporters, 85.25 to 86.25; medium, 85 to 85.25; butchers' cattle, choice, \$5.50 to \$8.00; medium, 85 to 85.25; ordinary, 84.50 to 85; heavy feeders, 82.75 to 84.25; steers, 82 to 83.50; canners, 81.50 to 82.75; milk cows, 84.5 to 85; ordinary, 83 to 84; springers, 83 to 84; calves, 83.50 to 87.50; sheep, 83.50 to 85; lambs, 87 to 87.50; hogs, f.o.b., 88.10 to 88.25; fed and watered, 88.50 and over. There seems to be a slightly downward tendency in the hog market as last week being offered at 82 1/2 f.o.b. This is only an isolated case, however, and it is not easy to foretell how long the prices in present ruling will exist. The Trade Bulletin's London cable quotes Canadian bacon at 68 to 70s.

Dr. Bell's Veterinary Medical Wonder cures inflammation of lungs, bronchitis and kidneys. The author ventures. Agents wanted in every county. Write for a free trial bottle. This offer only good for 60 days. Limited to goat bottles.

DR. BELL, V.S., Kingston, Ont.

AYRSHIRES

SPRINGHILL AYRSHIRES

Imported and home bred stock of a high class for sale. See our stock; the leading shows this fall. Write for prices.

ROBT. HUNTER & SONS

Long Distance Phone. Maville, Ont. E-7-410

IMPORTED AYRSHIRES

Having just landed with 50 head of choice Ayrshires, mostly purchased at the great Barchan sale, I am prepared to fill orders for hard heading bulls, selected from the best dairy herds in Scotland; 13 fit for service to choose from. Also a few females of all ages. Cows with milk record up to 70 lbs. per day. Write and let me show you my stock. Long Distance Phone. E-8-15-10

R. NESS, Howick, Que.

STADACONA FARM

Show Record for 1909

At Three Rivers, Quebec's Provincial Exhibition, at Sherbrooke, Canada's Great Eastern Show, at Ottawa, the Dominion's Large Central Fair, at Barton, Vermont, C. S. A., and at the Ontario Fair, under five different judges, my Ayrshires won FIRST PRIZES THAN ALL OTHER EXHIBITS COMBINED.

CATTLE of both sexes and all ages for sale at very reasonable prices. O-6-9-10 GUS LANGLIER, Sidcup Farm, Cap Rege, Que.

MONTREAL HOG MARKETS

Montreal, Saturday, Jan. 29th.—The receipts of live hogs on this market this week were very light, and in the face of a keen demand prices were strong, as high as 89.50 a cwt. being paid for selected lots weighing 225 to 250 lbs. A considerable quantity sold at around 89.25 a cwt.

Dressed hogs are in very good demand, and prices have been marked up this week to \$13.50 a cwt. for fresh killed abattoir stock. Country dressed is quoted at \$12.75 to \$13 a cwt.

EXPORT BUTTER AND CHEESE

Montreal, Saturday, Jan. 29th.—The market for cheese has been very active this week, and the demand for export has cleaned up everything offering in the way of cheap cheese. Prices have been marked up all around, and in the Ontario made cheeses are quoted to-day at 12 1/2 c. with nothing available of any grade under 12c. Holders are very confident owing to the small stocks existing here unsold, which are estimated to be not more than 25,000 to 30,000 boxes, and as they are controlled by a small group of dealers they are not likely to be sold except at full prices.

The total stock in Canada at the end of the month will not amount to more than 100,000 boxes, and some estimate put the quantity at even less than this. The shipments this month have been fairly good, and there is a considerable increase over those of December, bringing the stocks in store down to the figure mentioned above.

The butter market is steady, with a fairly good demand from all sources. A feature of the trading this week has been the demand from Great Britain for supplies, particularly of dairy butter and other cheap grades. A small quantity has been shipped across, but there was very little available as the bulk of the stock on this market has been cleaned up by the buyers from the United States. A carload of creamery butter was also shipped over to Great Britain this week, and a number of inquiries have come in this week, with some prospect of business resulting. Fancy June made and September creamery is quoted at 25c to 25 1/2 c. a lb. with a few winter made lots offering at 24c to 24 1/2 c. lb. The supply of the lower grade, however, is small.

ANNUAL MEETING OF HOLSTEIN-FRIESIAN ASSOCIATION

The 27th annual meeting of the Holstein-Friesian Association of Canada, will be held at the Temple Building, corner Richmond and Bay streets, Toronto, on Thursday, Feb. 10th, 1910, at 9 o'clock a.m. The Executive Committee will meet on Wednesday, Feb. 9th, at 10 o'clock a.m. in the Trocadero Hotel.

Mr. James Bettle gives notice that he will move amendments to Art. 3, Sec. 4, and Art. 4, Sec. 19.

Mr. D. C. Platt gives notice that he will move amendments to Art. 4, Sec. 19 and 20.

Mr. George A. Laidlaw gives notice that he will move that Clause 7, Rule 5, Record of Merit, be amended by striking out the words, "The estimated yield of butter shall also be considered."

To secure reduced rates buy single fare tickets and obtain standard certificate.

The annual fee for 1910 meet on Wednesday, Feb. 9th, at 10 o'clock a.m. in the Trocadero Hotel.

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DISPERSIO SALE

OF OVER

40 HEAD HOLSTEIN-FRIESIAN CATTLE

At MADOC, MARCH 25th, 1910

Including the great bull, SARA JEWEL HENGERVELD'S SON, whose dam has an A.H.O. butter record:

In 7 days of 28.12 lbs.

In 30 days of 10.18 lbs.

and the only cow in Canada that ever produced in official test one hundred pounds of milk in 30 days.

All the females old enough are bred to this great bull, and by the time of the sale there will be 20 calves sired by him.

Catalogues will be ready by March 1, 1910. Positively no reserve.

Further particulars later

J. A. CASKEY - - Madoc, Ont.

approved of by the Board on the fullest statement of the available facts. This method involves a large amount of work, but your Directors feel that they could not fully perform their duty to you and to themselves in any other way.

ECONOMICAL MANAGEMENT

Economy in every branch of the business is insisted upon, and I am glad to say that in this we are assisted by the whole staff. Saving has been effected in the matter of supplies by placing this class of expenditure in the hands of a competent and careful official. In transferring and appointing local managers and clerks, in the opening of new offices and in the division of the work, there has been a decrease of expenditure wherever possible. In no case, however, has this desire for economy been allowed to impair the efficiency of the working of the Bank.

BRANCH SYSTEM EXTENDED

During the year, owing to the largely increased business of the Bank, we found it advisable to open some important branches. In Vancouver an agency has been established in a central and highly desirable location. A property was purchased which has already considerably increased in value, and the Bank has opened there with every prospect of success. An office has been opened in Montreal under favorable circumstances, and several desirable points between these two large cities have been selected for our branches. The results from the western field thus opened up have been very gratifying, and have fully justified the action taken by our Directors. It will also be necessary to consider in the future what steps should be taken to connect our system with the Maritime Provinces, thereby extending our financial relations and still further increasing our facilities for doing business in all parts of Canada.

The astonishing growth and extension of Toronto, and its business, demanded serious consideration. The most important move made here was the opening within the past few weeks of a branch at the corner of Yonge and Richmond streets in the office lately occupied by the Bank of Montreal. Already business of a most material character is coming to us at this branch, and being in the centre of the commercial, financial and trade locality of Toronto, this point will always be an important agency.

ASSETS SOUND

I need not go into the details of the Annual Statement, which has just been read to you, and which you have had for some time past in your hands. I would like to point out to you, however, that we are holding \$300,000 to Rest Account, to contribute \$20,000 in reduction of Building and Furniture Account, to give \$5,000 to Pension Fund for the benefit of disabled or old retiring officers, to add \$5,000 to a Guarantee Fund to protect the Bank against loss by personal defalcation or losses through any member of its staff, and to carry something over \$102,000 to Profit and Loss Account.

In preparing this statement we have dealt with the value of the assets in a vigorous manner. There has been no hesitation in allowing the most liberal and reasonable provision for bad and doubtful debts, and I believe that no item has been knowingly placed beneath the assets at one dollar more than its actual and available value. We felt that the solidity and vital character of the Bank's business justified us in using more than ordinary criticism of what might be treated as doubtful, and hence we had we doubted the ordinary test of valuation of our assets, the net gains would appear much in excess of what the statement shows.

GRATIFYING INCREASE IN BUSINESS

At the last Annual Meeting the statement was made that for 1909 great progress might be looked for. I am delighted to say that this statement has been fully verified. We have made, so far as I am aware, absolutely no bad debts during the year, except in the few small accounts which may yet be realized. The whole twelve months showed a record of credits well observed, debts promptly paid, and no losses.

Our deposits have increased at an astonishing rate, and this, after all, is one of the great tests of public confidence and of stability in a Bank's affairs. Look for one moment at the facts. The increase alone in our deposits for the past year is nearly as great as the total deposits were ten years ago, then representing nearly fourteen years' accumulation. This year's addition to Rest Account is three times more than the total Rest of the Bank ten years ago. We have added to our total assets in 1909 a sum almost equal to the whole assets of the Bank at that period, and the shareholders' proportion for 1909 is equal to two-thirds the whole circulation of the Bank at the same period of comparison. In addition to all this, you are now receiving an increase in dividends of ten per cent., as promised, with ample provision against all contingencies. The promises held out a year ago have, therefore, been fully met, and we have no doubt that the future will be equally good. It is better, results in every branch of the Bank's business. Notwithstanding the low rate of interest during the earlier part of the year, and the abundance of available money, the earnings of the Bank have not suffered. We are able to increase the dividend and maintain at the same time a strong position with regard to all other obligations and contingencies. The increase in dividend is warranted by the condition of the Bank's affairs, and we felt that the interests of the shareholders should be kept in view, as the Bank has reached a stage when it can well afford to recognize these interests without impairing its ability to perform all its other obligations.

It is also a source of pleasure to know that the relations between the Bank and its customers are so satisfactory that litigation is almost unknown in the Bank's record for 1909. The absence of legal proceedings shows the accounts to be in a healthy condition, for it is only in cases of doubtful or doubtful credits that the law has to be invoked. Prompt payment and good security are the chief reasons why the Bank has not required the aid of the courts, and when you consider that nearly \$40,000,000 are under the control and management of the Bank, with tens of thousands of accounts in all parts of the Dominion, outstanding and current, and that during a few suits have been entered during the year, you will readily conclude that the financial condition is safe and strong.

THE BUILDING

One of the best investments of the Bank continues to be the Head Office Building. Every foot of rentable space is occupied, and the rent is promptly paid. After paying all our goings, the Bank receives nearly 5 1/2 per cent. net profit on the investment, or, to be exact, 5.40 per cent. Rents appear to be increasing, notwithstanding the many new office buildings, and with our equipment and accommodation for tenants, there need be no fear as to the future revenue from this source. The other buildings also yield a good return and promise well for the future.

The staff from the chief of the Executive to the messengers are enthusiastic in their work, and very patriotic in their duties, and efficient in every detail. Every office has been thoroughly in-

spected and full reports made to the Board thereon.

I now move that the Report for the year 1909 be adopted.

Mr. E. F. B. Johnston, K. C., seconded the motion. He pointed out that the Bank had risen from small beginnings to be one of the most important financial institutions in the Dominion. It had all the elements of sound progress and stability. The large deposits during the past year showed the confidence of the public. The absence of litigation proved that the debts were being promptly paid, or well secured, and the increase in the dividend, justified as it was, is the strongest evidence of the good earning power of the Bank. The Directors scrutinize every credit, except in very small accounts, and exercise their best discretion in determining the policy and conduct of the Bank's affairs.

The motion for the adoption of the report was carried unanimously.

It was moved by Mr. Geo. Le Riche and seconded by Mr. Geo. Watson that the thanks of the shareholders are due and are hereby tendered to the President, Vice-President and Directors of the Bank for their attention to the interests of the Bank during the past year. Carried.

It was moved by Rev. J. S. Williamson and seconded by Mr. J. R.

McKichan that the thanks of the Directors and Shareholders are due and are hereby tendered to the General Manager, the Assistant General Manager, and the staff of the Bank, for their diligent attention to the interests of the Bank during the past year. Carried.

It was moved by Mr. Ed. Dickenson and seconded by Mr. J. J. Gibson that the Lalor be now open for the election of Directors, and to be kept open until three o'clock, unless by five minutes elapsed without a vote being cast, when it shall be closed, and until that time, and for that purpose only, this meeting be continued.

The scrutineers reported the following gentlemen duly elected to act as Directors for the ensuing year—viz., C. D. Warren, Hon. J. R. Stratton, C. Kloefer (Guelph), W. J. Sheppard (Wauhanosa), C. S. Wilcox (Hamilton), E. F. R. Johnston, K. C., H. S. Strath.

The meeting then adjourned. At a subsequent meeting of the newly-elected Directors, Mr. C. D. Warren was re-elected President, and Hon. J. R. Stratton Vice-President by a unanimous vote.

STUART STRATHY,

The Traders Bank of Canada, Toronto, 25th January, 1910.

AYRSHIRE NEWS

Farm and Dairy is the official organ of the Canadian Ayrshire Breeders' Association, all of whose members are readers of the paper. The management of the paper is invited to send items of interest to Ayrshire breeders for publication in this column.

AYRSHIRE BREEDERS' NEWS

The following is a full report of the receipts and expenditures of the Canadian Ayrshire Breeders' Association for 1909:

RECEIPTS

Cash on hand, Jan. 1, 1909	124 82
Cash received from registrations	2862 88
Cash received from members' fees	912 00
Balance due for cuts in herd book	36 05
Amount received for cuts in Herd Book, 1909	56 80
Amount received for Herd Books sold	14 00
Interest	13 72
Total	8403 17

EXPENDITURE

Bal. due Record Office, salaries for 1908	36 25
Bal. exhibition grants for 1908	205 00
Bal. due secretary on salary, 1908	100 00
Bal. due Martin, 1908	50 00
Am't. of salaries Record office, 1909	60 00
Am't. of salaries of the Association's Directors' travelling salary for 1909	600 00
Secretary's travelling expenses	237 25
Printing and binding expenses	21 00
Herd Book, Vol. 18	622 20
Printing and binding 2000 copies Annual Refunds from Record Office	225 00
Farm and Dairy, 334 subscriptions at 70c	100 00
Translating copy for Herd Book and Annual	268 80
President's travelling expenses	37 50
Making cuts for Herd Book and Annual	25 50
Printing Circulars, etc.	45 27
Postage	32 75
Insurance on supplies in record office	40 00
Stationery	11 46
Printed to dairy test, Maritime Winter Fair for 1909	19 25
Grant to Dairy Test Ontario Winter Fair, Guelph, 1909	50 00
Interest	57 00
Telegrams and telephones	14 60
Express charges	11 19
Office supplies	6 65
Rent of hall for annual meeting	5 00
Expenses Revising Committee	5 00
Editor for 1909	2 00
Bank discounts	1 06
Bal. cash on hand	622 82
Total	8403 17

ASSETS

Jan. 1st, 1910:	
Cash on hand	6 622 02
53 months' fees for 1908	106 00
58 members' fees due this year	136 00
Herd Books on hand, about 2500	2500 00
Conductors' Record & Performance	2500 00
Illuminated Record & Performance	2500 00
Diplomas	200 00
Office furniture, safe	840 00
Books	50 00
Typewriter desk	6 00
Seal and press	15 00
Polos, stencils, etc.	10 00
Total	123 00

LIABILITIES

Jan. 1st, 1910:	
Bal. due Record Office, salaries for 1909	100 75
Assets over liabilities, 1908	8386 29
Assets over liabilities, 1909	2653 62
Total	932 67

AMERICAN AYRSHIRE BREEDERS' ASSOCIATION

The American Ayrshire Breeders' Association held their annual meeting recently at Philadelphia. Secretary C. M. Winslow's report showed that while the receipts for the year were not so large as might be expected, the registration and for transfers exceeded the total last year by \$1,000. John R. Valentine, Breeder, was elected president.

The official organ of the Association commenting upon the annual meeting suggests that the Association could make use of more money to give advantages to the breed. "Since probably from 200 to 300 head of stock will be imported from Scotland to the United States and Canada, and in the coming year, why not do it now?" "Impose a registration fee of \$10 a head, not for the coming year, but for the succeeding year to that, if such a fee were in force this coming year, it would probably amount in from \$2,000 to \$3,000. The increased fee would be a very small increase, and the A. G. C. C. for the registration of imported animals has not proved a hardship to the importer nor has it decreased importations. On the contrary it has made the importer more particular of the quality of the imports and has tended to increase importations.

I am very much pleased with the foundation sent to me received as a premium for Farm and Dairy—Ross Dymond, Wentworth Co., Ont.

FUJIS

Do you trap or buy fur? Buy from the largest dealer. I pay you for the skins of four species of mink, fisher, shrew, and chipmunk. I pay mail and express charges. I ship promptly. Also largest dealer in Bechies, Sheepskins, etc. Quotations and shipping tags sent free.

JOHN HALLAM, TORONTO

HOLSTEIN-FRIESIAN NEWS

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

The annual meeting of the Canadian Holstein-Friesian Association will be held in the Temple Building, Toronto, on Thursday, February 10, 1910, at 9 o'clock a. m.

BULL TRANSFERS FOR DECEMBER, 1909.

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

Aargie Netherland Prince, R. Willis to E. A. Hatch, Eden, Ont.
 Albrecht Sherwood's Dandy, Jessie Coombs to Wm. Robertson, Winchester Springs, Ont.
 Albrecht Sylvia Prince, George A. Walker to David Stearns, Russell, Ont.

Alberta Butter Boy, W. J. Tregillus to William Gilbert, Minburn, Alta.
 Alberta Pouch, D. H. Brown to Wm. Cleveland, Kimball, Alta.

Albert Calamity De Kol, A. P. Bissell to W. H. Lobb, Clinton, Ont.
 Albert of Sorel, Joseph B. Ferland to Duke Lavallee, St. Hyacinthe, Que.
 Albino Pieterje De Kol, George T. Prouse to Benj. James, Brownville, Ont.
 Annie Pauline's King, B. J. Palmer to W. H. Davis, Norwich, Ont.

Andra's Sir Pieterje, George T. Prouse to G. C. Hawkins, Brownville, Ont.
 Banks Grant De Kol, E. C. Chambers to Wm. H. McConnell, Windham Centre, Ont.

Beauy Buster Boy, L. Abbott to Alfred Steed, Sarnia, Ont.
 Becky's Lad, A. B. Potter to W. W. Hoffman, Borden, Sask.

Ben Pouch, R. F. Hicks to G. F. Carlike, Newton Brook, Ont.
 Beulah Clay's Prince, John Johnstone to James Arnold, Greville, Que.

Black Beauty, E. A. Gillespie to George Bennett, Prescott, Ont.
 Black Pouch, D. H. Brown to D. G. O'Connor, Huntingdon, Que.

Bookton Pride, Alexander Moore to W. M. Crozier, Bookton, Ont.
 Brema Butter King, J. H. McLean to H. Coon, Brinston, Ont.

Butter Boy Hengerfeld, A. D. Foster to P. Owens, Salmon Arm, B. C.
 Calamity Has, A. D. Foster to L. P. Hubbs, Hillier, Ont.

Campbelltown Abberker, R. J. Kelly to W. D. Lindsay, Hagersville, Ont.
 Canaan De Kol Burke, F. E. Came to James Scott, Beachburg, Ont.
 Canaan Sara Hengerfeld Korndyke, F. E. Came to W. W. Brown, Lym, Ont.

Centre View Butter Baron M. P. D. Ede to George de Montmorency, Woodstock, Ont.
 Champion of Elyin, John Purse to Arch. Bell, Trout River, Que.

Chean Billy, James Grigg to Henry Stady, Jr., Chilliwaak, B. C.
 Colantha Bill, X. Plaut to John Kenolly, Callton, Ont.

Cornelius De Kol Prince, L. Abbott to A. D. McEugan, Rodney, Ont.
 Count de Dikkers, C. A. Olmstead to Wm. O'Hara, Rupert, Que.

Count de Dikkers De Kol 4th, Robert Campbell to Bruce Speers, Fenella, Ont.
 Count Pieterje Pouch, Robert Cowing to J. R. Hammond, Monkton, Ont.
 Count Wayne Mercedes 5th, W. T. McQueen to Squire Sinden, Tillsonburg, Ont.
 De Kol Springs, C. A. Olmstead, F. H. Dent to C. E. Thompson, Beachville, Ont.
 Dick Hengard, Ontario to Bateman to G. W. Countryman, Tweed, Ont.

Doctor Tom Schulling, Stan H. Nagle to Mt. Elgin Industrial Institute, Muncey, Ont.

Dorothe's Dandy of B. R. F. McCuaig & Robertson to Howard Bangs, Hawkebury, Ont.
 Duke Pieterje Korndyke, B. E. Hagerman to Wilard Hagerman, Minto, Ont.
 Duke Wayne Calamity De Kol, W. Walburn Rivers to James Nichols, Beachville, Ont.

Ede De Kol, R. Willis to A. N. Gray, Eden, Ont.
 Ede's Tenon's Sir Inka, R. W. Walker to Archie W. Staples, Fleetwood, Ont.

Fairfield Sir Clothilde Wayne, C. E. Smith to Charles Mott, Mt. Vernon, Ont.
 Farmer's Friend Paul De Kol, Otto Suhling to Robert McLeod, Bennington, Ont.

Ganey Johanna, G. A. McNeil to Freeman McNeil, Lansdowne, Ont.
 Garretto Hero, J. H. McLean to James Knapp, Merrickville, Ont.

Herbert De Kol Duke, George Laird to Henry Curtis, Arkona, Ont.
 Homestead Duke De Kol, L. Abbott to Wm. Bowman, Arkona, Ont.
 Homestead Prince De Kol, L. Abbott to Neil McEugan, Talbotville, Ont.
 Garetto Hero, J. H. McNeil to Campbell to Elaire Tilton, Dominionville, Ont.

(To be continued)

Makes Each Animal Worth 25 per cent. Over Its Cost



"The Kel," 202

At a cost of only two-thirds of a cent a day per Animal, Royal Purple Stock Specific makes each Animal worth 25 per cent. more.

You never heard of any other Specific, or "Stock Food," doing likewise.

Royal Purple will permanently cure the Bots, Colic, Worms, Skin Diseases and Debility, and restore run-down Animals to plumpness and vigor.

It will increase the milk-yield three to five pounds per cow a day inside of from two to three weeks. It makes the milk richer than ever before.
 MR. ANDREW WEGRICH, of Vindict, Ont., says: "This is to certify that I have tried your Royal Purple Stock Specific for two weeks on one cow. On the 15th I weighed her milk at 17 pounds. I noticed a change after 5 or 6 days, as there was an extra weight of milk. On the 29th, I carefully weighed the milk, and she gave 22 pounds. I am giving an order for 5 boxes, as I consider it the best I have ever used."

"Stock Food" will not do this, because "Stock Food" is nothing more or less than a mixture of the very things which you, yourself, grow on your own farm.

It is not more food your animals need. They must have something to help their bodies get all the nourishment from the food they are getting. So that they will fatten, and stay fat, all the year round. They need something to prevent disease, to cure disease, and to keep them in the best of health, all the time.

Not a Stock Food

Royal Purple is not a "Stock Food," nor a "medicine." It is a Conditioner.

It does not contain grain, nor farm products. Nor does it contain "Dope," or any other injurious ingredient. Royal Purple does not merely temporarily bloat the stomach, or inspire the Animal. It fattens and strengthens it, permanently.



No other Specific known adds flesh so quickly as Royal Purple. It makes 6-week-old Calves as large as ordinary-fed Calves are at 10 weeks.

Royal Purple makes naturally-thin Animals fat and heavy. And it builds up the health and restores the former plumpness and vigor of run-down stock, in little or no time.

The very best time to use this Conditioner is now. It digests the hard food properly and prevents the animals getting indigestion or losing flesh.

50 per cent. Cheaper

One 50-cent Package of Royal Purple will little over Animal 70 days. This figures a little over two-thirds of a cent per day. Most "Stock Foods" in 50-cent Packages last but 50 days, and are given three times a day.

But Royal Purple Specific is given only once a day, and lasts 50 per cent. longer. (A \$1.50 Pall, containing four times the amount of the 50-cent Package, lasts 200 days.)

So, you see, it is unnecessary to give Royal Purple Specific once each day.

Just think of making each Animal worth 25 per cent. over its cost! What will that mean to you, Mr. Stock Owner!

Royal Purple creates an appetite for food, and helps nature to digest and turn it into flesh and muscle.

As a Hog fatterer, Royal Purple has no equal.

Never Off Feed

Dan McEwen, the horseman, says:

"I have used Royal Purple Stock Specific persistently in feeding 'The Kel,' 202, largest winner of any pacer on Grand Circuit in 1908 and 1909, and 'Henry Winters,' trial 2.05, brother of 'Allen Winters,' winner of \$36,000 in trotting stakes in 1908.

"These horses have never been off their feed since I started using Royal Purple

Specific. I will always have it in my stables."

For Poultry

Royal Purple Poultry Specific is our other Specific. It is for Poultry—not for stock.

It makes the Hens lay Eggs in Winter as well as in the Summer.

MRS. WM. BURNHAM, Sanford, Ont., says: "Dear Sirs,—This is to certify that I have used two boxes of your Poultry Specific for my hens. They laid so well while feeding it to them, I wondered if you would mind sending me word how or where I could get some this winter. I bought it from your agent last winter. I had 32 hens, and some days I got two dozen eggs a day in February and March, while feeding them the Specific."

Royal Purple Poultry Specific prevents Poultry losing flesh at moulting time, and

And we'll ask no questions—make no excuses. You will be the judge—not us.

This is an honest test, isn't it? We ask you to make it because we know that Royal Purple is the best Conditioner on the market.

If you are not satisfied, after testing it, you don't lose anything, do you?

Free Book on Diseases

Ask your dealer for our *Epargne Free Book on Cattle and Poultry Diseases*. This valuable little Book also contains many cooking recipes, as well as full details about Royal Purple Stock and Poultry Specifics.

It is worth many, many dollars to every owner of Stock or Poultry. Yet it costs you nothing. It ought to be in the home of every Stock and Poultry owner in Canada.

It gives the symptoms of all Animal and Poultry diseases, and tells the best drugs to be used in cases of emergency.

If your dealer cannot give you this book, write us, and we'll promptly mail it to you, Free, postpaid.

If your dealer cannot supply you with Royal Purple Stock and Poultry Specifics, we will supply you direct, express prepaid, upon receipt of \$1.50 a Pall for either Poultry or Stock Specifics.

Agents Make Money

We have hundreds of hustling men earning big money in spare time supplying Royal Purple Stock and Poultry Specifics. If we haven't a man in your district handling our goods, write us at once.

Everybody knows about Royal Purple Stock and Poultry Specifics.

You won't have to do any running around or talking. We do that for you, advertising, to help our agents.

If you want to work, on commission or salary, write us to-day for particulars. This is a good job for any farmer or farmer's son, with horse and rig, for fall and winter months. No experience needed. We lay out your work for you.

Write us a letter now, and just address us:

The W. A. Jenkins Mfg. Co.
 LONDON, ONTARIO

MAPLE GRANGE HOLSTEINS

The three illustrations of Holsteins published on other pages of this issue, were furnished by Mr. M. E. Woodworth, manager of Maple Grange and Georgetown herds. The two year old bull, Schulling of No. 5,000 (C.H.B.) was the grand champion prize and diploma at the great Eastern (Sherbrooke, Que.) and again at the Central Canada, Ottawa, exhibitions, and at the Vermont State Fair, the Grand Champion, last year. He also won the first premium and reserve Grand Championship at Brockton, Mass., River Junction, N. H., through and through, and of perfect dairy type, and is backed by a dam that won a test for butter fat over all breeds.

The cow Daisy B. De Kol 2nd, Pauline 2,623 (C.H.B.) was also a first prize winner, exhibited as a dry cow. She is a great producer, giving 71 pounds of milk a day at five years old.

Madam Dot 3rd Princess 2,853 (C.H.B.) is probably one of Canada's greatest cows to-day is a perfect dairy type and of great capacity. She is a phenomenal producer, in fact a regular milk-making machine. She won first and diploma at Sherbrooke, at Ottawa although experts did not side in with the placing, the sweepstakes cow at Toronto was placed over her. After the show she was immediately shipped to the States, where the following day after being taken from the car, she entered the contest for butter fat at the Vermont State Fair, where she easily made the most butter of any cow in any breed. She also won at the Brockton, Mass. Fair, in the butter test, and won first for making more butter than any cow of any breed. She also won the silver cup offered by the Holstein-Friesian Association of America at Brockton, Mass., for pure-bred Holstein cow. She is a handsome cow, and as handsome is that handsome does, she is twice handsome.

The noted Canadian Holstein herd, of which these animals are members, and which is owned by Mr. M. E. Woodworth, LaCelle, Que., is wintering at the farm of E. B. George, Maine Street, Haverhill, Mass. Mr. George evidently knew a good thing when he saw it, and he purchased a half interest in this herd.

There are many other animals in the herd which Mr. Woodworth considers just as good as those enumerated. A few young things from the herd would make a grand foundation for any breeder. Address all communications to Mr. M. E. Woodworth, Clement Farm, Maine Street, Haverhill, Mass.

HOLSTEIN AUCTION IN QUEBEC.

Thursday, December 23rd marked the first sale in Quebec at auction of pure bred Holstein cattle, that is where the proprietor is proposing to continue in business and uses the auction sale as a means to sell surplus stock.

In Ontario and the United States the auction sale has long been a favorite way of selling surplus stock. This has heretofore not been tried in Quebec, owing to the lack of general interest due to the Holstein breeding being in its infancy. The auction by Mr. Andrew Boa demonstrated that Quebec now can hold its own with the best, and while it shows that Quebec prices are not what they are in the older districts of the breed, that is for equal quality of stock, it shows that now Holstein sales can and will be used to keep pace with the advance of the Holsteins in this Province, which advance has truly been remarkable.

Mr. Boa's place is five miles from LaCelle, which lies 40 miles from Montreal, towards Ottawa. The sale of 25 head of registered stock of excellent breeding and condition, was conducted by Auctioneer Malouin, in the presence of Messrs. McPhee of Vankleek Hill, McDonough, Ottawa, E. N. Brown and F. E. Came, Montreal, others from Ottawa and neighboring towns.

Mr. Boa is proposing to extend his breeding operations and has a fine bull imported from New York, of the well known prize winner of Holsteins.

ANDREW BOA'S HOLSTEIN SALE

The sale of Holstein-Friesian cattle on December 23rd, 1909, by Mr. Andrew Boa, of Maple Hill View Farm, Genoa, Que., was not such a success as it would have been if there had been more bidders from a distance. Holsteins in the Province of Quebec have not become as popular as they might be, but there is no doubt but that they are fast increasing. Quite a number purchased from this sale what will make foundation stock. The animals

did not go as high as they should according to their quality and breeding; some buyers obtained great bargains. The main bidders were from Ottawa, Montreal and Vankleek Hill. Some of the prices are as follows: Butter Girl's Irene Queens, 8 years, D. A. McPhee, of Vankleek Hill, Ont., \$110; Lizzie Pietje De Kol, 10 years, F. E. Came, St. Recollet, Que., \$75; Butter Girl's Irene, 11 years, F. E. Came, St. Recollet, Que., \$75; Lady Pietje De Sol, 6 years, J. D. McMartin, St. Eustache, Que., \$71; Gretchen Butter Girl, 3 years, D. A. McPhee, Vankleek Hill, Ont., \$120; Albina Wayne De Kol, 3 years, F. E. Came, St. Recollet, Que., \$59; Lucilla Wayne, 3 years, F. H. McCullough & Sons,

Navan, Ont., \$70; Butter Girl's Irene Princess, 7 years, James Paul, LaCelle, Que., \$63; Princess Wayne Isoco, 6 months, Gilbert Matthews, LaCelle, \$38.50; Isoco Express prepaid upon receipt of price, W. E. McKilloch, of Vankleek Hill, Ont., \$22.

ABSORBINE FOR SPRAINED HOOF.—In recent letter from George J. Alexander of Lang, Ont., there was the following message with regard to ABSORBINE: "ABSORBINE is all you claim for it and more, as I have used up to date one bottle and a half on my horse, which had a very bad sprain on the hoof, and which I thought was going to run into something worse, but it is now cured. I would gladly re-

commend it to any who have blemished horses of any description. Reports like these are constantly being received. ABSORBINE at druggists \$2.00 or sent express prepaid upon receipt of price, W. F. Young, P. O. F., 123 Temple Street, Springfield, Mass. Canadian Agents: Lyman's Ltd., St. Paul St., Montreal, Que.

I enjoy reading Farm and Dairy and look forward to its coming every week, as it is full of information for a farmer.

—J. H. Wallace, Sask.

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



Use buying-sense when buying roofing

Mr. Farmer! Would you buy a horse from a man a thousand miles away—a man you did not know personally, on a mere paper guarantee? Certainly not. When you buy a horse you judge him yourself. You don't buy him on any paper guarantee, you buy him on what you know about him.

Buy roofing the same way—roofing that has proven itself by actual wear and tear test. Cover the roofs of your house and barns with

"EASTLAKE" Steel Shingles

LIGHTNINGPROOF STORMPROOF
FIREPROOF RUSTPROOF

the only steel shingle on the market that has proven itself ABSOLUTELY WEATHERPROOF under all climatic conditions—the ONLY steel shingle that can boast of an actual 25 year wear and tear test.

In perfect condition after 25 years

A quarter of a century ago scores of public and private buildings throughout Canada were roofed with "Eastlake" Metallic Shingles.

These roofs are in perfect condition to-day and have been certified as such by PRACTICAL BUILDING INSPECTORS.

THIS IS THE PROOF THAT COUNTS—better than one of these leaky guarantees.

After suffering hundreds of dollars of loss by laying an inferior roof, a paper guarantee is mighty poor consolation. Your lawyer could not dig a dollar out of it in a thousand years. Ask him—he knows.

Bank on the actual wear and tear test when buying roofing.

Easiest and quickest to lay

Then "Eastlake" Shingles are so easy to lay—saving labor which means money to you.

"EASTLAKE" STEEL SHINGLES make the most economical roof for all buildings. You pay nearly as much for the inferior brands of metal shingles, also the ordinary wood shingles, as you do for "Eastlakes" and they do not last one-third as long.

"EASTLAKE" STEEL SHINGLES are made from the heaviest sheet steel, evenly and perfectly galvanized, thus absolutely rustproof.

Their special patented construction insures a watertight roof. "Eastlake" Shingles are properly called the ONE RIGHT ROOFING.

The Philosopher of Metal Town.

Send a post card to-day for our free booklet, "Eastlake Metallic Shingles." It contains roofing facts you should know. Also ask for catalogue containing full information about our Metallic Ceiling, Steel Sidings for houses and barns, Corrugated Iron, Eave Troughing, Conductor Pipe, etc.

The largest and oldest manufacturers of sheet metal Building Materials in Canada.

Manufacturers



AGENTS WANTED IN SOME SECTIONS. WRITE FOR PARTICULARS.

Send NOW for Free Book and Sample!

"For more than five years I have been experimenting with our experts to find the BEST culvert for all-around uses. We sought the markets of the world for one that was just right; and we didn't find it. If we had, we'd have bought the patent rights for Canada. Finally, last Spring, we struck the idea. Then we put in some expensive months in making that idea better,—and NOW we've got a cul-



vert that is so far ahead of any other culvert than no comparison. You'll read something about it here; but to KNOW how 'way ahead it really is, you'll want to see the sample (sent free) and read the booklet (free, ditto). With that before you, you will soon see why every reeve, or warden, or town councillor, or anybody who has any use for culverts at all,—will find it pays to get in touch with me right NOW. I am asking you to lay aside your notions of what makes a good culvert, and a cheap culvert, and find out about this NEW culvert. I don't expect you to buy a foot of it until it PROVES to you that Pedlar Culverts are in a class by themselves, and that you can't afford to overlook them. Let us start that proof toward you soon—address place nearest you.

Learn about the strongest
most practical
most durable
and easiest-laid culvert
ever made

**PEDLAR PERFECT
CORRUGATED
GALVANIZED CULVERT**

**Frost-Proof, Rust-Proof
and Wear-Proof**

This triple-rib flange-lock principle, found only in Pedlar Culverts, not only adds greatly to the strength of the piping and makes a perfect joint—practically as good as if welded—but it also allows for expansion and contraction under cold or heat. Though a Pedlar Culvert, of any length, be frozen solid full of ice, it will not 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.

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.

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.

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.



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

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

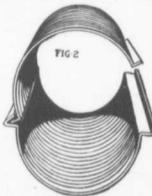


COMPACT—PORTABLE—ENDURING—ECONOMICAL

This Shows How It Is Put Together

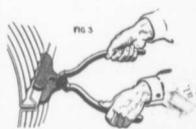


Pedlar Culverts are shipped in half-sections, nested—saving freight and making carriage easy in roughest country. Quickly and easily transported anywhere. Fig. 1 shows the half-sections or semi-cylinders, nested one within the other for shipment. One of the ribs is a radial flange, the other a re-curved 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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