

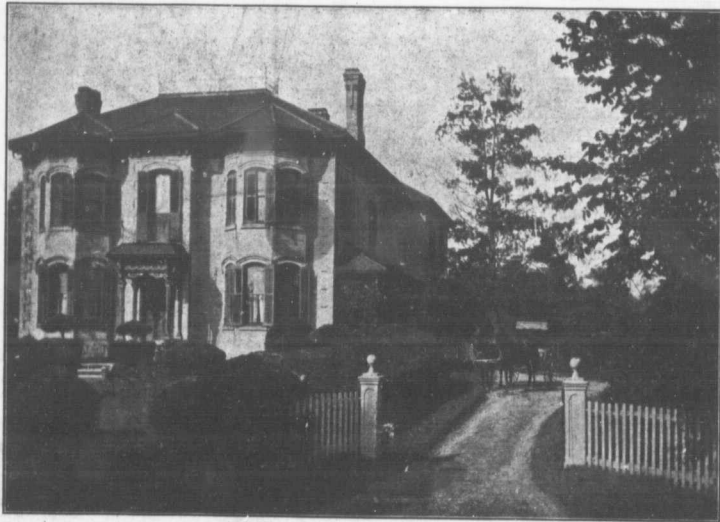
FARM AND DAIRY

RURAL HOME

Grillage J. H. C. F. (D)

PETERBORO, ONT.

JANUARY 7 1909



"SUNNYSLOPE," A BRANT CO., ONT., FARM HOME

The prosperity evidenced in the illustration is largely due to the system of mixed farming, and to dairying, which is practised on his and other farms in that section. Mr. J. H. Cornell, the proprietor, has been connected with the producing end of the dairy business for years. His farm of loam soil, consists of less than 100 acres. On it he keeps an average of ten milch cows, from 20 to 30 head of young stock, as well as a considerable number of pigs and poultry. He also counts on raising from one to three colts each year.

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has built its reputation are actual facts, of the indestructible kind. They are not the imaginary kind, made of sand, that are easily destroyed when the machine is in actual operation. The name of Derbyshire stands for all that is good for dairying in Canada and it would not be used in connection with a cream separator unless that machine was worthy of a place in any dairy in the Dominion. The sales of Link-Blade Separators during 1908 were the greatest in the history of the machine. This is a strong evidence of its increasing popularity.

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

Percherons vs. Clydesdales

Ed., Farm and Dairy.—I have been greatly interested by the letters in your journal under the above caption. Never but once in my life did I attempt to breed any horse other than a trotter.

Pound for pound, I believe he will give as much service for the feed he is too light to handle the heavy machinery required on most farms today. And in many cases he is too nervous and high strung for an ideal farm horse.

For about 30 years, we have had in this section both grade Clydesdales and Percherons. I am free to say that the latter have many points that compel my admiration. They are smoothly made, clean cut animals, with better necks, heads and limbs so far as contour is concerned, than any Clydes. They are free, quick snappy movers, all horse, and for heavy animals do fairly good road work. Although no expert in judging horses, I have never yet seen a Percheron in which I could not pick a really serious defect. Flat feet, narrow heels, navicular disease, down on their pasterns, are some of the worst. If there are any good sound Percherons, I wish a few could be brought down here, to give us a start in the breeding of a very desirable type of horse.

The Clydes we have here, are, to my eye, no beauties. Many of them are short necked, Roman nosed and hammer headed. Some have white enough on them for a Holstein cow, which does not enhance their appearance and more bee-like than that of the Percherons. But with us they have run fairly sound, and are good, servicable, willing workers. A homely horse with good underpinning is greatly to be preferred to a handsome cripple. "No feet and limbs, no horse."

It is not surprising then, that the grade Clyde is being fast displacing the grade Percheron though the latter had the first inning. It is quite possible that we were unfortunate in our choice of foundation stock of the French horse. If he is worthy, many of us would gladly see him on his way to the front again.—L. J. Flower, Queen's Co., N.B.

A Profit in Quebec Hogs

Ed., Farm and Dairy.—In your editorial, "An Impossible Suggestion," published in your issue for December 9th, you said that the idea had been advanced at various times that the packers should keep the price of hogs at a reasonable figure, and you claim that the suggestion was not practical. I agree that it would not work because, as your editor would say, "Oh! it is an old thing when we first proposed it fully, 'what would it do?' Now, however, it is a suggestion for trying to breed the packer not a packer."

In case any of our readers may not have seen our announcements in former issues they will be surprised to receive this, the first issue of the New Year, bearing the name of

FARM AND DAIRY

The only change that has been made in The Canadian Dairyman and Farming World is in its name (the former name was too long). This is the same paper under the same management. It will continue to be as bright, interesting and helpful as it has been in the past, and will be published weekly at the same old price—only \$1.00 a year.

raise, the better they find hogs pay. They aim to get two litters a year and their breeding sows. The spring litters are turned out to pasture as soon as the clover, rape, or alfalfa has grown enough to provide feed. These fields are enclosed with a regular farm fence and then divided into sections with what they call here a hog fence, about 26 inches to 30 inches in height.

When the hogs are four to four and a half months old, they weigh from 125 to 150 lbs. The farmers claim that they cost them less than three cents a pound up to that stage. They are then put into smaller enclosures and their feed changed to one of a fattening nature. Being in a good healthy condition they put on from 1 1/2 to 2 1/2 lbs. fat a day and are soon ready for market at a weight of 175 to 190 lbs. The best ones are sold and their places filled by the best ones of younger litters. After our farmers get the rotation well started there is scarcely a week in which they do not sell two or three hogs at from \$5.75 to \$7.25 a 100 lbs. live weight depending on the time of year, and the question of supply as well as on the Danish killing which rule all markets.

Our farmers are beginning to raise more of their own feed. They find that roots, ensilage, etc., make good feed when mixed with grain.—Job. W. Taylor, 137 Youville Square, Montreal, Que.

Record of Performance Work

Ed., Farm and Dairy.—Report No. 1 of the Canadian Record of Performance for pure bred dairy cattle has been issued by the Live-Stock Branch, Ottawa. The report contains a brief history of the work done about performance work which has been the purpose of the work done in the past.

The report contains a list of pure-bred researches for milk and fat. The rules for the performance work are given in the report. The report also contains a list of the names of the breeders who have been registered in the work.

This report will be of great value to producers of pure-bred dairy cattle. It will show the results of the work done in the past and will give a list of the names of the breeders who have been registered in the work.

Subscription News

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FORMERLY THE CANADIAN DAIRYMAN AND FARMING WORLD

Vol. XXVIII.

FOR WEEK ENDING JANUARY 7, 1909.

No. 1

THE GRANGE AND ITS OBJECTS WHY FARMERS SHOULD ORGANIZE

E. C. Drury, U.S.A., Sinceo Co., Ont., Master of the Dominion Grange.

The great Aim of the Grange is Education and Influence. It is Broad, Patriotic, Reasonable and Worthy of the Support of All

THE farmers of Canada should be organized in order that they defend their own interest against those who would encroach upon them. We are not conjuring up any fictitious bogey-man, when we say that those interests and rights are very seriously threatened, and that if we, the farmers of Canada fail to take action now, we may, twenty-five years hence, find that the time has passed, that we have lost that which nothing short of a revolution could restore to us.

One of the great characteristics of the present age, in the New World, is the thirst for great wealth, and the successful securing of the few to concentrate in their hands the wealth that should belong to the many. In the republic to the south, this has already taken place to such an extent that it is said that nine-tenths of the wealth is held by one-tenth of the people. In that country fabulous fortunes have been amassed, a permanent aristocracy of wealth with all its attendant evils, has been created, and the very fabric, social and political, of their democracy, is threatened.

WHERE OPPRESSION FALLS

In our country the same influences are at work. Corporate interests, organized capitalists, promoters of various sorts, and a score of other interests are constantly on the alert to secure from a drowsy public, favors for themselves by which they may gather wealth at the public expense. While these work great harm to the country at large, their oppression falls most heavily on the one great unorganized industry, agriculture.

This burden on the farmers is already making itself felt in a great many ways. The farm population of every province east of Manitoba is actually decreasing, that of Ontario at the rate of over 6,000 per year. Even in the West, town population is increasing much faster than rural population. It was shown three years ago, before the Tariff Commission, that the best managed farms in Ontario were not paying five per cent. on capital actually invested, above the wages of those who work them.

FARMERS SUBMIT TO TARIFF

In the face of these facts, the farmers of Canada submit to a protective tariff which is of no advantage whatever to them, and which costs the farmers between \$1,000,000,000 and \$2,000,000,000 per year in increased prices to favored industries. We allow bounties and bonuses to be paid to industries which have no claim to them. We allow our railways, which we largely bonused at the time of their building, to pretty well escape taxation. In short, we allow ourselves to be exploited by every interest which is better organized and more far-sighted than we. Surely it is time we were on the alert, if we

would enjoy that measure of prosperity to which our industry and thrift entitle us, if we would leave to our children that independence which was heven for us by our fathers, out of the wilds of this country, and if we would save our nation from the parasites which would fasten themselves upon it.

CHARACTER OF THE GRANGE

The one organization which is of a national character, and which aims to deal with these questions, is the Grange. This order has been in existence many years, and in the past has done some splendid work for the farmers of Canada. But, owing to some misdirected enterprises which it undertook of late years it had fallen somewhat into the background. The Farmers' Association formed some few years since also did good work, but, because it lacked in its mode of organization, it failed to reach the bulk of farmers, and did

I have been delighted with the dairy articles in The Canadian Dairyman and Farming World. Many of them bring back the good old days at the Ontario Agricultural College, and I so often hit upon the very thing I want, when my memory needs refreshing. As for articles on stock and general farming, they are read, studied, and discussed with every fresh issue.—J. C. Brown, Welland Co., Ont.

not accomplish all it should. But, a little over a year ago these two organizations united. The experience of the past in the organization of farmers was drawn upon, and, cutting out all those features of previous organization which had seemed to hinder their work, a beginning was made in the great work of organizing the farmers of Canada. So far, good success has been met with, and we look forward to the future with exceedingly strong hopes.

EDUCATION AND INFLUENCE

The Grange does not seek to create a new political party, but rather to work through and on, existing parties. It does not engage in buying, selling or manufacturing, as its experience in these things in the past was not entirely satisfactory. It has two great aims—Education and Influence. It aims to get the farmers together and to educate them on questions initial to their interests, and then, when public opinion has been formed in this way, to give it such an expression backed by a strong organization, that our Government no matter what political party may be in power, will not dare turn a deaf ear to the just demands of the farmers.

The foundation unit of the Grange movement is the Subordinate Grange. These organizations

are run with just enough of formula to give interest and order to their proceedings. Their main object is to get the farmers together, to promote discussion, and to enable them to form clear opinions on the public questions of the day, which are brought to their attention by the central organization. But they accomplish more than this. They are meetings when all questions relating to agriculture may be discussed. The Department of Agriculture are engaged in establishing Farmer's Clubs throughout this Province, and we would commend them heartily for the work, but it is worth while to point out that all the advantages of the Farmer's Club are possessed by the Subordinate Grange in the discussion of agricultural matters. Further, the Grange poses an important means for improving the social life of rural communities.

The Dominion Grange, which meets once a year is formed by delegates appointed by the Subordinate Granges. It is intended to give expression to the opinions of the Order generally. Public questions are discussed, resolutions passed, and steps taken to urge the wishes of the farmers on those in power.

PERSPECTS OF THE MOVEMENT

Will this movement for farmer's rights succeed? It will, provided only we can get the country well organized. If even one-third of the farmers of this country were organized in this way, knew their own minds, and how to ask for what they want, no political party would dare resist them, and the days of favored interests and of the exploiting of the public for the benefit of the few would speedily cease.

In conclusion I would call upon all farmers who are interested in the future of their sons, of their calling or their country to help with this work of organization. The Grange does not interfere with personal liberty in any way, it is inexpensive and simple, and it seeks to accomplish nothing that would injure our nation in any way. It is broad, patriotic, reasonable and worthy of the support, not only of every farmer, but of every public-spirited citizen.

Should be Thoroughly Discussed

Thos. MacFarlane, Carleton Co., Ont.

The subject of "The Bacon Hog" as dealt with by Professor Day in a recent issue of The Canadian Dairyman and Farming World interests me very much, as I keep pure bred Yorkshire hogs, bred of imported stock. I am opposed to too many varieties of pigs for it seems impossible to get uniform sides of bacon under such conditions. Neither can I see where dairying can be carried on profitably without the hog to consume the surplus whey or milk.

The Dominion and Ontario Government should take this matter up, as it will be a serious loss to the farmers of Ontario if we lose the British trade. I would be in favor of appointing a commission to tour Britain and Denmark, where they make hog raising a success, in search of information upon the most important questions. I would like to see this matter thoroughly discussed.

Send a Commission to Denmark

H. McNish, Leeds Co., Ont.

The articles in The Canadian Dairyman and World re the bacon trade have greatly interested me particularly so because I was one of the first to advocate the raising of more bacon hogs by our Dairymen. In the early eighties Canada was importing hog products instead of exporting them. I saw no reason why, with superior advantages Canadian Dairymen had in their cheap by-products from the dairy, they should not supply the home market but export large quantities of bacon.

It has been a great satisfaction to me to see how the export trade has grown during the past ten years.

No one regrets more than I to see the figures this past year or two growing the wrong way. It is to be admitted that there are local causes for this falling off in the export trade. The past two years have been poor years for the production of milk, which of course materially lessened the cheap pig feed. Grain has been unusually high and pork has ruled low for the past 12 months. With these two extremes it certainly has made the production of bacon hogs, on a large scale, unprofitable. I have not been one of the large producers, but my yearly output will average up pretty well. For the past ten years I have not turned off less than 100 hogs a year and sometimes up as high as 210. At present I have not one that I am feeding for pork.

Now what puzzles me is the statement made by the Mathews people to the effect that the Danes are buying the very grain that we Canadian farmers do not think profitable to feed to hogs and are producing bacon and selling it to our customers at a profit. If this is a fact, why is it? Are the Danes more skillful feeders than the Canadians, or do they get more for their hogs than we Canadian farmers do? This bacon question is a very important one and as a nation we must not allow any trade that we have once secured to slip away from us.

I have great faith in the ability of the Canadian farmer. He is an intelligent man and I believe can hold his own against all comers with equal chances.

To get at the very roots of this matter I suggest that a commission be sent over to Denmark to inquire into the question and find out at whose door lies the fault, whether it lies with the packer or with the farmer. Send good practical men, men who can get into all the details from the time the pig is weaned till it is put on the consumers' table.

Such a commission would not cost much and I am sure would be worth many millions if they could stay the decline in this most important trade.

The Seed Question

W. J. Stevenson, Ontario Co., Ont.

Considerable discussion is going on at this season of the year while the seed shows are on, relative to the sowing of good pure seed. Let us first consider what is required of a seed. The seed is nothing more nor less than a store house of plant food, intended to nourish the germ until the root and leaf are developed. The germination to take place, moisture, oxygen and a suitable temperature are necessary, under these conditions the seed swells, oxygen is absorbed, a part of the carbonaceous ingredients is oxidized, heat is developed, and carbonic acid is evolved. During these changes the solid ingredients of the seed gradually become soluble; the starch and the fat are converted into sugar.

With this supply of soluble food the root and leaf stem are nourished; they rapidly increase in size and burst through the coats of the seed.

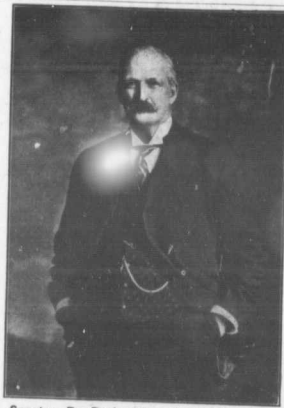
If the external conditions are suitable, the root and leaf commence their separate functions.

How important then to select large plump seed

that will be able to supply the food required until the root is established in the soil thus giving the young plant a good start in life. Sowing large and small grains will never produce the same results as large plump even seed. The smaller seed being weaker is apt to be buried too deeply and this can not reach the surface as quickly as large and it consequently suffers in the race.

Planting Trees on Stony Land

The planting of forests on absolute agricultural soil in the older parts of Ontario is not advisable, but there is in many agricultural sections of the province considerable waste lands in the form of steep hillsides, sandy or rocky soils, which could with profit, be covered with trees. At the request of a subscriber living in Northumberland Co., Ont., for information regarding the planting of a piece of stony land to a wood lot, we herewith publish an extract from "Farm Forestry," Bulletin 155 by E. J. Zavitz, B.A., M.S.F., lecturer on Forestry at the O.A.C. In forest planting we are



Senator D. Derbyshire, Brockville, Ont.

The annual convention of the Eastern Ontario Dairymen's Association is taking place this week at Premont prominent figure is likely to be that of Senator the honorable Derbyshire, the past president, and now is Senator Derbyshire well known to the dairymen of Canada, but he stands high in more ways than one among the people of the Brockville section, who, at one time, have elected him mayor of Brockville, and, later, their member in the House of Commons. One reason for the success of the Eastern Ontario Dairymen's Association is found in the fact that its including, as they do, such men as Messrs. J. E. Dargavel, and W. J. Paul, members of the Ontario Legislature; Edward Kidd, ex-M.P., Carleton County, and several who were candidates at the recent elections for the Ontario Legislature and House of Commons.

limited to certain species of trees owing to various factors. Some of these factors are:

1. Hardiness and rate of growth. 2. Nature of soil to be planted. 3. Kind of wood crop desired. 4. Availability and cost of planting material.

"In choosing species to plant, the original growth of forest in Ontario gives us some knowledge as to the possibilities of our native trees for re-forestation. With the evergreens, some of the more important species in relation to re-planting are: White Pine, Red Pine, White Cedar, or Arbor Vitae and White Spruce. Of the native species of hard woods, the following give promise of usefulness, Red Oak, White Elm, White Ash, Black Locust, Black Walnut, Black Cherry, Sugar Maple, Manitoba Maple or Box Elder, Whiteflower or Tulip. One of our best guides in re-planting will be found in the original natural distribution of trees. Through many generations certain species have become adapted to certain areas having certain conditions. Such distribution may be spoken

of as geographical and local. Geographical distribution depends upon climatic factors as temperature, rain-fall and atmospheric moisture. Local distribution depends on local variations as quality of soil drainage, exposure, etc."

Probably the best varieties of trees for planting the piece of stony land in question to wood lot would be, White Pine, Black Locust, Red Oak, Chestnut and Rock Elm. These varieties would furnish a very desirable crop of the different sorts of wood required in a wood-lot. If it is desired to make a solid plantation of one variety probably White Pine would give the best results. From the information available it would appear that the Black Locust is a very desirable tree to plant for wood-lot purposes. It is a hard wood and a very rapid grower. It is also very desirable for fence-post purposes. We would suggest as being a most satisfactory combination, White Pine and Black Locust. Possibly it would be best to set the plantation out all White Pine and afterwards fill in the blanks with Black Locust. If it is desired to have good wood for fuel purposes, one had better plant Red Oak, Sugar Maple or Rock Elm. As these latter are much slower growers, the White Pine and Black Locust are to be preferred for ordinary planting.

The Clover Seed Midge

Arthur Gibson, Chief Assistant, Division of Entomology and Botany Ottawa.

During the past season the clover-seed midge has done serious damage in districts of Ontario, where clover is grown for seed. Many complaints have been received from farmers of the presence of the small legless, pink maggots in their clover-seed at threshing time, and some anxiety has been felt as to whether these would mature, and affect the crop of next year. In the samples received, all the maggots were dead and shrivelled up.

The life-history and habits of this insect are well known. There are two broods in the season, corresponding with the two crops of clover-seed. The eggs are laid in the forming flower heads of the clover; when these hatch, the maggots penetrate the seed pods and destroy the seed. When the larvae are full grown, about the end of June, they leave the clover heads and enter a short distance into the ground, to change to pupae. The perfect insects, forming the second brood, emerge from the ground, just as the second crop of clover is coming into flower, and the females, at once, begin to lay their eggs amongst the forming blossoms. These eggs soon hatch, and, about the time the seed is ripe, the maggots leave the clover and enter the ground to pass the winter, whence they emerge again the next spring, just at the time the clover comes into flower.

Experience has taught farmers that the practice of feeding off their clover fields with cattle and sheep until the beginning, or middle of June, or cutting it before the 20th of that month, is the only way to secure an autumn crop of seed; thus the maggots of this first brood are destroyed by the cattle eating them, or they dry up with the clover hay which has been cut before they were mature enough to leave the heads of clover and go into the ground to pupate and change to the perfect insect, which is a small midge. If the clover is left standing in the fields till the end of June, a sufficient time elapses for this latter process to take place, and the perfect flies emerge again just in time to lay their eggs in the opening flowers of the second crop. In this way the seed of the second crop is destroyed, as well as that of the first.

As mentioned above, in all the samples of infested clover-seed received this autumn and early winter, the maggots were already dead and dried up; consequently there would be no advantage in destroying, by burning such material. At threshing time, however, if the living maggots are noticed, it would be a good practice to have all screenings swept up and burned.

A short Canadian journal Corn Macdonald the article cultivation

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Three Bushels Where Before He Got Two

John C. Shaw, Oxford, Co., Ont.

A short time ago an article appeared in The Canadian Dairyman and Farming World on "Plowing Corn and Root Land," by John Fixter of Macdonald College, Quebec. I cannot agree with the article in full, especially in regard to the deep cultivation after corn and roots.

When I was a young man on my father's farm my work was to plow and prepare the ground. The prevailing idea at that time was, that success in a crop of roots depended on the great depth in which the plowing was done. Observation and experience has long since proved to me that the heaviest yields of roots, corn and grain can be produced from light plowing of about five inches, accompanied with surface cultivation.

For roots I do not plow any deeper, but I follow with a deep cutting cultivator throughout the hoeing season, being careful not to bring any of the subsoil to the top. The heaviest crop of roots I have ever grown has been from the surface preparation of the soil; and I am quite satisfied that I am reaping easily three bushels from shallow cultivation where from the deep I reaped but two.

Plowing Corn and Root Lands

Thos. McMillan, Huron Co., Ont.

Having noticed a discussion of the above question in some of the recent numbers of the Farm and Dairy, I am entirely in accord with the views of Mr Brethren of Peterboro County regarding the mistake made by some in plowing our corn and root lands in the fall, after these crops have been removed.

This decision has been reached on my part after a number of years experience along this line. For three years in succession I adopted the method of plowing one-half my corn and root field in the fall, and just cultivating the other half of the field, giving the whole field a shallow cultivation in the spring, before sowing to grain crop and grass seeds. In each of the three years I had upwards of 10 bushels of mixed grain per acre more, and as well a better stand of clover on that portion which was confined to surface cultivation.

Of course, such a system of surface cultivation pre-supposes that during the growth of these crops the land has been so thoroughly cultivated, that the weeds are all destroyed, leaving the land after the crops are harvested, as clean as after a thorough summer fallow.

The various field crops usually grown in a regular rotation, may be divided under three heads. First, we have the soil enrichers, such as clovers, peas, beans, and all the other leguminous crops. Secondly, there is what may be called the soil cleaners, such as our corn and root crops, in the growing of which we are able to cultivate and clean the land, and lastly we have the soil impoverishers, or those which (if sold off the farm) tend to deplete the soil of its fertility.

PLOWING IN FALL

Such a division tends to outline a proper system of rotation which may be followed, and which may be lengthened by a year or two in pasturage if desired. With a soil which is infested with noxious weeds, I follow the practice of plowing the clover stubble directly after removing the hay crop, and cultivating during the fall months as a preparation for the corn crop use following season. If the land is clean, however, I allow the clover plants to grow on till the late fall, sometimes harvesting a second crop of hay, a crop of clover seed, or plowing down the aftermath, but I always follow the method of plowing the clover sod in the fall. I find that the land plowed in the fall will hold the moisture the following season, better than if left till spring before being plowed.

In manuring for the corn crop, as we always do, I like to keep the manure on the surface soil, where it can be worked into the surface soil,

during the process of spring cultivation and preparation of the seed-bed. In having the clover sod plowed in the fall, upon which is to be grown our corn and root crops during the following season, the manure is drawn directly from the stables in winter and spread broad-cast upon the surface of the field, when it is ready to be incorporated into the surface soil in spring. To overcome any difficulty with the long strawy portion of the manure, all the straw is now cut during the process of threshing, which renders it more easily handled in every particular.

APPLYING MANURE

By applying the manure in this way, and upon the surface of the plowed land, it is placed just where it will do the most good to the growing crop, and any weed-seeds it may contain are held sufficiently near the surface, to germinate and be destroyed during the work of summer cultivation. As a result, when these crops are removed, the surface soil, to a depth of three or four inches is quite clean of noxious weed seeds, and on being loosened up is the very best portion of the soil for receiving the grain and grass-seeds the following spring and giving them a rapid start; Therefore, it is a great mistake to turn that surface soil under, and bring to the surface other material which has not been so subjected to such a weed-cleaning process. Any system of cultivation

of the committee appointed by the Ontario Fruit Growers' Association to investigate these matters and which was read by Mr. H. St. C. Fisher, of Queenston at the convention of this association held in Toronto in November. Mr. Fisher pointed out the efforts that had been made by this association towards bettering the fruit market facilities in Toronto. "In order to better the conditions that existed a year ago," said Mr. Fisher. "The Grand Trunk Railway has had the old Scott Street Fruit Market renovated in such a way that now there is probably four times the floor space that was available a year ago. Other needed improvements were made, particularly in the matter of lighting. The repairs cost the G. T. R. about \$4,000 and our thanks are due them.

country and we should not rest until we have built in Toronto, one of the finest fruit market buildings on the continent. Toronto is worthy of such a market as it is the best market for choice fruits in Canada. Fruit growers should aim to send to this market, as to all others, a high standard of perfection in their fruit, quality before quantity, and every package honestly packed. If these things are observed, the price will take care of itself.

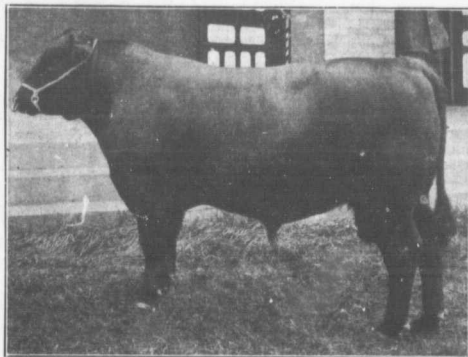
"This association should appoint a standing committee to deal with this matter of a suitable fruit market in Toronto until such is secured. It should do its best to show the City Council that if they wish to hold the fruit trade, they must, as soon as possible, build a suitable market to which all the transportation companies will have access on equal terms.

"The Canadian Express Co., working in conjunction with The Michigan Central and Grand Trunk Railways," continued Mr. Fisher, "have done much during the past season towards landing the fruit shipped from Queenston and intermediate stations in the Toronto market without delay and in good, marketable condition. We have had better facilities this year than ever before.

It is hoped that the company will do more for growers in future.

"The Dominion Express Co., working in conjunction with the Niagara Navigation Co., did their part at our end of the line, but when the fruit landed in Toronto, there was no decent place on the wharf for the commission men to handle it. It had to be loaded from the fruit trucks to wagons or drays, carted across the railway tracks to the fruit market and there unloaded again. The same is true of the fruit that is shipped from St. Catharines and vicinity to Toronto. It is well known that the oftener that fruit is handled, before the market is reached, the less it is worth. All these things go to show that the fruit market conditions in the city of Toronto can yet be greatly improved upon."

If the average farmer can get cows testing 3.5 per cent. and giving large quantities of milk, they will obtain better results than with cows testing 4 per cent., which give less milk, as they will have the extra by-products from the larger quantity of milk. Milk testing 3.5 is good enough for factory purposes as well as for city use. I like cows that give milk with a high butter fat test, but have been informed that such animals are more subject to tuberculosis.-G. A. Gilroy, Holstein Breeder, Leeds Co., Ont.



Champion Angus Bull at Toronto and London, 1908

Owned by James Bowman, Wellington Co., Ont. A low-set "bogey" fellow, well this year than ever before. Reared and carrying it well down to his hocks.

given should be such as to retain the surface soil on top and thus ensure a clean seed-bed and the best condition of soil for the crops which follow.

Upon well drained land the clover plant as Mr. Brethren says is the best sub-soiler we can have, as it sends its long tap root down into the subsoil where its little fibres gather the mineral matters, the phosphoric acid and potash, storing these up in the structure of the plant where they are held and supplied to future crops. With such ability coupled with the means of being able to make use of the free nitrogen of the air (the most valuable element of plant food) and also store it up in its structure, the clover plant is the most important and most profitable crop which can be grown. It is the foundation of all successful agriculture wherever it can be grown and may well be called "the farmer's friend."

Toronto Fruit Market

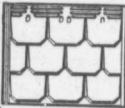
Although the fruit growers of Ontario have been shipping their fruit to Toronto under very unfavorable market conditions during the past few years, considerable improvement has been made during the past season but there is yet plenty of room for further efforts in this direction. These points were brought out in the report

PUT ON IN 1885 Perfect Protection in 1909

Metal Shingles may be "guaranteed" to last for 25 years—and not last five.

When a house has been making Metal Goods only a few years, of what good is their "guarantee" that their shingles will "last a life-time."

They don't know themselves how long their shingles will wear because they have not had time to put the shingles to the test.



"EASTLAKE" METALLIC SHINGLES

MADE IN CANADA FOR 24 YEARS

Don't forget that—Made in Canada for 24 Years. In use, right in your own province, for 24 years. Proven lightning-proof, fire-proof, leak-proof, wind-proof, rain-and-snow-proof, wear-and-rust-proof by 24 years' resistance against storms and climate.

The guarantee that goes with "Eastlake" Shingles is backed by 24 years' test. You don't take risks, you know.

There's the "Eastlake" Cleat—the improvement that makes the "Eastlake" Shingles perfect. An entirely original idea, patented, and found only in "Eastlake" Shingles. Let us tell you all about it. Write for catalogue.

The Metallic Roofing Co., Limited

TORONTO Manufacturers WINNIPEG

Agents wanted in some districts. Write for particulars naming this paper.

EMPIRE CREAM SEPARATOR

Easily and Thoroughly Cleaned Skimming Devices

To keep the skimming devices perfectly clean is of first importance, otherwise the quality of the cream suffers—profits diminish.

The majority of skimming devices are hard to clean. Some next to impossible to clean perfectly. But the Empire cones are easier than any others to keep clean and sweet.

They are of sheet steel, six in number, pressed into shape after fourteen distinct operations. They are accurate to a fraction, fit to a nicety—and it's utterly impossible to put them together wrong.

Light and nice to handle. The surfaces are smooth as china, with no crack, joint, seam or rivet to catch the albumen and impurities of the milk which stick like glue if given a chance.

Nothing could be simpler than to take our brush and wash out these cones, as shown in picture. Inside and outside, every part readily accessible—easier to clean the Empire cones thoroughly than

to half-clean other skimming devices.

Yes! we will gladly send you this Frictionless Empire, with its easier cleaned skimming devices, its lighter bowl, its simpler and smoother running mechanism, its frictionless bearings, and guaranteed to skim as close as any other Separator made, for free trial in your own dairy.

Anyway, we ask you as a favor to drop a postal for our FREE DAIRY BOOK

which should be in the hands of everyone interested in dairying.

The Empire Cream Separator Company of Canada, Limited Toronto, Ont.

Western Office, Winnipeg.



A Farmer's Club and Produce Directory

J. S. Kipler, Dundas Co., Ont.

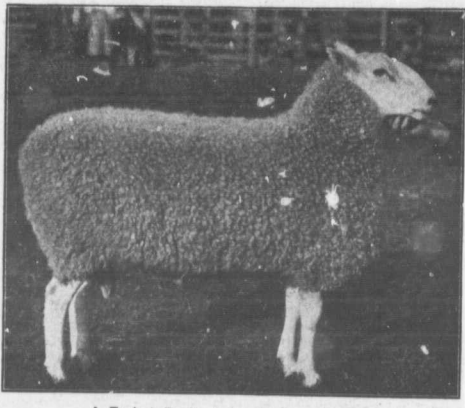
Realizing that organization is the order of the day in all occupations in life, the farmers of Morewood, Ont., decided to follow suit and be in the race. We accordingly organized a farmers' club which has in connection with it a produce directory. This organization was formed, mainly, for the interchange of ideas, social intercourse, general enlightenment and to encourage the young men to be able to express their thoughts in a tangible shape and be able to command an audience without being subject to "stage fright," should the occasion arise. Also, that these young men may ask questions of the older men who have had more experience, and that they may be encouraged to adopt new methods.

shall be as prompt as possible in cancelling the same, so as to prevent repetition of buyers. A time limit of seven days is allowed for cancellation after which offenders will be subjected to the penalty of a fine, to be determined by the executive. This constitution may be added to as occasion requires.

Annual Meetings in Toronto

The following Annual Meetings will be held in Room "G", King Edward Hotel, Toronto, during the time of the Horse Show, Jan. 12th to 15th: The Canadian Pony Society, Tuesday, January 12th, at 8 p.m. The Canadian Shire Horse Association, Wednesday, January 13th, at 8 p.m. The Canadian Hackney Horse Society, Thursday, January 14th, at 9.30 a.m.

The Ontario Horse Breeders' Association, Friday, January 15th, at 9.30 a.m.



A Typical Border Leicester Shearing Ram

First in his class at the Newcastle Royal Show, 1906, and winner of the Challenge Cup as best Border Leicester. Bred and owned by Messrs. Arch. Cameron & Sons Westside Farm, Brechin.

The Produce Directory in connection with the club allows the members to register anything they have to sell, such as, horses, cows, pigs, potatoes, grain or in fact anything on the farm. The directory is to be placed at the post office, or some other place of prominence in the village so that any body requiring anything may find out who has the same without loss of time. Thus it is a benefit to both parties inasmuch as it saves the buyer from having to travel around the whole country to find what he wants.

And rules that we have formulated and adopted, will give one a good idea of our organization. They are:

1. The organization shall be called the Morewood Farmers' Club and Produce Directory. An annual fee of 50 cents per member shall be charged.
2. The board of management shall consist of president, vice-president, secretary-treasurer, and a board of four directors.
3. The annual meeting shall be held on the first Friday of December of each and every year. Regular meetings shall be held on the first Friday of each month.
4. No member shall be eligible to vote or to receive any benefits of the organization unless his fees are paid up in full.
5. The object of this organization shall be to benefit each other by means of discussion and debates regarding farming and the uplifting of our profession.
6. No political discussion shall be allowed on penalty of being expelled.
7. Any member selling an article that is registered in the directory

The Canadian Clydesdale Association, Thursday, January 14th, at 7.30 p.m.

The Ontario Horse Breeders' Association, Friday January 15th, at 9.30 a.m.

Our Veterinary Adviser

FEEDING IRON SULPHATE—Will green coppers hurt a mare that is carrying a foal?—W. G. W., Victoria Co., Ont.

No. If necessary to administer iron sulphate or copper to a pregnant mare it is quite safe, but it is unwise to give medicines to any horse unless there is some disease or fault to correct. This applies especially to breeding mares.

KEEPING HORSE'S BLOOD IN ORDER—What is good to give horses occasionally to keep their blood in order?—W. L. B. Craville, Ont.

The idea that periodical administration of drugs is necessary to keep a horse's blood in order is all wrong. Healthy horses require no drugs, in fact it is very unwise to give any. Good care and careful feeding keeps a horse healthy, where any ailments occurs medicines whose actions are such that they should correct the fault should be given in proper doses, but the less medicine a healthy animal gets the better.

Clover hay is better than timothy hay for colts. Keep the colts growing well.—A. G. McKenzie, Oxford Co., Ont.

January 7, 1909. FARM Alfalfa You want the following to flow to the farm where the best hay is raised has a good crop worked in down with a acre. If from an overworked results not use any move any scythe two or three not clip last week in St. 2. Manure frequently than in last intervals. year's rotation the roots, corn most profitable crop culture utilize all be applied on grain. 3. Good 20 lbs. of m.e. each at regular intervals. the hay will manure. I value as a valuable crop of hay from a farm, should on as fertilization. 4. I should buying hay on your own them winter straw at a is that \$5 or spring.—J. H. Hints Give some sent of horse. On such a few remarks, is to keep the second in such a way in condition. moderate quantity necessary to moderate bran, 10 lbs feed most in the morning similar portion of hay water before See that A mixture of the most horses are to replace all horses are should be in straw taken from the comfortably

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FARM MANAGEMENT

Alfalfa, Manure, Wintering Cattle

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You would favor me by replying to the following questions:
 1. How to grow and handle alfalfa?
 2. How to distribute manure on the farm. What crops return the greatest value when manured?
 3. What is the value of a ton of good mixed hay for manure?
 4. Would you advise buying feed hay at \$13 a ton to feed cattle on your own farm, rather than having the cattle wintered on straw by some neighbor for \$5 or \$6 a head.—A. M. S., Waba, Ont.

Horse Soc.
14th,

1. Alfalfa requires well tilled land and a good heart and thoroughly drained, or three when having the cattle wintered the previous season, preferably a hoed crop. It should be thoroughly worked in the spring, then seeded down with about 25 lbs. of seed per acre. If a few bushels of surface soil from an old alfalfa field could be scattered over the field in question, better results might be anticipated. Do not use any nurse crop. Do not remove any crop first year. Clip with a scythe or a high cutting mower two or three times during the season. Do not clip later than the first or second week in September.

Challenge
& Bond

2. Manure should be applied fairly frequently to different fields, rather than in large quantities, and at long intervals. Following a four or five year's rotation, applying manure on the hoed crops, such as roots, corn or potatoes, will give the most profitable returns. If the hoed crop cultivated is not sufficient to utilize all the manure, then it should be applied on meadows rather than on grain.

Associa-
14th, at

3. Good mixed hay contains about 30 lbs. of nitrogen, 9 lbs. of phosphoric acid, and 12 lbs. of potash. At current manurial value this would make the hay worth about \$6 per ton for manure. But, in addition to this, its value as a producer of humus is considerable, so that I should say that a ton of hay when consumed on the farm, should be worth about \$10 a ton as fertilizer.

viser

4. I should very certainly advise buying hay at \$13 a ton to feed stock on your own farm rather than having them wintered at \$5 or \$6 a head on straw at a neighbor's. My experience is that \$5 or \$6 a winter cattle look like \$5 or \$6 a winter cattle look like.—J. H. Grisdale, Agriculturist, C. E. F., Ottawa.

Will greet
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Ont.

Hints on Caring for Horses

Give some hints on care and management of horses.—A. M. S., Waba, Ont.

ORDEP
essional.
W. L. B.

On such a general question only few remarks can be made. In the first place, horses should be fed so to keep them in good health; in the second place, they should be fed in such a way as to insure their being in condition to do the most work possible. To insure good health, a moderate quantity of good feed is necessary, say for a 1200 lbs. horse at moderate work, 3 lbs. oats, 3 lbs. bran, 10 lbs. hay, 3 lbs. straw, 5 lbs. of roots, preferably carrots, a day. Feed most largely of grain and hay in the morning, and at noon give a similar portion of grain, a fair portion of hay, and the straw at night. Water before feeding the grain. See that hay is free from dust. A mixture of clover and timothy hay is the most satisfactory. Where horses are not working, straw may replace at least half the hay. Where horses are working very hard, grain should be increased slightly and the straw taken off.

timothy
a grow
Oxford

Groom thoroughly every day, bed comfortably and keep stable well ven-

tilated. Where heavier horses are used, rations would need to be increased. A fair ration for a hard working horse is a little better than 1 lb. of oats a day and a little less than a lo. of hay a day for each 100 lbs. in weight of the horse. That is, a 1600 lbs. horse should have around 17 lbs. oats or meal, and around 16 lbs. of hay a day when at hard work.—J. H. Grisdale, Agriculturist, C. E. F., Ottawa.

Queries Re Cattle

1. What breeds of cattle are best for raising stock for the market?
 2. What month is best for having the cows calve in?
 3. What breed of milk cows give the largest net gains, and yet are fair in the best market?
 4. Do you know of any man who has a good milking class of cows? Give his address.—A. E. M., Waba, Ont.

1. Shorthorns, Herefords and Aberdeen Angus are the cattle that produce the best steers.

Cows to produce calves intended for beef had better drop their calves in March, April or May, preferably April.

3. There is no breed of milk cows that gives a large net gain for milk, and at the same time a fair carcass of beef for the market. The milking Shorthorn probably comes nearest filling the bill.

4. Any breeder of pure-bred Ayrshires, Holsteins or Jerseys, could supply you with such animals as you require, or if milking Shorthorns are needed, then I might refer you to the Central Experimental Farm, Ottawa. See the live stock advertisements in this issue.—J. H. G.

Feeds for Young Animals—Draining Land

1. What are the best feeds for young animals, say calves and lambs? (1) For growth; (2) Fitting for exhibition?
 2. How should I proceed to drain some low land?

1. Good, clean, mixed hay, clean oat straw, bran, oats, roots and ensilage are all suitable for calves and fillies for good growth. Where they are to be fitted for exhibition, then the addition of oil cake meal, corn meal and in some cases barley to the bran and oats would prove advantageous. For growth, one or two pounds of bran with a little oats added would be sufficient for either calves or fillies. For feeding for show, two or three pounds, and even slightly more, might be fed during the last part of the feeding period.

2. To drain low land, the first requirement would be to find a good outlet for the water, then an underground grading is intended, to lay a good main tile along the lowest lying part of the field. Later on laterals at regular spaces, if the whole field is to be drained, or along the lowest lying parts, if it is intended to drain only the worst spots, should be laid. The main should be about four feet below the level of the surface soil, and should have a fall of about one inch in a hundred feet; somewhat less of a fall will do but a somewhat greater fall will prove more satisfactory. The laterals may come up to within 1 1/2 ft. of the surface soil, if necessary, provided always that there is a good fall. Deep laid drains carry off surface water somewhat more slowly than shallow laid tiles, but are much more satisfactory in the long run, since they give a deeper bed, and are less subject to displacement by frost or rush of water in spring.—J. H. Grisdale.

Autos on the Farm.—According to the best information of the manufacturers and dealers there are more than a thousand automobiles owned and used by farmers in Indiana.

Farmers seem to have caught the spirit of doing things quick as well as lown people. In several instances we have heard of farmers starting to their nearest town markets with their butter, eggs and light articles for market, at 6 a.m., and getting back

home for the farm work by 7.30. They could not do that with Old Tom, and so to do things quick the auto is rapidly going to the farm. It seems to be catching all over Indiana as well as in other States.—Indiana Farmer.

ALL AUTHORITIES

Recommend CARBOLIC ACID for the Treatment of CONTAGIOUS ABORTION

COOPER'S FLUID

Contains 60% PURE CARBOLIC ACID. Is made from PURE CHEMICALS and is free from tar impurities. Send for Booklet A.

To the first 50 readers applying for our Booklet A., we will send a FREE SAMPLE, Express Paid, of this truly marvelous dip. This is the last time this offer will appear.

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USE A "CHAMPION EVAPORATOR" IN YOUR SUGAR BUSH



You will find it very profitable to do away with your old fashioned outfit and install a "CHAMPION EVAPORATOR" which will do your work in less time with a saving of fuel, and at the same time produce a much finer quality of syrup and sugar. Send for our Illustrated Catalogue.

"Champion" Evaporator

THE GRIMM MFG. CO.

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TO EARN THAT BIG SALARY. LEARN RAILROADING.

GET OUT YOUR LEAD PENCIL AND DO A LITTLE FINANCING.

Whatever your present monthly salary may be, multiply it by 12, and find your yearly income. Will it amount to \$1,500.00, the salary shown above? Do you earn one-half that amount? If not, why not?

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

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

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

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

Our free booklet tells all about our system of teaching. When writing, state age, weight and height. Address:

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



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

HORTICULTURE

Co-operation and Apple Marketing

P. W. Hodgkiss, Secretary, The Co-operative Fruit Growers of Ontario

The apple shipping season of 1908-9 has been a peculiar one. An abundance of bloom in the spring gave promise of a large crop everywhere. The reports of the apple dealers were that the fruit had set well, and there would be an abundant crop, that a large crop was expected in Europe, and that with poor trade conditions in both continents, apples would be a drug on the markets. Everyone was looking for low prices, and early in the season accepted low prices. But apples have been increasing steadily in value, until now prices in the local markets and in the large cities in the United States are away beyond the reach of ordinary individuals.

In the Old Country, prices for early apples were comparatively high, and led exporters to hurry up shipments of later varieties. These were picked and shipped during the long, hot drought, with the result that most of the fruit arrived in wretched condition, not only slumping the market for the poor stuff, but spoiling the sale of the good quality. When the weather cleared, market conditions improved and prices for good fruit have regained a fair market value. The one point noted about the reports from Great Britain is the difference in selling price of good fruit and poor fruit. Not a week passed but attention was called to the fact that too much fruit of ordinary quality was being sent forward. The difference between sound fruit and seconds and slacks during the season was from four shillings to as high as 11 shillings per barrel with waxy selling from two to three and a half shillings lower still. Yet many of our growers still persist in neglecting to spray, claiming it does not pay, or are willing to allow any kind of a packer to put up their fruit so long as it is safe into the barrels and out of the road.

EXTENSIVE PLANTING OF ORCHARDS

A notable feature of the horticultural press during the year was the report of extensive plantings of apple orchards. This was not confined to any one section of the country, but extended all over the continent, from north to south, east to west, being especially noted, however, in the northwestern states and British Columbia. This has now been going on in the west for some years, and with the result that every year large acreages are coming into bearing, increasing very largely the total production. As the local markets are very small, the bulk of the crop must be exported, and the growers of the west are looking no time in getting after the eastern markets. During December a large exhibition of western box apples was exhibited in New York, and attracted great attention, largely owing to the even grading and packing of the fruit. Similar exhibitions are now being shown in the chief trade centres in Great Britain by British Columbia and the western states. In the latter instance it is entirely at the expense of the growers themselves, and was the sole object of opening up new markets, not for their lands but for their fruits. The strict horticultural laws providing for compulsory spraying, orchard inspection, etc., and great care exercised in packing and shipping only first class fruits, together with good organizations for

marketing, is already showing results in the splendid prices being received for their produce.

Markets previously given over entirely to eastern fruits are now being invaded by the western men. Ontario must wake up to the new conditions if she expects to hold the prominent place for her apples that she has done in the past. That she can hold her own, is true, for the writer has seen the actual returns for Ontario boxed apples shipped during the present season from several sources, which compare most favorably with any received from western orchards.

Use of boxes

The use of the box for No. 1 fruit has increased very largely during the year, and we trust that this increase will still continue. The very fact that only good fruit must go into the smaller package will tend to force our growers to obtain a greater percentage year by year of the higher class apples from their orchards. Our co-operative fruit growers' associations should be the ones to lead in this movement, and indeed some have already shown their influence in this way.

One of our horticultural journals aptly stated in a recent issue that the great need of very largely during the year, and we trust that this increase will still continue. The very fact that only good fruit must go into the smaller package will tend to force our growers to obtain a greater percentage year by year of the higher class apples from their orchards. Our co-operative fruit growers' associations should be the ones to lead in this movement, and indeed some have already shown their influence in this way.

As co-operative associations formed to aid others as well as ourselves in building up a great industry in the best agricultural province in the Dominion, shall we not go forward into 1909 determined to do all that lies in our power to make the coming season a "quality" season? Get after your members early and late, in season and out of season, to prune, spray, fertilize, and cultivate their orchards as never before; and last, but not least, to pick, grade and pack the 1909 crop in a manner that will bring nothing but credit to our associations and to our country. May that crop be a bountiful one, big in size and numbers, rich in color, and flavor and worthy of the province that produced it.

Fruit Market in Birmingham

J. E. Ross, Canadian Commercial Agent

For the guidance of apple exporters, I may say that the Birmingham market is well stocked at the present time, consequently low prices are ruling. It would be judicious if Canadian apple exporters would retain their stocks until after the Christmas holidays. The market is always glutted at Christmas time.

I went through Smithfield market yesterday and inspected barrel after barrel of apples from British Columbia and Nova Scotia. The fruit from both provinces was exceedingly fine,

but much that came from Ontario was not up to the anticipated standard. Barrow's stores devoted a large window to a display of British Columbian apples which were the delight of crowds of spectators. The apples were a magnificent color, large in size and solid in flesh, and Birmingham, I feel sure, will look forward to these British Columbian shipments with a new eye, if the quality is maintained.

Pears are commanding a capital price at the present time, as doctors are now recommending them to invalids instead of grapes. The retail price in Birmingham for good varieties is 6d. (12 cents) a pound.

LAND for SETTLEMENT

Lands are offered for settlement in some cases FREE, in others at 5 CENTS per acre, in various districts in NORTHERN ONTARIO.

Write for information as to terms, homestead regulations, special railway rates, etc.

THOS. SOUTHWORTH,
Director of Colonization, Toronto.
HON. JAMES S. DUFF,
Minister of Agriculture.

The SUCCESS MANURE SPREADER



OLDEST
NICEST WORKING
BEST WORK
LIGHTEST DRAFT
MOST DURABLE

The "Success" has the latest rear axle and strongest drive-chain of any make and is the only machine with Husker frosting-device and many other points covered by strong patents. Our catalogue tells all about it and gives most valuable information for farmers. Write for it.

MANUFACTURED BY

The Paris Plow Co., Limited.
WESTERN BRANCH: WINNIPEG, MAN. PARIS, ONTARIO.

A FREE COURSE

AT THE

Ontario Agricultural College

We will pay the board and railway fare to Guelph and return, of any one living within 75 miles of Guelph, who is interested in the short winter course in Horticulture or Live Stock and Seed Judging and who sends us a club of 25 new yearly subscriptions to Farm and Dairy at \$1.00 each. Parties living within 175 miles of Guelph, must secure 35 new subscriptions at \$1. each in order to obtain this free course.

Remember each subscription in the Club MUST BE A NEW ONE, and taken at \$1.00 a year.

The short winter course in Horticulture opens January 25 and ends February 6. The course in Stock and Seed Judging opens January 12th and runs for 2 weeks.

25 New Yearly Subscriptions at \$1 each, entitles you to either course, ABSOLUTELY FREE, or we will accept 20 new subscriptions at \$1 each and \$3.75 in cash, or we will accept 15 new subscriptions at \$1 each and \$7.50 in cash.

An opportunity to learn Stock and Seed Judging. ALL FREE for only a FEW HOURS WORK among your neighbors. Write

CIRCULATION DEPARTMENT,

FARM AND DAIRY

Peterboro, Ontario

HOW TO BUILD A GOOD FENCE

Everyone intending fence building should send for our folder on Erecting Fences. It is full of valuable information on fence building, tells how to erect fences and has an article on the construction of U. S. Dept. of Agriculture made as a book. Not to fail to write a copy. It is free.

THE B&W L. BOXIE WIRE FENCE CO., Ltd. Hamilton, Ontario. Winnipeg, Manitoba.

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



No food regard to feed will require flour, bran, and other, so that it is important to have a good supply of animal foods, therefore your stock of food as locality.

Let it be remembered that good grains such as millets, etc., charcoal and grains such as buckwheat, should be fed and evening as often as the grain is available should only be used.

HOW TO

During the Morning, two or three milk, one quart of bran, 1 lb. of hay, ten to sixteen pounds of whole corn.

After this I go out and shed at what I should set to work they can receive six or one or two birds, give a few birds show e.

The feed in above cost no birds on March 10 cents a pound, but not more than 23 cents a bushel, the cost of the mill about 56 cents in winter quarter \$42.96 less for out a few eggs before our laying.—F.

Mrs. Fred very good and try papers, from hens from winter months. I began with and they were for. In order to be in breeding time, I noticed from my hens were.

My health but as I had a flock, I spent accurately of each individual that some of them more than these w

POULTRY YARD

Feeding The Layers

No fixed rules can be laid down in regard to feeding—the heavier breeds will require more food than the smaller, and some fowls eat more than others, so we must use some judgment as to how and what we are feeding. Poultry require a certain amount of animal, vegetable and mineral foods, therefore, you must supply yourself with as many different kinds of food as can be obtained in your locality.

Let it be understood that your hopes should only contain crushed grains such as oats, corn, bran, middlings, etc., with oyst-r shell, grit, charcoal and beef scraps. All whole grains such as wheat, corn, oats, rye, buckwheat, and barley, etc., should be fed in the litter morning and evening, using a different grain as often as possible, so as not to tire the birds of any one grain. Corn should only be fed at night.

HOW TO FEED THE LAYERS

During laying we feed as follows: Morning, two quarts of warm skim-milk, one quart of shorts and one bran & I mixed. At noon give them bran & I mixed. In the afternoon feed to sixteen ounces of green corn. At four-o'clock, one-half gallon of whole corn in the litter.

After the birds have come to roost, I go out and scatter one-half gallon of wheat and oats in the scratching shed to set them to work the minute they can see. A cabbage head, a few red beets, or a mass of boiled potatoes once or twice a week in place of the bones, gives them variety. When the birds show evidence of too much forcing, cut out the midday meal.

The feed last year for 24 birds fed as above cost me \$16.00. I sold the old birds on March 22nd to a farmer for 10 cents a pound, \$30.40, besides the eggs at 22 cents a dozen. The birds were the cull of my first hatch, being worth about 56 cents each when I put them in winter quarters. My total gain was \$42.96 less feed, \$26.95. This leaves out a few eggs we used in the house, before our other stock commenced laying.—F. in Standard.

Profitable Hens

Mrs. Fred Wilcox, who writes some very good articles in American poultry papers, tells how she bred the 24 hens from which she made \$200 in six months, as follows:

I began with the right kind of birds, and they were properly fed and cared for. In order to make this plain I must go back some years. When I began breeding the White Wyandottes I noticed from the first that some of my hens were better layers than others. My hens were not trap-nested, but as I had not up this work for my health and am passionately fond of it, I spent much time with my flock; consequently I became quite accurately acquainted with the merits of each individual hen. I say, too, that some of the chicks matured much more rapidly than others and that these were the first to lay and

they made my best layers. Therefore I began to breed only the best birds. Of course, all the time I kept one eye on the Standard of Perfection while with the other I closely scanned the egg basket.

I noted that the hens that came nearest to Standard in build could not always keep pace with those birds having little longer bodies with more of their weight back of their legs and a very broad tail, so I began to breed two different types in build, yet keeping the standard requirements in my mind at all times. This practice resulted in the production of two distinct strains; one for exhibition (and I must say these birds are splendid egg machines) and the other for the production of eggs and broilers.

A pullet of this strain began laying at the age of five and one-half months. She had laid 27 eggs in the last thirty days, and 92 eggs since she began laying, the 15th of July, just seventy-one days ago.

When people understand the importance of thorough breeding success will be more easily attained and failures will not be so numerous.

A Pretty Good Record.—A farmer's wife in the Eastern Townships, Quebec, has 40 White Wyandotte pullets, hatched April 1, that on October 15

had laid 60 dozen eggs—an average of 18 eggs each. It is no wonder that from her flock of 40 hens she each year sells in poultry and eggs \$300.00 worth of stuff.

Short Poultry Course.—From the second to seventeenth of February a special course in poultry will be given at Macdonald College. Those wishing information regarding it should write the principal.

Why Don't They Advertise?—The poultry editor of this paper is continually getting requests for poultry. Naturally he will refer them to those who advertise in this paper. So far he has not been able to find sufficient advertisers.

An Egg Story.—A Methodist minister in Alberta sends me the report that a farmer has an egg from his flock that measures nine inches one way and seven inches the other. He hints that we should get some of these hens at Macdonald College. Had it not come through the source it did I would have put it down for a Western yarn.—F.C.E.

Prof. Graham, of O. A. C., Guelph, is arranging to have a poultry insti-

ONTARIO HORSE BREEDERS' EXHIBITION

UNION STOCK YARDS
WEST TORONTO
JAN. 13, 14, 15, 1909

Over \$3,000 in Prizes
Entries Close January 2nd

All horses exhibited will be stable in the Exhibition Building, For Prize Lists, Entry Forms, and all information, address

A. P. WESTERVELT, Sec.,
Parliament Bldg., Toronto
WM. SMITH, President

tute at the close of the poultry course in February. He is getting some good speakers and there ought to be a profitable time for poultry men who can attend.

Renew Your Subscription Now.



LEARN TO MOUNT BIRDS AND ANIMALS!



\$20 to \$50 Weekly Easily Earned

Let us teach you the wonderful art of Taxidermy. You can learn at home in your spare time to mount birds, animals, game heads, fishes; to tan all kinds of hides and furs, make rugs, fine robes, etc. Professionals make from \$1,000 to \$3,000 a year. We teach all branches of this art by mail and show you how to open a business of your own. In your spare time you can easily earn from \$15 to \$25 a week. A mounted quail sells for \$3 and can be mounted in one hour; a mounted deer head brings \$25 and can be easily prepared in half a day. Big demand for completed work.

TO HUNTERS AND TRAPPERS! Decorate your home and den with beautiful mounted specimens. Save Taxidermy. Buy your taxidermy supplies now and let them be sent to you by mail. You will be **BURIED** at the large amount of money you can easily and profitably make in this business. Thousands of students—men, women and boys.

We Absolutely Guarantee Success or Refund Tuition Fees
FREE For a limited time only, our beautiful Illustrated Book on Taxidermy, Sample Copy or too fascinating art by mail. POST YOURSELF on this wonderful opportunity. Your name and address on a postal will be sent but for the free looks at once. Don't delay—send right now, today.

NORTHWESTERN SCHOOL OF TAXIDERM—BOX 451-N—OMAHA, NEB.

One Student says: "From October 1 to March 1, 1908, I spent my spare time learning work and attended to all my work by mail. I have now made \$100.00 in my spare time and take \$200.00 for them if I could not get my money in any other way. Every gentleman in this country should learn Taxidermy. I recommend your school because it is so simple."



Frost Agents have Reasons to "Crow." They increased their sales 25% last year. Why not join them?

Nine out of ten Manufacturers, Merchants and Agents will tell you that last year was a "lean" business year, yet "Frost" Agents did not find it so. They increased their sales of "Frost" Products 25%. Do you wonder that they are crowing?



There are reasons for the conspicuous success of "Frost" Agents. The reputation of their goods gives them an influence no other Fence Agents have. They have the most complete line: Woven Wire Fence, Field-Built Fence, Ornamental Fence and Gates. No order they cannot fill. They can supply every possible fence requirement.

They are able to sell fencing of the famous "Frost" quality at a rate that makes the price for inferior goods appear highly unreasonable, to say the least.

On account of its elasticity, the farmer has great faith in Colled Wire for horizontalists in his wire fence. Without that springiness or elastic fence, wire, fence will, as you know, soon become slack, unsightly and fall to give the service required.

"Frost" Colled Wire has made "Frost" Field Erected Fence famous. But provisions for expansion and contraction are as necessary in a machine-made fence as in the field-built kind. In "Frost" Woven Fence there are extra provisions made for this. A piece of this fence stretched on the posts has every

appearance of a field-built fence with colled laterals. Horizontalists and Stay Wires in the "Frost" Woven Fence are identically the same grade as the "Frost" Colled Wire used for horizontalists in the "Frost" Metal Lock Fence.

Now we are increasing our field force this year, so why not join our "crowing" Agents and take orders for the easy selling "Frost" Products, and largely increase your Bank account.

Remember there is only one "Frost" Wire. The farmers have become educated to this and you will find a big trade awaiting you.

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FARM AND DAIRY

AND RURAL HOME

Published by The Rural Publishing Company, Limited.



FARM AND DAIRY is published every Thursday. It is the official organ of the British Columbia, Manitoba, Eastern and Western Ontario, and Bedford District Cheese Dairy-men's Associations, and of the Canadian Home, and Jersey Cattle Breeders' Associations.

7. SUBSCRIPTION PRICE, \$1.00 a year, strictly in advance. Great Britain, \$1.25 a year. For all countries, except Canada and Great Britain, add 50c for postage. A year's subscription free for a club of two new subscribers.

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

CIRCULATION STATEMENT

The paid-in-advance subscriptions to Farm and Dairy exceed 8,500. The actual circulation of each issue, including copies of the paper sent gratis, are but slightly in arrears, and sample copies, sent from 5,000 copies (never being less than that) to interested subscribers unless renewed, are discontinued as they cost more than the postage. No subscriptions are accepted at less than the full published rates. Thus our mailing lists do not contain any dead circulation.

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' reliability. We try to admit to our columns only the most reliable advertising. Should any subscriber have cause to be dissatisfied with the material 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 in the slightest degree, we will discontinue immediately the publication of their advertisements. Should the circumstances warrant, we will expose them through the columns of the paper. Thus we will not only protect our readers, but our reputation 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." Complaints should be sent to us as soon as possible after reason for dissatisfaction has been found.

FARM AND DAIRY

PETERBORO, ONT.

TORONTO OFFICE:
Room 306 Manning Chambers, 77 Queen St. West, Toronto.

A BETTER SYSTEM NEEDED

Such good work has been done by the Dominion Dairy Division through the Cow Testing Associations, it is unfortunate that the system has received a set back this year through the method of testing the milk that was adopted early in the season. In previous years, representatives of the Dominion Department of Agriculture used to visit the different cheese factories and test the samples of milk taken by the members of the different associations.

Last year this arrangement was changed. Arrangements were made to have the cheese makers in the different cheese factories test these samples of milk. This arrangement may be more economical to the Department of Agriculture, but it is hav-

ing an injurious effect on the work of the association. When the representatives of the Department visited the different factories, it kept them posted in regard to the work in each section, and was a means of conveying information from one district to the next. This tended to increase the interest. Cheese makers have their own work to perform, and are apt to pay but little attention to the work of a cow testing association. It thus, often, is neglected.

Not only should the Department of Agriculture adopt the former method of testing the milk, but it should carry the whole work out much more thoroughly. As at present conducted, the work of the association is only superficial. It does not give the members any actual idea of the returns they are obtaining from each of their cows. The work should be carried on in much the same manner as it is in Scotland and in Denmark. Figures should be obtained showing the cost of feeding the cows in the different herds, thus giving some idea of the net returns per cow. It might cost more to gather this information, but the increased interest that would be taken in the results would prove ample compensation. If the work were to extend greatly, the Department would be justified in increasing the charge per member, which would tend to keep down the expense.

It is understood that the Department of Agriculture feels that the returns that have been secured through the work of the cow testing associations, does not justify the expense that has been incurred. This is the best line of work that the Department has undertaken for years, and it should be pushed vigorously, even if the cost does appear great. The Department should recognize that it takes considerable time to arouse general interest in a movement of this kind. The farmers of this country are worth spending a good many thousand dollars on. When we realize that the expenditures of the Dominion Department of Agriculture amount to only about one million dollars a year, while the expenditures of the Department of Militia and Defence amount to about six million dollars, it is evident that there is room for a decided increase in the wise expenditures of the Department of Agriculture, without anyone being injured.

UNDESIRABLE ADVERTISING

"It takes nerve and costs money to exclude not only medical advertising, but the raft of other advertising, which by many is considered legitimate, but which, according to our code, is more or less objectionable. I know that the 'Orange Juice weeklies, including also the semi-monthly Farm and Home, and the magazine Good Housekeeping, issued by the 'Phelps Publishing Co., sacrifice over \$100,000 cash each year by refusing medical advertising and other objectionable business.'" Agricultural Advertising. During the past year, The Canadian

Dairyman and Farming World has refused hundreds of dollars' worth of undesirable advertising. It believes that a paper is responsible for the gentleness of every advertisement and, therefore, that it cannot afford to publish advertisements that are likely to be misleading or cause loss to its readers. Papers, all over the continent, are beginning to recognize the truth of this principle and are discontinuing the publication of electric belt, liquor, patent medicine, and other similar advertisements. The public will serve its own best interests if it backs up those papers that are taking this stand.

RESULTS OF CHEESE SHORTAGE

For the past two seasons the make of cheese in the average factory has been considerably below what it was previous to 1907. The patron is usually the first one to be considered when a falling off in the make takes place. The exports of cheese from May 1st to December 23rd, 1908, fell off 223,950 boxes, as compared with the same period of 1907. If to this be added the shortage in stocks on hand, as compared with a year ago at this time, we have a total shrinkage, as compared with the season of 1907, of well on to 300,000 boxes. Then the make of 1907 was considerably below that of 1906, and we are safe in estimating a shrinkage of nearly 500,000 boxes in the manufacture of cheese during the past two seasons. This amounts to about 40,000,000 lbs. of cheese. The average price of cheese during the past two years has been about 11 cents a lb. This shrinkage then means a loss to Canada of nearly \$4,500,000.

This loss is figured out by statisticians and others as coming directly home to the farmers or patrons of cheese factories. This loss is undoubtedly very large in the aggregate, and amounts to an average of about \$40 for each one. It is well to remember, however, that had the make of cheese kept up to the big records of 1906 and one or two previous years, the average price of 1907 and 1908 might not have been so high, and the real loss not so large as the above figures would seem to indicate. It is serious enough, however, and has had its influence upon the general business of the country.

But there is another side to it. How has this shortage affected the cheese manufacturer and the cheese maker? Look at the question from the manufacturer's standpoint for a moment. During the past season or two, there have been greater demands made upon him than ever before, for better factory buildings, and for better equipment and facilities for making cheese. The reports of the instructors show that he has responded to this demand, with some exceptions, in a very liberal manner. He has invested more capital in the business, and has a larger investment to pay interest on, or to make a profit on, than he had two years ago. He has found, however, that his source of revenue is decreased rather than

increased since his increased investment was made. The make of cheese has decreased, and there has been no corresponding increase in the price he gets for manufacturing. Conditions have arisen for which no one is responsible. But they have so affected the annual revenue from his business that the manufacturer finds himself, financially, in a worse position than he was before these extra demands were made upon him for better buildings and better equipment. These improvements are urgently needed in the interest of the business, and are essential to maintaining the standard and quality of Canadian cheese. The question is, is it reasonable to expect the manufacturer to continue to invest money in further improvement of his factory unless the revenue from his business increases likewise? In short, it looks as if the price for manufacturing cheese will have to go up, unless the make increases very materially during the coming season.

PLOWING IN RELATION TO WEED DESTRUCTION

The weed nuisance may be perpetuated with the plow. If care be taken, however, it need not be the case very often. Some weed seeds like those of wild mustard have great vitality and may lie, like a sleeping dog, in the soil for years. When the plow again brings them to the surface and they receive a warm May shower they suddenly waken up and show what they are made of.

If all soils were of the proper texture for drainage and for holding plant food, it would not be necessary to plow deeper than four or five inches at any time. In that case, where fields are weedy and many seeds have formed before the plowing is done, these weed seeds would not be turned under in most cases beyond the point of germination. Most of them would be encouraged to grow and then be killed while they were young and tender. This is the reason why, in most seasons, a shallow plowing with a gang immediately after the crop is removed is so beneficial. It covers the weed seeds with sufficient soil that with accompanying moisture to cause them to grow, they may be killed with after cultivation or by a late plowing.

Very often a mistake is made in plowing the field after the hoe crop has been harvested. More especially is this the case if the field has been well cultivated. Through the frequent and thorough cultivation that the hoe crop receives to conserve moisture as well as to kill weeds, nearly all of the food seeds in the three inches of soil at least, have germinated. Below that line there may be a great many different kinds of weed seeds awaiting their opportunity to grow when brought to the surface. The practice of bringing them to the surface with a plow, is altogether too common.

If plowing is necessary at all on the heavier soils, after a hoe crop is harvested, it should be just a light skimming of the surface. In some cases, however, as with the land this year, when it was hard and dry, it could not be plowed at all, except it

were plowed many cases seeds bed has been in the fall field in the spring good and often the result.

For all and working heavier soils of drainage ture of the with the d should be d seeds near plowing of t

● Cream
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A crying business at ter cold stor creameries. Last Hems, chief the average storages at car tario, was 5 high for the keeping of states that 5 are in good dition, and this accounts creameries in Ontario last therefore, but have no cold ing butter. Over one mil cold storage tion.

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were plowed to a great depth. In many cases the preparation for a seed bed has been made with cultivators, in the fall for fall wheat and rye, or in the spring for spring crops, and as good and often better crops have been the result. For a catch of grass and clover seed the firm under soil with the fine tith on top is almost ideal.

For all light soils shallow plowing and working is preferable. With heavier soils, however, the question of drainage and the mechanical texture of the soil have something to do with the depth to which plowing should be done. For keeping weed seeds near the surface the shallow plowing of the soil is preferable.

Creamery Department

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

Better Cold Storage in Creameries Needed

A crying need in the creamery business at the present time, is better cold storage facilities at the creameries. From investigations made last season, by Mr. Frank Herna, chief instructor, we learn that the average temperature of the cold storages at creameries in western Ontario, was 52 degrees. This is too high for the proper cooling and keeping of butter. Mr. Herna also states that 29 of these cold storages are in good condition, 18 in fair condition, and 13 in very poor condition. This accounts for only 60 of the 77 creameries in operation in western Ontario last season. There must therefore, be 17 creameries which have no cold storages at all for keeping butter. At any rate, only a little over one third of the creameries have cold storages that are in good condition.

The conditions which apply in western Ontario, will apply in other parts of Ontario. Just as better curing facilities are one of the crying needs of the cheese industry, so better cold storages or means for keeping and "curing" butter are urgent-ly needed in the creamery business. It seems difficult to get people to understand that anything more is needed, after a good quality of cheese or butter has been turned out. They are slowly learning, however, and at considerable cost, too. No article of food produced will deteriorate more quickly under unfavorable conditions than butter. It is safe to say that a large proportion of the defects in Canadian creamery butter is due to unfavorable conditions surrounding it after it is made. Butter should be kept as near to the freezing point after it is made, as possible. Mr. Herna's investigation shows that the average temperature in creamery cold storages is about 52 degrees above that point. We may infer that the 29 creameries, with good cold storage facilities, have kept the temperature down to near that point, or below 40 degrees at any rate. If this be true, then the temperature at which butter was kept in the remainder of the creameries must have been very high to bring the average up to 52 degrees.

The lack of proper storage for butter is shown by the experience with the refrigerator car facilities for the carriage of butter. There was some improvement the past season, but the temperature at which butter is loaded in the cars is far too high to get the fullest benefit from the transportation facilities provided. The ideal

place is low temperature at the creameries, and low temperature while the butter is in transit to the consumer. This ideal has not been reached yet, and will not be till every creamery has proper facilities for cooling butter and keeping it at a low temperature until it is put on board the train. The refrigerator car facilities provided last season were as good as could be reasonably expected under the circumstances. It is up to the creameries to do their part, and supply those cars with butter properly curd and in a condition to be carried to its destination without any danger of deterioration in quality.

Creamery Butter-makers' Salaries in Denmark

They have been wrestling with the makers' salary question in Denmark and endeavoring to establish a basis to work on. Owing to the increasing interest in this question in Canada, the following from one of our exchanges will be of interest. It is the scale of salaries recommended at a recent meeting of the Jutland Creamery Association:

Creameries	Gross salary of manager including salary to help	Of this is supposed to be used for help	
		Cash	Board
1	\$ 420	\$ 97	\$ 54
2	634	162	108
3	870	270	135
4	1,052	324	162
5	1,136	367	189
6	1,203	394	216
7	1,253	421	243
8	1,391	475	270
9	1,510	513	297
10	1,618	540	324

In the gross salary is calculated in cash value all supplies, such as income from garden, fuel, light, milk, cream, etc., only the dwelling which is provided free. The salary is calculated to be normal for creameries where no cheese is made and where extensive retail sales are not made. The labor cost of making up 1,000 lbs. of milk will thus vary from 42 cents for the one million creamery down to 16.2 cents for the ten million creamery.

This table would indicate that Danish butter-makers are not over paid in the way of salaries. In a creamery receiving 10,000,000 lbs. of milk, \$864 has to be paid out of the gross amount the manager receives for help and board, leaving a balance of only \$752 out of which have to come other things. How do these salaries compare with what makers receive in

Care of Milk by the Householder

At the New York State Fair prizes were given for the best essay on the care of milk by the consumer. The first prize was won by Mr. B. Publow. The following are some hints from his essay worth noting:

1. Bottle milk is practically free from outside contamination and is the preferable form for purchasing it.
2. Can milk is liable to contamination from dust, from heat, and from strong-smelling substances in the refrigerator.
3. The top and outside of the bottle should be rinsed off with warm water before being opened, as the milkman usually carries the bottles by the top or neck, and more or less dirt and bacteria are certain to be transferred to the outside of the bottles.
4. Place the milk at once in a refrigerator, in cold water or in a cellar. Keep the covers on the bottles as it prevents material falling in, and also prevents absorption of odors.
5. Wash and scald the bottle as soon as empty.
6. Clean vessels only should be used for holding milk sold by measure.



Your Old Machine

Cannot compare with
The New Model

**DE LAVAL
CREAM SEPARATOR**

A fair allowance is made for the old Separator. Be ready for any Dairly emergency—

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WINNIPEG MONTREAL VANCOUVER

Dairymen's Association

OF WESTERN ONTARIO

**42nd Annual Convention and Winter Dairy Exhibition
BRANTFORD**

JANUARY 13th AND 14th, 1909

\$360.00 IN CASH FOR PRIZES FOR BUTTER AND CHEESE
Cheese Buyer's Trophy valued at \$150.00 for Sweepstakes Cheese
Splendid List of Speakers

\$100.00 in Cash Prizes for Dairy Herd Competition
Silver and bronze Medals by Ryrie Bros. Toronto

Special prizes by Holler and Mery Co.; New York, R. M. Ballantynes Limited, Siverford; C. H. Slavson & Co., Ingersoll; J. B. Ford Co., Wyandotte, Mich.; The Canadian Salt Co., Windsor; The Western Salt Co., Mooretown.

THREE SESSIONS EACH DAY

Wednesday afternoon session specially for patrons of cheese factories and creameries and all milk producers. Reduced rates on all railroads.
For programs and all information apply to

FRANK HERNES, Sec.-Treas., London, Ont.

These should have tight fitting covers.

7. Never mix fresh and stale milk as all becomes tainted or sour in a short time.
8. Milk slightly sour can be sweetened by the addition of a small amount of lime water. Pasteurization will add to its keeping quality. This latter is not good policy, but it is a remedy for a common evil.
9. Do not buy milk because it is cheap, for usually it is the dearest in the end.

Items

Dish-cloths should never be used around dairy utensils. They are too hard to clean. Use a stiff brush instead.—J. N. Paget, Haldimand Co. Ont.

In New Brunswick during the seven years, 1900-1907, creamery butter production increased 237 per cent., and its value 294 per cent. In the same time cheese decreased 36.2 per cent in value, and 21.58 per cent in value.

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 your letters to The Cheese Maker's Department.

A Champion Cheese Maker

One of the oldest, best known, and most successful cheese makers in the Dominion, is Thomas Grieve, of Wyandotte, Ontario, an illustration of whom is here published. Mr. Grieve has been making cheese for over 40 years. He did much to advance Canada's possibilities as a cheese country when in 1876, he exhibited cheese at the Pennsylvania Centennial Exposition, which won the gold medal and sweep-stakes. At that time, comparatively little interest was taken in

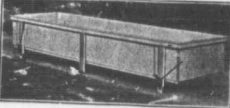
dairying in Canada. This victory aroused greater interest in cheesemaking, and had a pronounced effect in encouraging people to send their milk to the cheese factories. In the same year, Mr. Grieve sent cheese to an exhibition in New York, where he also won the first prize.

The best known cheese factory and creamery in Ontario is the Black Creek factory, erected by the late Hon. Thomas Ballantyne, of Stratford. Mr. Grieve made cheese in this factory for 13 years, having preceded for some time as maker, Mr. George H. Barr, now the Assistant Dominion Dairy Commissioner, who made cheese in the Black Creek factory for about five years. For 38 years, Mr. Grieve has been making cheese in the Wyandotte cheese factory. At last, he is suffering from the same cause that has driven so many of our cheese makers out of the business. Another maker has volunteered to make cheese for 8 cents a cwt. of cured cheese less than Mr. Grieve was making for, and will box the cheese in addition. The

patron of a cheese factory should store ice for use in the summer months. A small ice house can be erected at small cost and it is not a very difficult task to store a few loads of ice during the winter months. There is always a creek or pond near at hand at which ice suitable for this purpose can be secured. It will come in handy for other purposes as well as for cooling milk for the cheese factory. It will pay cheese makers to give some attention to this question dur-

ing the next couple of months. By explaining the necessity of cooling milk properly for cheese making patrons can be induced to take the matter up. The storing of ice by the patron is one of the needs of the business at the present time. The maker will have a much more satisfactory season in 1909 than he did in 1908, if he can induce his patrons to make preparations for putting in a supply of ice for use when the hot weather comes.

"PERFECT" Steel Cheese Vat



(Patented August 14th, 1906)

Durable—All Steel, **Sanitary**—Not a crack or spot for milk to lodge in and decompose. **Handy**—Levers and gears to raise and lower each by inch. **Ideal Drainer**—Built so the last drop runs out.

What Men who Know Say About Them:

An pleased to say that your steel cheese vat is coming vat. After testing it carefully during the past year, I can recommend it very highly to all dairymen.

C. B. LARRY, Finch, Ont., Dairy Instructor.

I have examined and carefully tested your steel cheese vat and consider it the best vat I have ever seen and take pleasure in recommending it to all factory men.

H. E. BRINTNELL, Kingston, Dairy Instructor.

Your steel cheese vat is superior to anything I have ever seen. As to sanitation and durability it is by far the best. It heats and holds the heat just as well as the wooden vat. I have pleasure in recommending it.

W. J. KAGEDALE, Smith's Falls, Dairy Instructor.

This is to certify that I have had 40 years' experience using cheese vats and it gives me much pleasure to say that the vat manufactured by your company is the best that I have ever seen. I have one in use at the present time in the Plum Grove Factory.

JAMES WILLIAMS, Williams Corners, Cheese Mfr. and Buyer.

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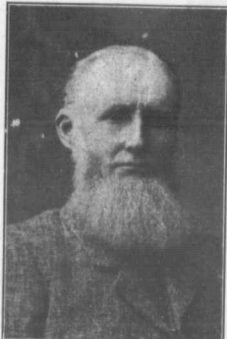
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Thomas Grieve, Wyandotte, Ont.

management of the factory has accepted the offer of this new man, and now Mr. Grieve is without a position. This tells a tale about the cheese business, about which so much has already been said, that we hardly deem it necessary to make further reference to it.

November Cheese Not Wanted

While speaking at the annual banquet of the Belleville cheese board, Mr. H. Hodgson, of Montreal, the well-known cheese exporter, advised dairymen to stop making November cheese and to manufacture butter instead. The exporters want all the butter in November that can be made. The November cheese is not wanted because, generally, it is hard and leathery.

Mr. Hodgson urged dairymen to use larger boxes and suggested that 95 lb. boxes would be the most convenient. He did not want the dairymen, however, to put an 85 lb. cheese in a 95 lb. box.

Induce Patrons to Put Up Ice

One of the chief troubles cheese makers had to contend with last season was over-ripe milk. During the hot months the quality of the cheese made in many factories was materially injured because the milk when received by the maker was in an over-ripe condition and the finest product could not be made from it.

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CHLOE with I "I" stood, "I" she this day a deaf-mute. If I should heaven who to come and never men Sabina me seems to "keep"

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LET us never forget that an act of goodness is of itself an act of happiness. No reward coming after the event can compare with the sweet reward that went with it.

Naturinck.

The Domestic Adventures

By Joshua Daskam Bacon
(Continued from last week)

CHLOE looked solemnly at me with Mary's letter in her hand. "I want it distinctly understood," she said decisively, "that from this day on I am dumb as a deaf-mute, on the servant question. If I should hear of an angel out of heaven who was simply pining away to come and work for us, I should never mention the fact to you. Let Sabina make some suggestions—she seems to know so well what not to get!"

But Sabina's "immunity from domestic litigation" was too definite a clause in our arrangements to be overlooked. Beside this, she has been, if anything, less interested than ever in our little household crisis since she came back. She is now busy in the office, and at our old boarding house of course there was never a hint of any sort of friction, and I suppose she readily got back into the way of taking everything her own way granted. I cannot help remarking the difference that has crept into our points of view since I took up house-keeping; Mary's letter which she presented to me the enormity of leaving without notice and the ingratitude of an ignorant person, appears to Sabina chiefly as a humorous literary production! She admits this, and says that I lack the necessary perspective for properly appreciating the incident. But how am I to get the perspective while I am wrestling with the problem? It occurs to me that this may explain the lack of humor, of which my sex is accused.

Sabina suggested Chloe's showing the letter to Mr. Van Ness, but Chloe refused. I think she was allowing me to see that she resented his leaving us alone so long, for when he appeared again, a few days after the house was in order and the disinfectants nearly faded away, she stayed at home with Mr. Ogden, who had come the same day, rather tottery, but jolly as ever, and seemed quite shocked when Mr. Van Ness suggested that she should come out to a little spin nevertheless—as if she had not done it more than once before! Sabina was quite cross at her, and told me afterward that Chloe acted vindictively and didn't deserve either of them. She said Pluto was counting on the drive.

However, I was glad at the time that they didn't go, though heaven knows I have repented it often enough during this last month, for if I had been left alone to entertain Mr. Ogden I should have taken no special notice of his ideas on the solution of the domestic service problem, whereas Chloe took them seriously enough to—but no one could have blamed her; the coincidence was so extraordinary.

For reasons best known to herself she practically ignored Mr. Van Ness that day, and sat with Mr. Ogden

(she calls him "your young friend," with an enigmatical glance at me), making our experiences with May sound so amusing that I began to think Sabina was right and that I had lost my perspective. Still, they had neither of them shared Solly's broth and cereals for a week!

"And I hope we all see now," she concluded, looking straight over my head, "what I suspected from the beginning—that an American is simply impossible. You see, we have no servant class. It must be foreigners—or monkeys."

Mr. Van Ness, who was sitting by Sabina, caught this, and nodded. "Quite right," he said. "That's what my sister says. Monkeys. And when you see her new Japanese butler you will think she has one."

This he addressed to all of us, with his usual politeness, but for the moment I was cross enough at Chloe to hope she would never see that butler. "What she had always suspected," indeed! I immediately lost my perspective. I am sure of this, because if I had kept it I should have laughed at Mr. Ogden's next speech, instead of agreeing with him, which I did. I'm afraid, chiefly because it contradicted Chloe, just as he made it. I'm equally afraid, to contradict Mr. Van Ness.

"It seems to me you're on the wrong track," he said, "because as fast as the foreigners get to amount to anything they quit the servant class and go into something better, don't they? On that basis the monkeys would very soon evolve into foreigners, you see, and what would be left? My mother says that we must get back to the old 'hired help': social equals, you know, or nearly so, and make 'em the dignity of labor, and all that. She comes out 'strong on it—you ought to hear her! Now should think, if you ask me—"

Nobody had asked him of course. Why on earth should they? But that is a remark very characteristic of Mr. Ogden, and he always goes on without waiting for the least encouragement.

"If you ask me," he repeated, "that what you ladies want is somewhat exceptional kind of person. Somebody who is really fond of housework, you know (oh, why didn't we stop him), and isn't doing it just because she hasn't the sense—or the nerve—to do anything else. There must be women

left, intelligent women, who like that sort of work—women used to."

Of course the proper thing to have said to this didactic young man at this point was, "How do you know they used to?" But nobody did. Mr. Van Ness paid no attention whatever to him, which was his usual course, and Sabina politely followed Mr. Van Ness' lead which was her usual course. At that very moment, indeed, it occurred to me with renewed force that Sabina and I were both of us wasting a great deal of time and attention on that graceless Chloe and her lovers, and that she would probably have settled her affairs much more promptly if she had not been able to depend upon us to repair her alternate neglect and favoritism. But I listened, polite as Sabina at the other end of the room, to Mr. Ogden.

"There must be somebody," he went on, who is tired of trying to make a living at other work, where the competition is frightful, who would be glad of good home, and who would have brains enough to treat the work scientifically, you know, and—oh, well, the way you would yourself. It must be a lot healthier than working in a factory."

"Are you acquainted with many of these persons you describe so feelingly?" said I.

I saw that he was looking at Chloe, and followed his eyes. She had all the appearance of a child that tries not to talk during a church service: short of holding her tongue with her fingers, she was a pantomime of determined silence.

"What is it?" I asked. Her eyes sparkled but she shook her head. "—oh, it is too ridiculous!" she burst out at last.

"Perhaps you 'know' one of those fictions of Mr. Ogden's brain?" I suggested.

"She's not a fiction—but I shall never tell you," she declared.

"Chloe," I said severely, "don't be childish. If you really know of anybody—"

Farm and Dairy extends to every Canadian housewife and every Canadian home, its heartiest and best wishes for a Most Happy New Year.

"I swear to you that I should never have mentioned her if the man'd describe her," she assured me solemnly, "never! She is just like that—she was in college, a sophomore, and her eyes gave out, and the doctor said her work would be the best thing for her. Editha Evans wrote me about her—I got the letter this morning. She was our senior president, you know, and she's teaching now. She's just as managing as ever, and the girl was in her classes, and she's telling everyone she knows about her, so they can find her a place. She's a poor girl, and very plain," Editha says, but she always had high marks. She wouldn't expect to eat at the table."

(Continued next week.)

The Upward Look

NEW YEAR'S RESOLUTIONS
Put on the whole armour of God, that ye may be able to stand against the wiles of the devil.

For we wrestle not against flesh and blood, but against principalities, against powers, against the rulers of the darkness of this world, against spiritual wickedness in high places.—Ephesians 6, 11, 12.

It is well at the close of the year, and at the beginning of the new, to take stock of ourselves. A ship on

the ocean, without a chart or a compass, would be apt to wander helplessly. Unless we have a chart, we can constantly to improve ourselves, our lives will prove failures. New Year resolutions help us to direct our lives towards better things. When resolute for a year to year, they enable us to see the progress we are making.

Most of us feel the need for making good resolutions. We realize that our lives are far from being as loving as kind, as cheerful, as uncomplaining as they might be. We long to do better. We decide constantly to try to improve in those points wherein we realize that we are weak. Alas, too often we rely on our own strength of will, and when inevitable failure overtakes us, we are inclined to become discouraged. We ask ourselves what is the use of trying to do better, when we are so sure to fail. The best year some of us have resolved to try and be more unselfish in our homes; to be better mothers or fathers, sons or daughters, brothers or sisters. We have decided to endeavor to overcome our faults of character, to control our tempers, to master our foolish pride, to be more faithful in the performance of our daily duties; it may be that our endeavor is to overcome some of our faults, such as a love of strong drink. Some of us, although the new year is only a few days old, may have broken already many of our good resolves.

We need not break them, or, if we do, we may know that the reward need be only temporary, and that complete victory will be ours if we persevere in the right manner. We have definite, absolute assurance that we have no fault, no matter how serious a one, it may be, that we cannot overcome.

Before we can expect to succeed, we must have a clear conception of the greatness of the difficulties that we confront us. If we understand them, they will overcome us. We must recognize that we are not struggling merely against faults. Our effort is against the devil who is endeavoring to drag us down by means of our faults. Our text makes that clear. It warns us against the wiles of the devil. It tells us that we do not struggle against merely human odds, but against powers, against the rulers of the darkness of this world, against spiritual wickedness. Many of us do not realize this, when we make our good resolutions. That is why we are so hopelessly defeated. The devil is infinitely stronger than we are. Single-handed we cannot hope to overcome him.

But our text tells us something more. It directs us to put on the whole armour of God, that we may be able to withstand the assaults of the devil. God is stronger than the devil. If we will but ask God for His assistance, and are faithful and persistent in our asking, He will give us the victory. He will aid us and He cannot lie. The Bible records His promises to this effect over and over again.

In John 16, 23, we read, "Whatever ye ask the Father, in My name, He will give it to you." In John 15, 7, we are informed, "If ye abide in me, and my words abide in you, ye shall ask what ye will, and it shall be done unto you." If, therefore, we fail to keep our good resolutions, it is because we do not take God at His word, because we are not faithful enough in asking Him to help us, because we do not strive earnestly enough to abide in Him, and to have His words abide in us. Let us realize this, and our characters, if we so will, may be changed from glory to glory.—I. H. N.

Value of Women's Institute

That the women's institute in Ontario is appreciated by the women of the Province, is evidenced by the fact that in less than ten years, it has grown from one institute with a membership of not more than 50, to 465 institutes, with a total membership of over 12,000.

We have in the women's institute an organization which permeates all classes of women of a community, meeting with a common object in view—the betterment of their home life, and the scholastic training and care of children, economic and hygienic value of foods, clothing and fuels, and a view to raising the general standard of the health, and morals of the family in general.

It has been said that the formation of a Country is laid in the home, and the Women's Institutes are for making women efficient in the home. The most important factor in every home is the woman at its head, and why should she not take advantage of everything that will tend to make her more fit for the duties she has to fulfill.

Having occasion recently to visit several institute meetings being held by the women of Ontario, the writer was more than impressed with the energy and enthusiasm into the work of many of the speakers sent out by the Department of Agriculture. Some of the speakers sent out, are not, perhaps as well adapted for their work as others. All women can get up and speak before a large audience; they all cannot give up personal comfort and self to go out to meetings and deliver addresses simply for the benefit and good to be done to others. But when one sees women who have good homes, and every comfort, put their work, or their betterment of their sex first of all, leaving their homes in the midst of winter, travelling in the cold, often late

at night, after delivering a long address in a close stuffy hall, then driving sometimes for ten to fifteen miles to get to another town, where the same proceeding has to be gone through—one cannot but help admire the courage of these women. Their hardships are many. It is when one sees kind women as these taking an interest in the work of the homes of their fellow women, that it is hard to believe that every one does not give them credit for their heroic efforts.

Still, even yet, in some sections can be heard remarks like the following: "If women would stay at home and take care of their own work they would get along better. I never go. My own home is quite good enough for me," or another, "I have no use for the Women's Institute, I can keep house just as well as those who belong." If the houses of women who think and express their feelings in the above manner were looked into and their methods and lives laid open for inspection, we probably would find that the inmost workings of their homes, and the lives and minds of the women themselves, were as narrow and unprogressive as their remarks would indicate.

By attending institute meetings, new ideas and suggestions are being constantly received, and consequently there is more interest and variety in the home duties. None of us know so much that we cannot learn more. Whatever plan we may follow in our work, there may be somewhere a still better one. Why not find it out? Why stay in the same old rut? Why study in the same old ruts? Your mothers and grandmothers followed? Do you not want to advance as you grew?

Women's and for that matter, men's meetings afford many advantages for developing our capabilities. One instance of this was recently drawn to the mind of the writer. On visiting an institute in Peterboro County, it was learned that the former presi-

dent of the women's institute in a certain town, used to be a most timid get up or speak at any meeting, who was a woman of most excellent ideas and suggestions. Upon being elected Institute, it seemed almost impossible for her to accept the position. She did. Now she is one of the leaders in all matters pertaining to that institute. The members look to her, ask her advice and receive it in many things. She has become self reliant, has spread her knowledge and influence abroad among many women, and all for good. Why? What has done for herself and others, can be done by other women. It is by coming in contact with others, that we learn how for ourselves, develop our latent powers and capabilities, and extend to others all that we have in ourselves.

Institute work should be taken up on the broad basis of education in every part of the home life in every style of home; benefit all the inmates, young and old, and touch all kind of phases of the work of the home. If the women of each community would take the trouble to know and learn something of the Institute, they would be proud to belong to an organization whose object is the betterment of home life and the upbuilding and making of character.—C. B. M.

Talks with Mother
Self Reliant Children

The tree grows as the twig is bent, so if we wish our children to become self-reliant we must begin early, training them to become helpful, industrious and methodical. Give them a small amount of work to do each day and do that they do it neatly and thoroughly.

A small broom, gay sweeping cap, gingham apron, dish cloth, dusters and towels, all her own, will make a girl's duties like a game. When she begins to cook, get some dainty utensils for her individual use. I well remember the small rolling pin my grandfather presented me with after he had tested my first biscuits: I was as proud as a queen, although the article is considerably under-size, I have used it ever since.

I have in mind two different families. Each has three girls and live upon farms. In one, the mother is a household slave, working early and late, and seldom ever going to church or visiting her friends. In fact she has stayed at home so closely that she feels old-fashioned. When the girls feel about the house, they are almost driven to it; one does the laundry work, the other is a veritable tomboy, and the eight-year-old miss is the "baby" as the mother makes answer in exclaiming tones. Do these girls love their mothers? Of course they do, only their eyes are hidden and as they are all bright, lovable little girls, it is only a question of time when the scowls will fall.

A CONTRAST

In the other family, the children do a portion of the household work. To relieve the monotony, they are given about each week and already the eldest, now nearly fourteen, is an accomplished housekeeper, having taken one of which was the illness of her mother, at which time she kept house nearly six weeks until her mother returned from the hospital. As a natural result, this mother (scowls and frowns) is not obliged to overwork so is a cheerfully helpful companion to her girls; assisting in their lessons, interested in more time for sewing than the majority of women, she keeps them tastefully dressed and has time for her own mental development.

A Pleased Boy

What one boy has done, another boy usually can do. Get busy, boys, and earn a good watch for yourself. It won't take you long. Several boys have now received our premium watches, for securing one or two new subscribers for us. For one new yearly subscription to Farm and Dairy at \$1.00 a year, we can send you a good watch; for two new yearly subscriptions, we can send you a better one. One boy writes us: "I received the watch with pleasure and I am very well pleased with it. I might try and get some more subscribers at some other time. I am going to school and I haven't much time."—Cecil Presley, Peel Co. Ont.

If you have trouble with lampwicks, perhaps you will find it advantageous not to trim them with scissors, but rather to rub off the charred part as close as possible to the edge of the burner by slipping an old stocking over the hand and rubbing the burner wick with the forefinger until it is even.

Red onions are excellent diuretics; raw, white onions cure insomnia.

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Fancy Aprons



Pretty and attractive aprons are among the fads of the moment. They are charmingly coquettish if worn upon the right occasion and they give just that housewifely touch that is so essentially feminine.

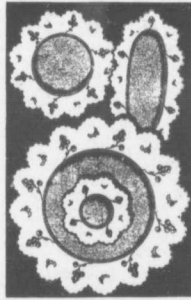
Here are three that are adapted to various purposes. They can be utilized for the chafing dish supper, for the afternoon tea, for the hours given to fancy work and to all occasions of the sort. In the illustration, No. 1 is made of fine sheer lawn, trimmed with narrow lace, while No. 2 is made of flowered organdie with frills of lace and banding, and belt of insertion, and No. 3 is made from dotted Swiss muslin, and is embroidered red at the lower edge to give a daisy effect, which is eminently decorative while the work involved is slight in the extreme. Its edge is finished with a narrow frill. All the materials that are used for fancy aprons are appropriate, however, and there are flowered and cross banded muslins included in the number, as well as those illustrated, while some women like pretty Oriental sash silks for the purpose.

No. 1 is made with a plain foundation and an outer portion that is cut

out to form the openings and the two are joined at their edges, so that the space becomes a capacious pocket. Nos. 2 and 3 are made in one piece each, and all the three aprons are finished with frills. The seam of No. 2 is covered with banding while the edge of No. 3 is finished with feather stitching, and No. 2 shows a belt of embroidery, while in the case of No. 3 the belt is of beading threaded with ribbon. But ties can be of ribbon or of the material as liked.

Coronation and braiding designs are increasing in popularity; they are worked the same way. For this kind of work a running outline must be selected in order that the cord or braid be not cut too often. A good, practical way to sew the cord or braid is by taking a short button hole stitch through the wrong side, catching only the back of the cord or braid; sew rather close; cord or braid must not be pulled nor yet be too loosely, but evenly covering the stamped line. If fine cord or braid is used, the ends may be pulled through to finish; if heavy cord or braid is used, one end must be lapped over the other and button holed.

Here is a piece that may be as elaborate or as simple as the worker desires. Worked in plain outline it could be handled very easily by any of our young girl readers; of course the design will look much better if



No. 552

worked in solid embroidery, but do not let that deter you from attempting to provide yourself with a dainty table set, for done in outline stitch it will be very neat and pretty.

This set, No. 552, consists of centre piece, size 15x15 inches, tray, 6x11 inches, doily, 6x6 inches, and doily, 8x9 inches.

Performed patterns of one of each size, price for all including stamping materials, 50c.

Designs stamped on linen, consists of one centre piece, one tray, six doilies 6x6 inches, and six doilies, 8x9 inches; price for all, \$1.

Before and After Marriage

(Sweet Driver)

To my mind no service or ceremony is more solemn than the marriage ceremony. It is an untried step in life. How often we see cases where marriage seems to be a complete failure, or, as I heard a young lady say once, it does not have the desired effect. The effect it should have, of course, is to make both husband and wife the happier, and each working for the good of the other. No doubt many of us have seen young men pick out the girls of their choice. They talk love, and have things down fine. To each of them there seems to be nothing in store for them but perfect happiness. They marry, and everything goes very nicely for a time. Visit them in a few years, and you would scarcely believe they were the same couple. You would never dream he was the young man who would bring his box of choice bon-bons every time he called, or send his bouquet of cut flowers, etc., (oh, no.)

Things are quite different now—they are married; no lead for that any more. The aim now is to get out of debt as fast as possible, and if there is no debt, to accumulate wealth as fast as possible. After that they will take things easy and enjoy each other's company. What a mistake. Ere they know it, their health is gone, and at any rate they are older; their ways are set, and it would be as good as a ten cent shov to see them making love to each other, for it is only a sort of make up.

If there is anything in this world that is a foretaste of heaven, it is a happy home. Some people imagine they cannot have a happy home unless it be well furnished, and everything up to date. Money may make a home comfortable, but it will not make it happy. Very often it is the families who are depending on the father to earn their daily bread which are the happiest. A happy home is where each one labors for the good of the other.

Some people will tell you that women have a great influence over men. They may have, to a certain extent, but very often a good strong pipe would have a larger influence. No, do I accuse the men for all unhappiness. I believe that if the women of our land would not get so carried away with society, trashy afternoon



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WE want to place a New Scale Williams Piano in practically every home in Canada. We want those of moderate means to enjoy the delights of owning one of these superb instruments. Our Easy Purchase Plan points the way.

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"Puritan" Reacting Washing Machine

The Improved Roller Gear - an exclusive feature of the Puritan - extra heavy cast iron wheel, and Roller Bearings, enable a child to do the entire washing. Gear is enclosed in metal cap so there's no chance of children getting fingers injured.



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"Favorite" Churn is worked by hand, or foot, or both. Roller Bearings mean quick, easy churning. Built for strength. 8 sizes to churn from 1/4 to 30 gallons of cream.

Write for booklet of these "Household necessities" if your dealer does not handle them.

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

If everything else in the house did its share of the work as well as

"Black Knight" Stove Polish

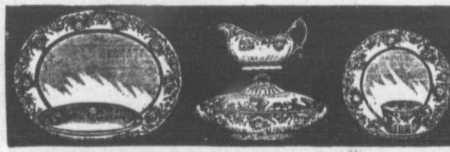
very few women would complain of the housework. "Black Knight" does away with the everlasting rubbing and polishing. It shines quickly and produces a result that satisfies the most particular.

Always ready for use for Stoves, Grates and other Ironwork. It's the best polish and the biggest can for the money.

Send dealer's name and 10c for full size can if you can't get "Black Knight" in your town.

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A USEFUL GIFT FOR MOTHER



FREE FOR A FEW HOURS WORK

Secure a Club of only Nine New Subscriptions and you will be sent Free of Cost, an elegant English Semi-Porcelain Dinner Set of 52 pieces.

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

Get to work among your neighbors; get the children at work, and you will not have much trouble in securing only Nine New Subscriptions to Farm and Dairy, at \$1.00 a year. Sample copies on request. Write Circulation Department:

FARM AND DAIRY, PETERBORO, ONT.

parties, etc., but be at home to welcome their "big boys," and teach their "little brats," we would not see so many men spending their evenings in the corner house or billiard room. No doubt there have been fathers and mothers whose sons and daughters have for a time gone down the stream as it were, but the good seed sown is sure to bring forth fruit, and in time they may return.

Entire confidence in each other is one of the secrets of married life. I believe in a woman standing by her husband as a wife, in the very truest sense of the word, and the husband to do likewise—to be, as it were, one person and show by our lives that marriage is not a failure, so that the rising generation will not have a dread of marriage lest they should become like us.

THE COOK'S CORNER

Send in your favorite recipes, for publication in this column. Inquiries pertaining to cooking are solicited, and will be replied to as soon as possible after receipt of name. Our Cook Book sent free for two new yearly subscriptions at \$1.00 each. Address, *Household Editor, this paper*

LEMON PIE

To the juice and grated rind of 1 lemon add 1 cup granulated sugar, and 1 tablespoonful corn starch. Then add the beaten yolks and 1 white of 3 eggs (save 2 whites for frosting), and 1 cup boiling water. Bring this mixture to a boil, then bake with an under crust. When done cover with a meringue made from the whites of 2 eggs and 2 tablespoons powdered sugar. Replace in oven and brown lightly. This makes 1 pie.

CREAM OF TOMATO SOUP

Into a qt can of tomatoes, stir ½ teaspoonful of soda, let it stand ½ hour, and then add a teaspoonful of onion juice; heat and mash through a colander, adding salt and pepper to taste. A pinch of sugar is also allowable. In another saucepan melt a tablespoonful of butter. Into this mix a tablespoonful of flour, and when this mixture bubbles, pour in a third at a time, a pint of warm milk—the richer the better. Stir until it thickens. Do not mix the tomatoes with the milk until serving time.

STUFFED ONIONS

Parboil the necessary number of

medium-sized large onions, trying to get all of the same size. Change the water at the end of each ¼ of an hour, and at the end of ¾ of an hour, unless very large, they should be tender. They must not be allowed to lose their shape by too much cooking. Scoop out a deep cavity, and fill with a mixture of bread crumbs and half chopped cold ham. Arrange in a baking pan and baste occasionally with water and melted butter. When the crumbs are nicely browned, the onions are ready to serve. Make a little hole in the bread crumbs with a tooth pick and insert a spray of parsley in each.

CRANBERRY JELLY

Wash thoroughly a qt of cranberries and put them in ½ pt of water. Cook for 15 minutes. Press through a sieve, add 1 lb of sugar, and a teaspoonful of gelatin, dissolved in water to insure the jelly keeping its shape. Mould in individual stars, and place one at each plate.

BLACK BREADING AND SAUCE

To scant ¼ cup molasses add 1 cup lukewarm water in which dissolve 1 level teaspoon soda, 1 well-beaten egg and 2½ cups flour sifted with 1 scant teaspoon each ground cloves and cinnamon. Lastly add 1 cup seeded and chopped raisins dredged with flour. Steam. This is nice served with the following sauce: Mix 1 cup brown sugar with 1 tablespoon flour, then add gradually 1 cup water, 1 tablespoon vinegar, pinch salt, and tablesip butter. Cook until thick and smooth. When ready to serve slices of lemon may be added if desired. The quantities for this recipe may be doubled or trebled, and the pudding steamed or kept in a cool place, to re-steam in cases of emergency. It will keep for several weeks or months, or even all winter, in a cool place.

TRIP

A Trip Around the World

Have you secured one of our sets of 60 beautifully illustrated post cards entitled, "A Trip around the World"? If you have not, you should get one. If you are free for one new subscription to Farm and Dairy, at \$1 a year. The set of cards is well worth ordering for. Those who have secured these cards cannot praise them enough. Our supply is limited. Send us \$1, with one new name, for your year's subscription to Farm and Dairy and a set of 50 cards will be forwarded to you, free of cost.

Household Secrets

To those who do not care to eat the skins of baked potatoes: Before baking them I suggest my plan of washing very carefully, pouring boiling water over them and leaving for three or four minutes. Then take out and wipe them dry and rub over each potato a piece of brown paper which has been dipped in melted fat. They will be clean and can be peeled as easily as when boiled.

TO AVOID THE SPLASHING OF GREASE
To prevent meat of any kind from soiling your stove or floor by splashing out of pan while frying, sprinkle some flour over contents of frying-pan. It will cease popping immediately, and keep a clean stove and prevent disagreeable odor of burnt fat as well.

TO IMPROVE SUET CRUST

In preparing suet crust for meat and fruit puddings, add one cold boiled mashed potato to each half-pound of paste. The result will be a most marked improvement in lightness and sweetness.

A NEW ECONOMY

I save considerable in my household expenses by using suet and leaf-lard. I use about two pounds of leaf-lard to one of suet. Cut in small pieces and put in a bread-pan to "dry out." If the oven is not too hot it requires no watching. When done, the lard should be strained into a lard-pail. The cracklings can be used to make corn-bread. Leaf-lard being cheaper than rendered lard, and suet cheaper still, the saving is even greater than one would imagine.—*Jessie B.*

TO PREVENT SKIRTS FROM SAGGING

To prevent dress skirts from sagging or becoming wrinkled while hanging in wardrobe, fold the waistband back and front together, then fold once more. Take a small strip of cloth or tape, pin with one thread on a paper and it will form a loop to hang skirt up with. This always keeps skirt in good condition.

TO KEEP THE IRON SMOOTH

When ironing starched pieces, rub your iron over a half pint of salt which should be mixed on a paper and will do for a number of ironings; it will make your irons smooth and clean.

DOUGH MINUS SPLINTERS

If you have an old-fashioned marble-top table, use it in the kitchen on which to roll pie or pastry dough. It is easily kept clean, and no risk of getting splinters in the dough.

The Sewing Room

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

FANCY BLOUSE #193

The blouse that is made with long close sleeves is the latest decrease of fashion. The model suits all the materials that are thin enough to be tucked, however, and is just as desirable for the odd waist as it is for the entire gown. Customers are exceedingly fashionable and always is pret. Material required for medium size is 4½ yds 21 or 24, 3½ yds 32 or 34, 4½ yds 36 or 38, 5½ yds 40 or 42, 6½ yds 44 or 46, 7½ yds 48 or 50, 8½ yds 52 or 54, 9½ yds 56 or 58, 10½ yds 60 or 62, 11½ yds 64 or 66, 12½ yds 68 or 70, 13½ yds 72 or 74, 14½ yds 76 or 78, 15½ yds 80 or 82, 16½ yds 84 or 86, 17½ yds 88 or 90, 18½ yds 92 or 94, 19½ yds 96 or 98, 20½ yds 100 or 102.



GIRL'S GIBSON DRESS #168.

The Gibson dress is a generally becoming keeping wistly. The dress is made with fronts and back, and is fast in the center of each shoulder, the opening being made invisibly beneath one of the tucks at the left side of the front. The fulness is held in place by a high collar that can be made to match. Material required for medium size (10 years) is 5½ yds 24, 3½ yds 32, or 2 7/8 yds 44 in wide. The pattern #168 is cut for girls of 6, 8, 10 and 12 yrs of age, and will be mailed on receipt of 10 cents.



SHIRT WAIST #194.

The plain shirt waist is one of the latest and smartest of the season, and it promises to be even more popular in the future. The waist is made with the fronts and back and when the shirt is worn, it is applied over the back. Material required for medium size (10 years) is 3½ yds 21 or 24, 3 yds 32, 2½ yds 44 in wide. The pattern is cut a 32, 34, 36, 38, 40, and 42 in bust, and will be mailed on receipt of ten cents.



BOY'S NIGHT SHIRT #192.

Roomy and comfortable sleeping garments are essential to the boy's comfort and this night shirt has been found satisfactory. The shirt is made with front and back. The plain sleeves are simply stitched at their lower edges, but those in shirt style are gathered and finished with over-laps and straight cuffs. Material required for medium size (10 years) is 4 yds 27 or 3 yds 36 in wide. The pattern is cut for boys of 6, 8, 10, 12 and 14 years, and will be mailed on receipt of 10 cents.



"New Century" Washing Machine

The "New Century" washes a lot of clothes in five minutes—without boiling or rubbing. It washes heavy clothes thoroughly—and soft, thin things without the least injury. The "New Century" enables you to do the biggest kind of a wash in an hour, that would take the whole day with an ordinary wash-tub. It saves your hands, your back, your time, your nerves—to say nothing of the clothes. The ball bearings and powerful oil-tempered steel springs make it run so easy that a child can do the family washing.

It is the cheapest machine ever sold, for value given. The Wringer Stand is one of the many improvements the "New Century" has. It is as rigid and strong as a bar of steel—in just the right position for quick, easy wringing—the wringer is always on stand—and the water drains right into the tub.

Twenty-five years of "knowing how" are built right into every part of it.

Some people buy them because they run "so easy," others because they do such perfect work in so short a time—all of them because there is no other "just as good."

Price \$25.00 without wringer, delivery in any railroad station in Ontario or Quebec. Write us for free booklets.

The Dowsell Mfg. Co. Limited
HAMILTON, Ont. 45

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OUR FA

COMPTON— Many are obliging for water. The fine in a count out as it shows that it high price turns fed on the yield below because of the warm a fair crop warm weather farmers' a chance—H. C.

HALIBUT— KINMOUNT— stormy month. bores deep on night, no frost. night of the 9th registered 10.0. Has been down to 30. 31 has Christmas. King of the 9th registered 10.0. 9th, 23, 24, 25, 26, 27, 28, 29, 30, 31. No snow this winter, so pigs is poor—3.

WICTE— WOODVILLE— keeping wistly. condition. The coming into the though the water heard of cases compelled to fill stock. Grain not as high live stock market bright and the fairly brisk—J. R.

WENTWORTH— HAMILTON—7 ly cold with light plenty of coarse high in price a dose; only cheese, 10¢; 85.50 a cwt; 18.50 a pair; can 80¢; stockers, 30¢; 16¢; clover, 11¢; wheat barn, 82¢.

BRU— WENTWORTH—7 and it has made large quantity of taken out this very of last summer. There roads into Sweden in them. Wood Ont. to the buyers have low.

NUN— WENTWORTH—7 weather has been two weeks. Most fall work pretty was difficult without ground being past few days, it off again near the have, which was need more water snow. The agric with any tremor strain. Quite a to have have it chopped ties of poultry been marketed. They were some compared with of good, running there is a likelihood enough for the O. trade. G. B.

MUSKOKA— HUNTSVILLE— mild and pleasant the Christmas making advantage

Renew your subscription now. Today is the time.

OUR FARMERS' CLUB

COMPTON CO., ONT.

COMPTON—Cattle are looking poor. Many are obliged to go quite a long way for water. There are not many good calves in the country. It is not holding out as it should; it seems to be so dry that it goes rapidly. People are not feeding as much meal as usual on account of the high price. There are not many turnips fed on account of the poor crop, the yield being far below the average because of the dry weather. Potatoes were a fair crop, and so was grain. The warm weather continuing so late gave farmers a chance to get their plowing done.—H. C.

HALIBURTON CO., ONT.

KINMOUNT—December has been a stormy month. No thaws; snow, 20 inches deep on the level. Good sleighing, no frost in the roads. On the night of the 9th the official thermometer registered 24 degrees below zero in Kinmount. Before and since then it has been down to zero or below. Grain has been sold from \$10 a ton to \$12. Christmas poultry sold at the following prices: Old Canada ducks, 50c; chickens, 10c a lb; turkeys, 50c; butter, 25c a lb. Milk feed is still very high. So many cows have been bred this winter, so the outlook for spring pigs is poor.—J. A. S. J.

VICTORIA CO., ONT.

WOODVILLE—The weather is still becoming wintery; the roads are in splendid condition. The outlook for fresh water coming into the wells is critical, and although the water supply is not serious in this section, your correspondent has heard of cases where the farmers were compelled to melt snow to water their live stock. Grain is a fair price but it is not as high as it was last year. The live stock market is keeping fairly bright and the prospects for beef cattle are fairly bright for the coming spring.—J. R.

WENTWORTH CO., ONT.

HAMILTON—The weather is moderately cold with light snow, scarcely enough to freeze. Live stock is doing well; plenty of coarse grain but feed of all kinds is high in price. Fresh eggs, 35c to 50c a doz; egg butter, 30c to 35c; colored calves, 2 to 2½; dressed pork, 25 to 28.50 a cwt; lamb, 50 to 110; chickens, \$1.50 a pair; calf skins, 12c a lb; hides, 6c; melch, 50c a lb; butchers', 7½c to 8c a lb; hogs, 56.15 a cwt; timothy hay, \$16; clover, \$11; straw, 87 to 88 a ton; oats, 45c a bush; barley, 52c; peas, 45c; wheat barn, 82c; middlings, 82.50. R. & S.

BRUCE CO., ONT.

HEPWORTH—The snow came very early and it has made splendid sleighing. A large quantity of wood and logs is being taken out this winter owing to the bush fire of last summer. The wells are still very low. There is no trouble getting roads into swamps, as there is no snow in them. Wood is cheaper than usual. Owing to the quantity being cut the buyers have lowered the price.—J. K. L.

HURON CO., ONT.

BLITH—After a long dry fall winter weather has been prevalent for the past two weeks. Most of the farmers got their fall work pretty well done, although it was difficult with plowing owing to the ground being so hard. Sleighing has been very good in most parts for the past few days, although it is nearly all off again near the lake, owing to a slight thaw, which was badly needed. We still have more water, either rain or melted snow. The agricultural population is busy with any teaming they may have on hand such as hauling manure and grain. Quite a number draw their grain to town to have it chopped while others have it chopped at home. Large quantities of poultry, especially turkeys, have been marketed in the past few weeks. They were somewhat lacking in quality compared with other years, but the price was good, running from 10c to 12½c a lb. There is a likelihood of these being scarce enough for the Christmas and New Year's trade.—R. B.

MUSKOKA DISTRICT, ONT.

HUNTSVILLE—We are experiencing a mild and pleasant winter. As it is now the Christmas season the farmers are making advantage of the good condition

of the roads. If people are to judge of the financial condition of the country by the heavy loaded sleighs that pass to and from town, they would soon come to the happy conclusion that all the hard times we have endured so much about are in some other part, and not in Muskoka.—F. R. B.

GOSSIP

Mr. G. A. Brehan on Norwood, in sending in copy for an ad., writes: My cattle are doing well this winter. I shall try in an effort to put some of them in the Advanced Register for Record of Performance this season. I think they are rounding into shape nicely.

A UNIQUE OFFER

We would call the attention of our readers to the advertisement, in our advertising columns, of William Cooper & Nephews. The free sample of their Fluid Dip, which they offered in our last week's issue, to the first 50 applicants, who are readers of Farm and Dairy is well worth procuring. We can heartily recommend this Dip to our readers.

W. W. BROWNIDGE

The Pine Grove herd of large English Berkshires, property of W. W. Brownidge, Ashrove, is still well up in the race. Representatives from this herd shown at the Winter Fair, Guelph, captured two firsts out of six in as strong competition as ever met in Guelph. The herd consists of over 60 head, with impure Polate Donovan and Polate Dollar the silver medal winner at Toronto, 1907, at the head. Most of the prize winners in the herd were sired by the latter, some of them weighing over 300 lbs. at eight months old. Six of the 12 brood sows are imported. Among them is Feringa the Duchess, the Toronto champion of 1907. Several of the others belong to the Compton family—one of the most popular families in England. When you want to get something real choice write Mr. Brownidge, mentioning Farm and Dairy, and you can rely upon getting value for the money. Pine Grove is about half way between Georgetown and Milton, in Halton Co., Ont.

A BOON TO HUNTERS

Where is the hunter or fisherman who has not many, many times captured some extra fine, beautiful trophy which he and his friends are so much admired, and then allowed the splendid specimen, which represented his own skill and prowess, to spoil and decay. And where is the man who under these circumstances has not sincerely wished he knew some way to save and preserve the trophy just as it was in life? It is now possible and easy for any one to know how to preserve animals, birds and fishes so that they look exactly like the living creatures. This art, Taxidermy, has become the greatest of fascination for all who undertake it. Formerly only a few professional Taxidermists knew the secret of doing this work, and they guarded their knowledge well. Now, however,

SEED OATS

FOR SALE—A quantity of Improved American Banner Oats, grown from pecked seed. For Sale—A "New Drop," a splendid early white oat, that I have grown for several years with good success. Heavy, thin hulls, about same length and quality of straw as Banner, but four or five days earlier.

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

THIS WEEK'S PRICES FOR HOGS DELIVERED AT FACTORY

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FOR HOGS WEIGHING 160 TO 220 LBS.

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PETERBOROUGH, - HULL, - BRANTFORD

this is all changed. The very best and easiest system of taxidermy may be secured by anyone interested in the art, and it is said that a few weeks' practice enables the hunter to mount his trophies just as well as a professional can do it, and at practically no cost. Big profits are made by many persons by selling their mounted specimens and mounting for others. Beautiful decorations for the home can be prepared, and the art offers a splendid recreation for spare time. Every sportsman should cer-

tainly be his own taxidermist, as it is so easily learned. The art is now taught by mail with great success by the Northwestern School of Taxidermy, of Omaha, Neb. Thousands of sportsmen are members of the school and recommend it the highest terms. Our readers interested in the subject, can secure full particulars and a beautiful prospectus, by writing the above school at the address given.



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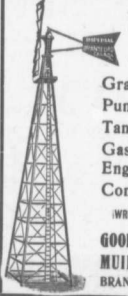
For Icemen, Butchers, Dairymen, Farmers, etc.

You must have the very best tools for ice harvesting. The season is short—weather cold—men must work like lightning—and a break-down would be costly.

Get everything you need Now, and get the Best. We have been making Ice Tools for 26 years, and have the right tools at the right prices.

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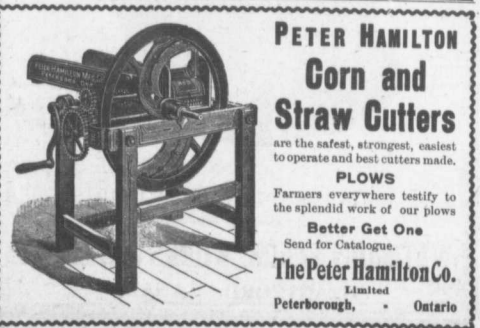
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are the safest, strongest, easiest to operate and best cutters made.

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Farmers everywhere testify to the splendid work of our plows
Better Get One
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The Peter Hamilton Co.
Limited
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MARKET REVIEW AND FORECAST

Toronto, Monday, Jan. 4, 1909.—Jobbers in most lines report very good business the past two months. Had the whole year been as good as November and December the balance on the right side of the ledger at the end of the year would have been of fairly large proportions. Up to two months ago, however, most wholesale houses had reason for congratulation if they paid expenses. The trade of the past two months has put new life into business generally, and the outlook for 1909 is very much brighter. A fair demand for money for commercial purposes continues. Call loans rate at 4 to 4½ per cent., and discounts at 6 to 7 per cent., as to the nature of the account.

WHEAT

The week began with a fair market and higher prices for wheat, especially in the Chicago market, where speculators control the situation. Towards the end of the week prices dropped over a cent a bushel. The decline in foreign wheat markets about the middle of the week, caused a lot of unloading by speculators with the above slump recorded. European buyers seem content to let those who are trying to manipulate the market on this side of the Atlantic, do the holding, and are not buying much more than they can handle from day to day. The indications are that there will be some heavy shipments of Australian and Argentine wheat during the next few weeks. The local wheat market here shows signs of increasing activity. Dealers report bids for export higher, and more frequent. There has been very little wheat offering and a good cash business is reported. Dealers here quote Ontario wheat at 85½c to 90c outside as to quality. On Toronto farmers' market there has been very little wheat offering. Fall wheat sells at 90c to 94c and goose at 90c to 91c a bush.

COARSE GRAINS

There is not much change in the oat market. At Montreal the principal business is in Manitoba oats, which are quoted at 45½c to 46½c in store here. There is nothing doing in the export line. Dealers here quote oats at 37c to 38c outside and 40c to 43c a bush on the farmers' market. The barley market has held steady since last writing and there are no new features to report. Feed barley is quoted at 57c to 58c and malting at 63c to 65½c a bush in store at Montreal. Dealers here quote barley at 50c to 55c outside at Ontario points and 55c to 58c for malting, and 40c to 55c a bush for feed barley on the farmers' market here. Peas are quoted at 85½c to 86c outside and 89c to 90c on Toronto farmers' market.

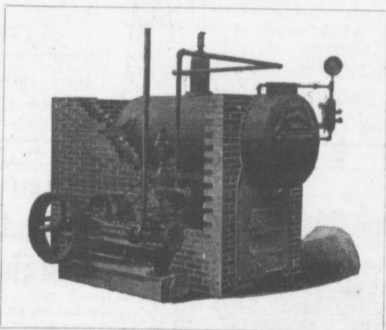
FEEDS

There is no change in mill feeds. At Montreal the demand continues good, with supplies limited. Manitoba bran is quoted at \$20 to \$21 and shorts at \$24.50 to \$25 a ton in bags, and Ontario bran at \$21 to \$21.50. Dealers here quote bran at \$19.50 to \$20.50, and shorts at \$22 to \$23 a ton in bags in car lots outside. The corn market shows another decline. There is a less urgent cash demand and larger deliveries are expected from American farmers from this on. At Montreal corn is quoted at 67c to 70c in store for shipment in car lots. Old American corn is quoted here at 67½c to 68½c and new at 65½c to 67½c in car lots, Toronto freights. Canadian corn is quoted here at 65c to 66c a bush in car lots.

SEEDS

There are no new developments in the seed market though there is likely to be more activity from this on. Dealers quote prices at country points at \$6 to \$7.50 for alfalfa; \$1.50 to \$2.10 for timothy; and \$4.25 to \$5.25 for red clover, as to quality.

THE SUPERIORITY OF OUR Dairy Outfits IS UNQUESTIONABLE



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WATEROUS ENGINE WORKS CO., Limited
BRANTFORD, CANADA

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Capital and Surplus of Canada Total Assets
\$6,350,000 \$34,000,000

Now is the time to open a Savings Account. Make a good beginning, add to it as the proceeds of the year's work come in, and you will have a comfortable reserve, ready for likely-looking investments or unexpected expenses. \$1 opens an account.

THE BANK FOR THE PEOPLE

One of the 80 Branches of this Bank is convenient to you.

Your account is invited.

POTATOES AND BEANS

The potato market at Montreal rules firm with prices fully maintained at 75c a bag for Quebec in car lots. A great many French Mountain potatoes continue to arrive there. They sell at 75c to 80c a bag of 90 lbs in car lots. Trade is a little easier here, though prices rule steady at 60c a bag for Ontarios in car lots on track here. On Toronto farmers' market potatoes sell at 65c to 80c a bag. The bean market is somewhat unsettled. Western Ontario shippers are offering beans in car lots on track Montreal at \$1.62 to \$1.65 a bush for three-pound pinks.

EGGS AND POULTRY

The egg market keeps strong and prices are on the up grader. An advance of 1c a doz is reported at Montreal. Stocks are being reduced. There has been some inquiry there by large grocers, a factor which indicates a light supply in the country. Strictly fresh-gathered are quoted at Montreal at 40c and select at 39c a doz in case lots. The egg supply is short here and the market rules very firm. Eggs are quoted in a jobbing way at 35c to 36c for standard; 28c to 30c for select; 25c to 26c for storage; and 22c to 24c a doz for pickled and held country eggs. On Toronto farmers' market new-laid sell at 40c to 50c and fresh or stored at 30c to 35c a doz.

The dressed poultry market is stronger owing to light receipts. At Montreal there was a better market last week than for the Christmas trade. Receipts there are light. Dealers there quote fresh-killed turkeys at 12c to 12½c; geese, at 12½c to 13½c; ducks at 13c to 14c; chickens, at 15c and fowl at 9c to 12c a lb. Turkeys are a little more plentiful here and the market is a little easier at 12c to 20c in the trade. Other lines are scarce. Chickens sell at 12c to 13c for choice, 10c to 11c for common; 1c, at 8c to 10c; ducks, at 12c to 14c, and geese at 12c to 14c in a wholesale way. On Toronto farmers' market, quotations are from 1c to 2c a lb higher.

DAIRY PRODUCTS

The cheese market rules quiet though more activity is expected after the new year opens up. Holders on this side and buyers in Great Britain are waiting for the other to make the first move. Canadian holders of cheese seem to be firmly convinced that the market will move upward before long and are content to wait. The English buyer is holding up New Zealand cheese, which is now beginning to arrive, as an element in the situation that is likely to prevent prices advancing. The farmer is out of the game now and can watch its progress with equanimity. Total exports to date show a decrease of 236,611 boxes as compared with 1907. This with the small stocks held on this side, makes the situation a strong one for the holder. There is no change in quotations.

The butter market shows little change, though an easier feeling is noticeable here than gave rise to a move for choice Swiss and Oct. goods. Butter prices are high in the United States, and it is reported that there has been some smuggling of Canadian butter across the line. Local quotations here are: Choice

creamery, 28c to 29c; dairy prints, choice, 25c to 27c; store prints and large rolls, 20c to 24c, and inferior, 20c to 21c a lb. On Toronto farmers' market dairy prints sell at 27c to 32c and solids 25c to 28c a lb.

UNION STOCK YARDS PRICES.
West Toronto, Monday, Jan. 4.—The run at the Union Stock Yards this morning consisted of 51 cars, made up of 1074 cattle, 129 sheep, 11 hogs and 715 calves. The export market is hampered by lack of shipping space. There was some buying for shipping at the end of the week; good exporters sold at \$5 to \$5.25, export bulls were slow of sale; butchers' cattle were slow, the bulk selling at \$4 to \$4.50, with choice picked lots selling up to \$5 a cwt. Lambs sold at \$3.25 to \$6, ewes at \$3.25 to \$3.60, and rams at \$2 to \$2.50 a cwt.—J. W. W.

UNION STOCK YARDS HORSE EXCHANGE

The past week was a pretty slack one in the horse trade. Receipts at the horse exchange, Union Stock Yards, were the smallest of the season. Last week's quota, however, was encouraging. The encouraging feature of the situation is the prospect of a better trade after the holiday season is over. There has been more inquiry for horses from outside, and dealers are looking for better business early in the year. This does not mean that the price will be much higher than they are at present. The horse market generally is about 20 per cent. lower than a year ago.

THIS WEEK'S HOG PRICES

The William Davies Co., Toronto, will pay \$6.15 f.o.b. at country points this week for hogs. This advance in price is not due to any improved condition in the export bacon trade but to the scarcity

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Gombal's Caustic Balm

As a Human Remedy for Erysipelas, Scalds, Burn Throat, etc., it is invaluable. Every bottle of Gombal's Balm sold is Warranted to give satisfaction. Price \$1.00 per bottle. Sold by all Druggists, Grocers, and Dealers. Full directions for use on the label. Beware of cheap imitations. Sole Address The Lawrence-Williams Co., Toronto, Ont.

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of hogs in the week, Danish hogs in the week falling off, get back to the holidays. MONTREAL, Jan. 4.—There is no change for live hogs in the week. The demand and prices rule steady. The market all are becoming a good deal. \$8 to \$8.50 a

The live stock has been very in general, and receipts have risen. Stock Yards on it care of stock will maintain steady to firm at \$5.25 a cwt. The week's everything sold quoted at \$4.50 a cwt. The sale at \$3.75 a cwt. The trade in is not as brisk as for the other kinds of There is a calves, from \$

Shoe Boils, Hock, Burs are hard to ABSO

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