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FARMING

March 7th, 1899.

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THE WINDSOR SALT CO., LIMITED,
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A safe, speedy and positive cure. The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes Bunches or Blenches from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blenish. Write for circulars. Price \$1.50 per bottle, express prepaid.

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Not one case in a hundred that cannot be cured by one to three applications of

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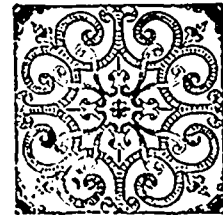
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GUARANTEE - Every package sold under positive guarantee; money back if it should ever fail to cure. Sent everywhere by mail, Price, \$2.00.

FREE A valuable illustrated treatise on cure of Lump Jaw sent free to readers of this paper.

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Are not only beautiful at first, but remain handsome; never crack or drop off, can be easily cleaned, and are fire-proof and sanitary.

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SIX BULL CALVES,

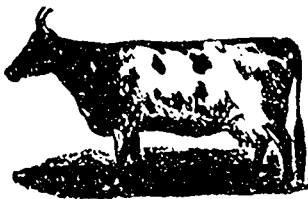
Eight to ten months old, from imported Cows from the best Herds in Scotland. Any breeder requiring a bull for the coming season would do well to see them. We will sell them right.

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Address ROBERT HUNTER, Manager,
LACHINE RAPIDS, QUEBEC.

GLENHURST HERD OF AYRSHIRES.

Noted prize-winners. Choice quality and heavy milking families. Extra fine young animals of both sexes for sale. Also Leicester Sheep and Berkshire Swine.



DAVID BENNING,
WILLIAMSTOWN, ONT

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...GOLDFINDER, Imp...

—HEADS OUR AYRSHIRE HERD—

We have for sale: five choice young bulls fit for service, two by the noted stock bull "Matchless," also some good females of all ages. We have a few choice Clydesdales on hand. Correspondence solicited and Visitors Welcome.

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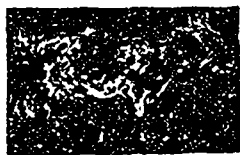
Ayrshires, Berkshires, Tamworths and Poland China. Three young bulls fit for service and but 1 calves. We are now booking orders for spring pigs. A few Tamworth bays from full litters.

R. REID & CO.,

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Farm one mile from Ottawa. Street Cars to Farm.

HICKORY HILL STOCK FARM



3 Ayrshire Bull Calves from dams that have won milk tests.

Great Bargains if sold before winter sets in. Write or come and see

NAAMAN DYMENT,
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CHOICE AYRSHIRES AND POULTRY

FOR SALE.—A number of Choice Young Bulls. Sired by Jock Morton and from heavy milking dam; also a few Heifers. A large number of choice Barred Rocks and Black Spanish, and a few fine Toulouse Geese and Cayuga Ducks.

JAS. MCCORMACK & SONS,
ROCKTON, ONTARIO

AYRSHIRES ... For Sale

The celebrated stock bull
"WHITE PRINCE"

A winner at the World's Fair, Chicago. Parties desiring a first-class stock bull cannot do better than secure this animal. Large White Yorkshire pigs of the bacon type for sale, also a standard bred mare in foal, sired by Red Chief. Colt sired by Elm City.

JOHN H. DOUGLAS,
WARKWORTH, ONTARIO

H. & J. MCKEE, Brookside Farm, Norwich, Ont.
H. Breeders Ayrshire Cattle Silver Grey Dorkings.

J. YULL & SONS, Meadowside Farm, Carleton Place, Ont., Breeders of Ayrshire Cattle, Shropshire Sheep, Berkshire Swine and Barred Plymouth Rocks

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FROM IMPORTED STOCK.

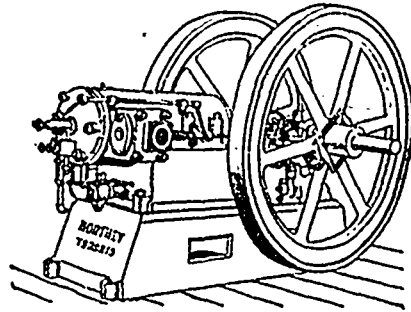
We offer or sale Three (3) BULL CALVES from 9 to 13 months old, sire and dams imported; also 5 calves from 1 to 4 months, good individuals and from the very best milking strains obtainable in Scotland.

W. W. BALLANTYNE,
(formerly Thos. Pallantyne & Son)
"Neidpath Stock Farm," Stratford, Ont.
Farm adjoins city main line G.T.R.

WM. SMITH, Columbus, Ont., Breeder of Clydesdale Horses, Shorthorn Cattle, and Cotswold Sheep. Stock always for sale.

Northey Gasoline Engine

AN IDEAL FORM OF POWER FOR THE FARM



Simple, Strong, Economical. No handling of fuel. No smokestack to throw sparks. No danger of explosion. Can be readily moved about from one place to another, and will do with the greatest ease all that the windmill or steam engine could do, at a far less cost.

Our booklet tells all about it. Write for it.

Northey Manfg. Co., Limited, Toronto

1028 King St. Subway

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BUT ask your Dealer for
ROBERTSON'S
the Best
PAINTS in the Market



THE JAMES ROBERTSON CO., Limited

The Paint Makers..... TORONTO

Dentonia Park Farm

EAST TORONTO
(Coleman P. O.)

W. E. H. Massey, Proprietor

Address DENTONIA PARK FARM, Coleman, Ont., Canada

Dentonia Jersey Herd

Winners of the Herd Prize at both the Toronto and London Fairs last fall, also some thirty other prizes. The herd comprises fourteen head of imported cattle, many of them winners of valuable prizes on the Island; also some thirty animals carefully selected from the best Canadian herds. Heifer and Bull Calves, also good Cows, always on sale.

Dentonia Trout Ponds

"Eyed" Trout Eggs, also yearling and two-year-old Brook Trout for sale. Market trout supplied in season.

FOR SALE
FIVE AYRSHIRE BULLS

Ranging from six months to two years. First-class animals, fit to head any herd.

Also, **BIRLS**
of thirty varieties of land and water fowl

WILLIAM STEWART & SON
Menlo, - Ont.

...FOR SALE...

8 SCOTCH SHORTHORN BULLS

From 10 to 18 months old. 1 BULL 2 years old, bred by O. & W. B. Watt, Salem. Also a number of

COWS AND HEIFERS

DAVID MILNE, - - - Ont.

HENRY ARKELL, Arkell, Ont.

Importer and Breeder of OXFORD-DOWN SHEEP
Ewes in lamb to Royal Warrick and Imp. Hero 5th for sale.
PRICES REASONABLE.

A New importation of
Clydesdale Stallions

Arrived Oct. 31, 1898



The largest importation of the breed made in five years, and 80 per cent. of them Scottish Prize-Winners. A few choice

HACKNEYS

for sale. Address

ALEX. GALBRAITH

JANESVILLE, - - WISCONSIN

IMPORTED SHIRE STALLION FOR SALE

Eight years old. About 17 hands; weight, about 2000 lbs. Good condition. Color, bay, with white stripe and two white hind feet. Sure stock-getter. Perfectly sound in every respect. Right in every way. For particulars address

JOHN SIMPSON
Box 73, Tottenham

FARMING

VOL. XVI.

MARCH 7th, 1899.

No. 27

Is Looked For Every Week

Mr. Wilbert B. Stevens, of Shetland, Ont., writes on Feb. 24th: "We have taken FARMING for one year now. It is a good paper and we look for it every week. There are lots of good things in it that the progressive farmer needs to know. It is better than the semi-monthly—in more ways than one."

"More Orders than we can Fill"

The following letter from one of our regular advertisers speaks volumes for FARMING as an advertising medium for all kinds of pure-bred live stock. The letter needs no comment on our part, and we publish it merely to show the great value to breeders of regular and continued advertising in a weekly farm paper:

Harriston, Ont.,
February 24th, 1899.

FARMING, Toronto, Ont.:

DEAR SIRS,—Enclosed please find \$14, amount of account for advertising. Have had a great year of sales. Have sold all stock fit for service. Have had good luck with young stock. More orders than we can fill. Many thanks to FARMING also. FARMING has been mentioned in all orders but one.

Yours, etc.,
JOHN COUSINS & SONS.

Agricultural News and Comments

In France, where poultry breeding is carried on very extensively, turkey hens are used to hatch the chickens, as they can cover as many as thirty eggs at a time and thus bring off large numbers of chickens.

The directors of the Cheese and Butter-makers' Association of Western Ontario met in Ingersoll last week. It is probable that the next annual convention of this organization will be held there. It is, however, not definitely decided yet.

The compulsory annual dipping of sheep has many supporters in Great Britain. At a meeting of the Central Chamber of Agriculture recently held, the majority present were in favor of this plan. The question, however, has not been generally discussed, and is, therefore, not likely to come into force for a while.

In an address in the Legislature last week the Minister of Education made an important announcement, to the effect that agriculture will be made a compulsory subject at the public school leaving examinations. This announcement will be welcomed by every one who has the real interest of agriculture in this province at heart, as the fore runner of compulsory teaching of agriculture in our public schools.

A bill has been introduced into the Legislature for the destruction of the barberry bush. It provides that no person shall keep or have, under cultivation or otherwise, in the province, barberry shrubs within one-half mile of farm lands used for grain-producing, and gives the Minister of Agriculture power to destroy the same by fire, by duly qualified inspectors, who shall report to the Minister the value of the plants destroyed. Provision is also made for compensation to the owner of the shrub when destroyed.

The yearly consumption of potatoes per head of the population in Ireland is 1,467 lbs., in Germany, 1,300

lbs.; in the Netherlands, 840 lbs.; in Norway and Sweden 740 lbs.; in France, 700 lbs.; in Austria, 663 lbs.; in Canada, 600 lbs.; in Great Britain, 238 lbs.; in the United States, 200 lbs.; and in Italy, 48 lbs. The yearly consumption of wheat per head of the population is: France, 467 lbs.; Canada, 360 lbs.; Italy, 307 lbs.; Great Britain, 250 lbs.; United States, 240 lbs.; Austria, 230 lbs.; Russia, 93 lbs.; Japan, 22 lbs. The yearly consumption of beef per head of the population is: United States, 147 lbs.; United Kingdom, 100 lbs.; France, 77 lbs.; Germany, 64 lbs.; Russia, 50 lbs.; and Italy, 24 lbs. The yearly consumption of eggs per head of the population is: United States, 133 eggs; Canada, 90; France, 78; Germany, 75; Italy, 47; and the United Kingdom, 39.

The Canadian Horse Show

One of the important events of the year in this province is the Canadian Horse Show, which takes place annually in the Armouries, Toronto. Heretofore, for some reason or other, the farming community has stood somewhat aloof from this show and looked upon it largely as a society affair existing more especially for the well-to-do. Whether there has been any justification or not for this view it is not necessary for us to discuss here. What we do wish to point out, however, and emphasize more particularly just now is that, whatever grounds the farmer may have had for remaining at home other years, he will have no good reason for doing so at the coming show, which takes place on April 13th, 14th and 15th next.

The management is making a special effort this year to reach the agricultural classes. The show will be held two weeks earlier than last year, which will enable farmers to visit the show before the spring work begins, and breeders to show their horses before it is time to start the stallions on the road. Additional prizes will be given for young stallions in all the classes where there were none before, and good prizes will be given for heavy draft teams of horses, which should serve to bring out a large exhibit of the kind of horses in which the farmers are more interested. The price of admission has been reduced to twenty-five cents for any time during the show. This, however, does not include reserved seats. There will also be reduced rates on all railways and special freight rates for horses exhibited. All this is along the right line, and the coming show will be a good opportunity for gaining a knowledge of the kind and quality of horses it will pay our farmers to breed. The prize lists will be ready this week, and may be had on application to Mr. Henry Wade, Toronto.

Manures and Manuring

A subject of vital interest to the Canadian farmer to-day is that of manures and manuring. It is the real basis of all successful farming, and the farmer to-day who does not give special attention to maintaining and increasing the fertility in his land cannot hope to make his vocation a profitable one. No subject attracts greater attention at the Institute meetings than this, and farmers are anxious to get the fullest information possible on the subject. One of the regular staff of speakers at the Farmers' Institute meetings who discussed this topic in a practical and com

mon sense way at a number of the meetings in the series just closed was Mr. T. C. Wallace, of this city. There have been a number of requests made recently by those who heard them that his addresses on this subject be published, and we are pleased to be able to announce that Mr. Wallace has kindly consented to prepare them for publication in *FARMING*. As it would not be possible for us to give the whole matter in one issue, we will publish it in serial form, to begin probably in next week's issue. When a subject is taken up at an Institute meeting the most valuable part is the discussion, when questions are asked and answers given, and we trust that our readers will follow the same course when Mr. Wallace's articles appear and have them fully discussed, and for which purpose these columns are open. Any questions asked or explanations desired will be given special consideration.

Sub-Earth Ducts in Curing-Rooms

From reliable information recently received we learn that the Quebec Government is giving a bonus of \$50 to every cheese factory in that province that will put in a sub-earth duct for the purpose of regulating the temperature of the curing-room. This will certainly be an incentive to the Quebec dairymen to put their factories and curing-rooms in shape for making and curing the cheese as it should be cured, and will result in greatly improving the quality of the product. No part of the Dominion has made greater advancement along dairy lines in recent years than Quebec, and this recent action of the Government shows that those in authority fully realize that a critical period has been reached in regard to the quality of Canadian cheese, and that something must be done at once to put the factories in shape to cure the cheese properly.

A sub-earth duct in the average curing-room will cost from \$125 to \$150, and it will pay every cheese factory three times over the first year to put one in whether they get Government assistance or not. Ontario dairymen should note particularly what is being done in our sister province and govern themselves accordingly. In addition to having a sub-earth duct, every cheese factory, as well as a creamery, should store up ice and put ice-racks in the curing-rooms so that the air within can be kept cool during the hot weather. Full particulars regarding the sub-earth duct and ice-racks are given in a bulletin recently issued by Prof. Robertson, and we would advise factorymen to write at once to the Department of Agriculture at Ottawa for a copy so that arrangements may be completed before the season begins.

A Big Yield of Oats

Mr. John Kenward, of Oxford county, writes as follows, and his statement is vouched for by Messrs. John S. Pearce & Co., of London, Ont.:

"I sowed 20 bushels of Danish Island oats by weight on 12 acres on April 20th, 1898, and cut them July 25th and 26th, and threshed 900 bushels, or 75 bushels per acre, or 75 bushels for every 56½ lbs. of seed sown. The land was not very rich, as it has been cropped for over fifty years, and there was no fertilizer of any kind used on the land."

The Quality of Canadian Cheese

In *FARMING* for January 31st appeared an article entitled "Is Canadian Cheese Losing its Hold upon the British Market?" As this question is of vital importance to the country just now we decided to get the views of some of the leading dairymen and exporters on the subject, and the following is a summary of some of the replies received:

D. Derbyshire, President Butter and Cheese Association of Eastern Ontario:—"I think that quite a lot of

things have been said about Canadian cheese, in order to scare our people into making a point that we must have better curing-rooms, better factories, better makers, everything must be improved. But I am perfectly satisfied that our cheese last year was finer than ever before, and the only trouble has been, that there have been a few English cheeses made, this last year, a little better than formerly, so that this showed a little difference in quality. Another thing, some of our cheese became heated on the way, this last year, a few in July and August. This we must remedy this coming season, but you can depend upon the Canadian maker waking right up and putting his factory in better condition, and taking more care in the manufacturing of his goods, and we are going to walk right up to the front, with all our competitors in 1899 without any doubt."

Harold Eagle, President Butter and Cheese Association of Western Ontario: "I was much interested in your article in *FARMING* of January 31st, entitled 'Is Canadian Cheese Losing its Hold Upon the British Market.' But am free to confess that as cheese is quoted at 10cts. at the present time in Montreal, to the ordinary Canadian producer it does not look as much like losing as in the early summer months of last year when cheese was selling at about 7cts. per lb. However, as you quote the authorities, and state that their statements are backed up by similar statements from the buyers, 'who complain of the quality of a great deal of Canadian cheese being unsatisfactory to their customers in Great Britain, and especially the quality of the product made during the 'last season,' there is no doubt just cause for your question. I believe there were two main causes of the poor quality of Canadian cheese last season; one was that the price of cheese in the first three months of the cheese-making season was so low that there was no profit for the ordinary patron; consequently he did not take as good care of the milk sent to the factory as he would and does when the price of cheese gives him a fair profit. I know perfectly well that the cheesemaker is supposed to (and usually does) reject all milk that has not been properly taken care of. But yet when cheese is so low in price the average condition of the milk received, after the maker has rejected more than he would need to under normal conditions, is away below par. Another reason or cause of poor quality of cheese last season in a good many districts was the weather, hot and dry. I don't think that the cheesemaker's right hand is losing its cunning; but this I do know, that the cheesemakers of Western Ontario had to work harder and longer on account of the unfavorable weather in a good many districts than they have had to do for some time. With all due deference I do not think that 'There has been of late years a little too much resting at ease and feeling secure because of former successes.' I believe that the dairymen of Canada are to-day, and have been for some time, trying to do their best to make cheese that will suit the consumer in Great Britain and keep the hold we have on the English market. No doubt the one thing most necessary at the present time is better curing-rooms, curing the cheese at a lower temperature. Already a considerable number of factorymen are putting in cold air ducts, and many others will put in ice to control the temperature of the curing rooms."

Professor Dean: 1. "The chief cause of the apparent decline in the quality of Canadian cheese during the season of 1898 was the fact that there was more cheese produced in 1897 than could be consumed at the prices paid for this large production. The prices were phenomenal in '97, considering the large make. This old cheese was not cleared out of the way before the new cheese of '98 appeared on the market, hence '98 cheese was a 'drug' for most of the season. These low prices caused the producer of milk to be somewhat careless, who said 'it did not pay to bother with cows.' The cheesemakers had poor milk to contend with, and the buyers were more critical when they inspected the cheese—as buyers always are when there is an over-production of any commodity. Makers are also contending with poorly-equipped curing-rooms, and the

cheese became heated and lost in flavor and texture, though these faults would scarcely have been noticed in years of first demand. In some cases the wages and guarantees required have been such that some good makers have quit the business and left the manufacture to less experienced hands. 2. The best means to adopt in order to place Canadian cheese at the front are: (1) Make it profitable for the milk producer to feed and care for the cow and her milk in the very best manner possible. Send proper persons to the farms to give help and instruction where needed. Limit the production of cheese to about six months in the year, thus insuring better quality and higher prices for the cheese and milk. (2) Make cheese in none but properly equipped factories where the temperature can be properly controlled, especially in the curing room. No one phase of cheesemaking requires more attention to day than the curing. It is a special business, needing special training therefor. (3) Employ none but first-class makers and pay these men wages which will tend to keep them in the business—not drive them from it. It would be a calamity to the Canadian cheese trade if the making of cheese were to drift into the hands of inexperienced men. (4) Cheese should be inspected before it is sold, or offered for sale, so that buyers may know what they are buying, and makers may know that they will not have to 'pay the piper' in case of a decline in the market between the period of buying and inspection. (5) Salesmen should know what good cheese is, so that they may protect the reputation of good makers. (6) Cheese should be properly cured before leaving the curing-rooms, and then be transported in the very best cars and ships which money can provide."

T. B. Millar, President Cheese and Butter makers' Association of Western Ontario: "As to what is the cause of this lowering of prestige in the British market? (1) The low price of cheese during the fore part of last season had a very detrimental effect on the average producer of milk, and in many instances the result was the worst lot of milk that I ever saw delivered at factories, and, as a natural result, an inferior quality of cheese was made. I am not speaking of Canadian cheese as a whole, but, in many cases, such was the fact. (2) The wages paid to cheesemakers in some sections are so small that they can scarcely live, let alone employ the necessary help to conduct the factory properly. (3) Then again, we have to contend with poor buildings badly equipped and poor curing-rooms, in which the temperature varies almost as much as the outside air, where in cold weather it is impossible to keep the temperature uniform, and which is so desirable in order to secure good results in curing cheese and in the hot weather to keep the temperature from going up to 86° or 90°, the cheeses being so heated that very often they are spoiled in the curing-room before they are ready for shipping. (4) Lack of proper factory management. As to the best means of recovering this lost ground and placing Canadian cheese in the front rank of British dairy imports? (1) The patrons must realize the necessity of producing good milk and taking care of it in a proper manner, so that it will be delivered at the factory in first-class condition. Then the cheesemakers must reject all milk that is not in proper condition to make good cheese and butter. (2) Pay good prices to first-class men and employ only such to manage the factory, and then expect first-class work. The best is none too good. (3) We must have better buildings. It is not necessary that we should have all new buildings, but those we have can be improved greatly by spending a few hundred dollars on them. The making-room should be a tight, snug building, with good floors and gutters. These should be perfectly water tight. More attention should be paid to the surroundings and sanitary conditions of our factories. The curing-room should be so constructed that the maker could control the temperature, which should be held between 60° and 65°. Every curing-room should be provided with a cold air duct or an ice-box, and supply of ice for use in the hot weather. I do not consider any cheese factory complete without an ice house and supply of ice. Provision should be made for uniform heating during the spring and fall. This can be done in several

ways, but I prefer a coal furnace made for the purpose."

Hodgson Bros., cheese exporters, Montreal: "In reply to your enquiries as to whether Canadian cheese is losing its hold upon British markets, we do not think any such rumors are correct, although at the same time we are frank enough to admit that unless the Canadian factorymen look to the front we shall go backwards instead of forwards. The English farmers have felt for some time past that they would have to improve their quality if they wished to hold their own with Canada, and as a result a vast improvement has taken place in the quality of the English cheese and Canada will have to follow in the same lines if she wishes to hold her own. One great danger we see is that most of the makers in this country seem to be working too much for an average, as there seems to be a desire to make the cheese softer, which requires to be sold more promptly. It is of the most importance that Canadian cheese should, above all things, possess keeping qualities. The Americans lost their prestige entirely through making the cheese too soft, and unless this is discouraged in Canada we may be in danger of occupying the same position as America does. At the same time we do not think Canadian cheese has fallen back as much as the Government have represented, although there is a tendency to make the cheese softer than heretofore."

I. W. Steinhoff, cheese-buyer, Stratford, Ont.: "I think the article to which you refer is in order and should do some good. Permit me to say first, that I do not think the reputation of Canadian cheese or prestige in the British market has been materially lowered. It is a fact, however, that we have not improved the quality of our cheese within the last six or eight years, while consumers are getting all the time more particular and more critical of quality; especially is this the case when the cheese supply is very liberal and the taste is turning more to meats, the importation of which has doubled within a few years in Britain. Probably one reason more than any other why we in Canada have not gone on improving the quality of our cheese is that there has been too much resting on our oars, with the opinion that our cheese had reached the highest pinnacle of perfection in the British market. Especially has this been the case since the victory at the World's Fair, after which every newspaper and everyone who mounted a platform applauded the quality of our cheese. The present awakening upon the part of dairymen in general has been caused by the Hon. S. Fisher, Minister of Agriculture, coming back from England and frankly telling the public of complaints which he met with while there; and the dairymen give ear, while exporters have heard these complaints for the last few years quite frequently. But factorymen are not so ready to listen to exporters, as they are not so personally interested, and the former, as a rule, are suspicious that the dealers in making complaints have something to gain. I think the most common faults, and along which lines we must make improvement, are: Better flavored milk, for which we must look to the farmers; better paid cheese-makers; better exteriors with less mould; and properly constructed curing-rooms with furnaces where the temperature can be controlled at all seasons. I may explain that it is only in the poorer class of factories where makers are not up to date, that we find the rough, cracked, mouldy and dirty exteriors, but the fact that a large portion of our factories are making cheese strictly gilt edge in appearance, makes those that are rough all the more noticeable and troublesome. I have just now a very annoying case of a shipment of August cheese, the customer declaring that they are June and July goods from the mouldy appearance."

A. W. Grant, cheese exporter, Montreal: "Is Canadian cheese losing its hold upon the British market? Yes, I think it is. What is the cause of this lowering of prestige in the British market? Inferior quality. As to the best means of recovering this lost ground, and placing Canadian cheese in the front rank of British dairy imports? The first desideratum is to have good milk and skilled labor, neither of which we have as good as we should

have to day. The best means to restore Canadian cheese or to increase the demand in the British markets is to have a better article. Fully 600 or 800 thousand Canadian cheeses are damaged every year in the curing rooms; therefore, a curing room to keep the temperature of the cheese at about 65 or 70 degrees is an absolute necessity. Cheeses should be kept longer on the shelves to properly cure before they are put into the icehouses. It is the rule to icehouse green and uncured cheeses, and they come out chippy and dry and unpalatable. If care and skill were exercised by the farmers and the factorymen in producing a better article of Canadian cheese than has been produced heretofore, it would not cost any more than at present, and the consumption would be increased in my opinion fully 25%, and the price would be fully 1 and possibly 2 cents higher than the average ruling values of the past four or five years. I am a great believer in excellence of quality. There is a very little of the finest of any article of consumption made, so there is plenty of room at the top."



The Function of Clover

By T. C. Wallace, Toronto

There is no branch of cultivation so little understood as clover manuring. Generally speaking, the farmer's knowledge of clovering is drawn from various experiences and is therefore empirical. These experiences are got from a variety of conditions and soils, themselves not understood by the farmers. Present growing and handling of clover seems to represent attempts to fit the clover to the land under changed conditions, instead of fitting the land to the plant. This is also true of other crops than clover. The question is of sufficient importance to warrant us in looking carefully into it.

Clover is of the leguminosæ family. It is the natural plant of the family, and each variety is indigenous to some soil and latitude. When we remove any of these varieties to foreign soils and climates we must apply the cultivator's art to succeed in reproducing them, as is quite clearly evidenced in the difficulties experienced in growing alfalfa and crimson clover in the North.

All plants require for their sustenance about nine or ten mineral elements of the soil besides the atmospheric elements. The grasses (except clovers), the roots and the grains (except peas, beans, and vetches) require that the nitrogen of the atmosphere must be organized in the soil before they can utilize it, and when we have plenty of decomposed vegetable matter in the soil this organization is effected. We can also feed them nitrogen in a readily soluble form, as, for instance, in nitrate of soda, which, becoming dissolved, enters the hygroscopic water along the roots, and, combining with the other elements, is taken up as food without much effort on the part of the plant.

On the other hand, clover and the other legumes grow best in a mineral soil in which atmospheric nitrogen is not in such an organized form as required by the other classes of plants. Why is this? Why did nature require such a class of plants as legumes, which we may term "nitrogen-collecting plants"? Only one answer presents itself. Original soils are but ground up rock, which, being purely mineral, would have to be organized, and the nitrogen of the atmosphere incorporated with them in a condition for plant food. There then is a necessity in nature for just such a class of plants as clovers, plants which feeding upon the mineral elements of the soil can convert nitrogen from lower forms of organism. They in their turn, dying in and on the land, leave the soil organized in a condition that other types of plants can grow from the material decomposed from their bodies.

Clover, then—and the other legumes—is a natural manure, because it is through its agency that nature enriches lands for other plants. When clover has accomplished its mission it dies out, just as every other living thing does. Dumbly it is handing us a seed, and if we "consider the

lilies of the field" properly, we know how to make use of it profitably. The principal mineral elements of the soil required by clover as well as all other plants are the elements of potash and phosphate, and it must have a plentiful available supply of these. We presume on the supply of lime which we have with the phosphoric acid, the two forming the phosphate. Potash, being a base, is in pretty good supply in most of our soils, and our system of farming, by which we return the straw and the dung, is not very exhaustive of it. It is not all freely available in the soil, but it is easily rendered so by caustic lime in tetra-basic phosphate. The other substance, being an acid, is not in such profuse supply, and what there is of it is mostly locked up with the bases in the soil, and it is not so easily made available. Besides, the grain and the animals carry away all they consume of it, and only the portion remaining undigested in the dung comes back to us. Consequently all high authorities agree on the necessity of returning it from some other source. The axiom, "A good phosphatic heart is the basis of all successful agriculture," is strikingly pointed in this connection.

From this, then, it will also be readily seen that clovers and other legumes do not require to be manured with a nitrogenous manure, as for instance farm-yard manure, and that, in fact, such manuring would be extravagant waste, particularly as we require all the nitrogen of our manure to procure maximum crops of grains, roots, and other grasses. But beyond this it may be dangerous practice to grow clover with a nitrogenous manure, and the reason harm has not generally resulted from it is that most farm-yard manure has practically lost the bulk of its nitrogen through the methods employed in handling it before it gets to the land. By growing clover with a dressing of nitrogenous manure the natural conditions of the plant are changed, and instead of acting as a collector of atmospheric nitrogen it may change its character to become a "nitrogen-consuming" plant, and we get a soft, tough plant, which we are obliged to harvest before it is in full strength, instead of a firm plant, with all its parts developed, and, like the hog fed on too much heat and fat-forming materials, it gets weak kneed. Seed from such clover must naturally not only be wanting in fertilization power, but may produce a clover prone to indulge in the liquefied nitrate gluttony of its parents, and the principal benefit we gain from plowing down such stuff is in the mechanical effect on the soil, the effect of acids formed by decomposition, which help to unlock some of the otherwise insoluble soil elements, and eventually a better condition of humus carrying available plant-food extracted from the soil. If, then, several generations of the same clover be grown by application of nitrogenous manures we arrive at the deplorable condition of "clover sickness." The history of the seed we are going to use is as important as the pedigree of our cattle.

It is often stated that clover first uses up the available nitrogen of the soil and only becomes a nitrogen collector when forced to do so for want of more nitrogen. If this were so the growing of clover with grain crops would be a questionable practice, as our soils are not so well supplied with nitrogen that they can afford such a drain. If it is so the grain must suffer materially, or if there is enough available nitrogen present for both crops the clover will bring us nothing new. However, it is scarcely logical except in this way, that any dissolved nitrates entering the hygroscopic water along the root system of the clover will generally be taken up by the clover. It is not an uncommon thing to see complete failure in clover on highly nitrogenous soils, and clover sickness is never developed on any other condition of soils. The system of growing clover with grain crops may be then questionable practice partly on this account and partly because clover grown on a nitrogenous soil such as we should prepare for wheat has a tendency to become a "nitrogen-consuming" plant through the disuse of its power or function of "nitrogen collecting." No better method of preparing land for wheat and any grain or roots is known than the growing of clover, or peas and vetches with the minerals and plowing them down for manure, but it seems like a lot of wasted energy

to grow clover on the prepared land. If the land is not prepared it is injudicious to sow wheat.

Clover properly grown is a valuable forage and pasture crop. As a hay crop its value largely depends upon its being properly grown to develop full strength. As corn is more valuable feed when grown to proper maturity than immature corn, so is clover. There is a tendency on the part of farmers in most parts of Canada to adapt their methods to the changing condition of their lands, instead of attending to the condition of the land. They are constantly devising new plans of harvesting clover, corn and roots before they are properly in a condition to harvest, because if they let them go full time the digestibility of the feed is impaired. In this way we find great diversity of opinion among them as to methods of procedure. They are all looking at it from the altering conditions of their soil and the varying conditions of climate, which latter, of course, is mostly beyond control. In the matter of clover they are forced to cut it too young because if they don't do so it becomes tough, herbaceous, indigestible stuff. If the clover is grown with minerals only, the basis of lime and potash being present with the important acid, phosphoric, in plentiful supply, a sure crop of digestible clover hay may be harvested having two or three times the feeding value of clover usually grown on our farms. In most parts of Canada where clover is grown, only one season's hay crop can usually be harvested, but there are yet parts where hay can be cut two seasons from a seeding, besides carrying it one season in a grain crop. With rational methods of manuring and handling, the better condition may be continued and the poorer condition may be improved. A grass meadow may be kept in sward indefinitely without plowing, and alternating with clover at regular intervals by the intelligent application of phosphate and potash, and the heaviest possible crops of the finest feeding grasses annually harvested. Pastures may be kept up indefinitely by the use of phosphate only.



Nova Scotia Fruit-Growers' Convention

(Specially reported for FARMING by J. J. FERGUSON, B.S.A.)

The thirty-fifth annual gathering of the fruit men of Nova Scotia took place at Wolfville, February 20-22nd, with a splendid attendance of interested intelligent farmers from different parts of the country. The fruit-growers of Ontario do not realize the immense factor which Nova Scotia is soon to become in the apple trade with England. Wolfville, the seat of the Nova Scotia School of Horticulture, is in the very heart of that garden of gardens, the far-famed Annapolis valley. Even at the present unfavorable season the visitor cannot help but see that this district is most wonderfully adapted for and supplied with all the natural conditions requisite for success in this business. The valley is about 100 miles long and four to seven miles wide, protected on the north by a high mountain range.

Last year there were grown in the province 300,000 bbls. of apples of fine quality, netting for the growers about \$800,000. From 20,000 to 30,000 bushels of plums were grown; these also were of fine quality, but prices barely paid expenses. President Bigelow, in his annual address, referred with much pride to the fact that he had sent to the Omaha fair a barrel of Nova Scotia Gravensteins, which there drew much attention, receiving a diploma and gold medal. The president briefly referred to the successful work being done by the Wolfville School of Horticulture, which is under the able direction of Prof. Sears. The past season saw sixty five students in attendance, representing nearly every county in the province.

A number of excellent addresses were delivered on practical topics by local men and some of the members of the Dominion Experimental Farm staff. Prof. F. G. Shutt delivered a most interesting talk on "Fertilizers for Orchards." He emphasized the great importance of giving the ground thorough cultivation and manuring before planting out the

young trees. In the Annapolis valley barnyard manure is a scarce article so that the farmers must resort to artificial fertilizers. The effects of the different constituents were explained. Nitrogen promotes leaf growth and growth of wood generally. Potash is a great essential, it forms fifty per cent. of the ash of the apple. Phosphoric acid is requisite to hasten the ripening of the fruit. For the ordinary orchard, Prof. Shutt recommended an annual dressing of ten tons of farm-yard manure, with one hundred and fifty pounds of kainit per acre; where hard-wood ashes could be had, 40-50 bushels per acre would give splendid returns. The manure should, preferably, be applied in the fall. In answer to a request for a general formula for a mixed fertilizer for ordinary orchards, the following was given—per acre:

Bone meal.....	100
Superphosphate.....	100
Muriate of potash.....	75
Or kainit.....	400

Mr. W. T. Macoun, Horticulturist of the C.E.F., delivered a very interesting address on fruit topics in general. At the Ottawa Farm there are 653 varieties of apples under test, 200 being Russian. There are also under test 69 varieties of plums and 169 varieties of grapes.

"Horticulture in the Maritime Provinces" was very ably treated by Saxby Blair, Horticulturist of the Nappan farm. He dealt specially with apples. As to varieties, he mentioned that Northern Spy, Ben Davis, and Bishop's Pippin had all been shipped from New Brunswick and Nova Scotia with splendid results. Plums can be successfully grown in Southern New Brunswick and in Prince Edward Island. Pears and peaches do well in sections of the Annapolis valley. Small fruits can be grown almost anywhere in these provinces.

Hon. Sydney Fisher delivered a very helpful address, referring chiefly to the great question of transportation. Our ocean rates are higher than those from United States ports, because our business is smaller and competition among steamship lines is therefore less. Last season it cost \$238,000 more to ship butter from Montreal than if it had gone from an American port. Speaking of the advantage of cold storage for fruit shipments early in the season, Mr. Fisher said that on some apple shipments from Western Ontario it had meant an increase in profit to the shipper of twenty-five per cent. For late shipments there was, of course, no advantage. Mr. Fisher had a splendid reception at the different missions; the fact of his being a thoroughly practical man secures for him a warm place in the hearts of the farmers.

Dr. Borden, Minister of Militia, expressed himself as being entirely opposed to the bonusing of steamship companies from Canadian ports; withdraw the subsidy, and competition among the different lines will bring the needed reduction in rates, was his solution of the matter.

A large number of local men discussed matters of local interest. Prof. Sears, of the School of Horticulture, gave some very valuable suggestions along the line of "Recent developments in spraying." Up to the present there has been no uniformity in regard to the size of the barrel used in apple shipments from Nova Scotia to Great Britain. The fruit-growers are trying to remedy this, and now call for the adoption, on the standard of a barrel of the following dimensions, 27 inches between the heads, 17 inches in diameter at the head, and 19 inches in the centre. The general adoption of this standard would mean better prices in England where uniformity in quality and package is at a premium.

At the different sessions "Agricultural Education" was a live topic. The farmers of this province are keenly alive to the urgent necessity of establishing a first-class agricultural college. While the schools at Wolfville and Truro have undoubtedly done good work, they do not meet the advancing requirements of this progressive province. At present students who wish advanced instruction along this line are forced to go to the Ontario Agricultural College to receive it. What is wanted is an agricultural college, pure and simple, where practical work can be done. Some

time ago the school buildings at Truro were destroyed by fire; the people of Annapolis valley ask that a college be established, combining its work and that done by the present School of Horticulture. Best of all, the Government is ready and willing to do its part. I was greatly pleased to find that the Maritime people look upon our O.A.C. as a model institution, and more than pleased to hear Mr. Fisher speak of it as "the best in the world."

CORRESPONDENCE

An Interesting Australian Letter

To the Editor of FARMING:

I am sending you £1 by P. O. order in payment of subscription to the journal FARMING. I am very much pleased with the last form of the journal, though I do not think it so handy as the old monthly size; but I am glad the advertisements are not mixed with the reading matter, so as not to make the volumes, when bound, so bulky.

FARMING is most welcome in Western Australia, where the business of farming is the most backward of any place of which I have heard under the British flag. The majority of the farmers are so ignorant that they think they know enough about farming. There is no agricultural paper printed in this colony. The Government started an apology for one and called it the "Journal of the Bureau of Agriculture," and delivered it to the farmers free bi-weekly. This was followed by a monthly called the "Farmers' and Producers' Gazette and Settlers' Guide," which was a great improvement, but cost the Government too much, and so it was killed; but farmers seem quite satisfied. This will give you some idea of the obstacles to farming here, where we have the finest climate in the world.

Yours faithfully,

W. E. ASH,

(Associate, Ontario Agricultural College).

Korijekup, Harvey, West Australia, Jan. 9th, 1899.

Babcock Tests vs. Churn Tests

To the Editor of FARMING:

In your issue of 21st February I notice an interesting letter from Mr. Geo. Rice, of Currie's, Ontario, on this very important subject, and, as he quotes in full a letter sent by me to his firm, I may be pardoned for asking to take a hand in the discussion. I am admittedly the advocate of a system of churning which I claim has been proved more perfect than even the Babcock method in establishing accurately the exact amount of butter in a given amount of cream. The product of my process must certainly stand the chemical test for fat or else my contention falls to the ground. The process must also be capable of practical demonstration on an economical basis. On this point let me remark that there have been hundreds of churns almost, if not all, of which have been at some stage condemned by "experts" (?) who afterwards recommended them. Yet they were not all wrong, and, indeed, to day it is the process rather than the machine which rules. There have been several different kinds of separators, both horizontal and vertical, which have received similar gentle treatment. Even the salt has come in for its share of blame to bolster up some blunder. However, as I stated in my letter to Messrs. Rice, my process of taking butter from cream, and producing an absolutely pure article in marketable form, and showing a gain of 25 per cent. over the Babcock test, is in operation at the dairy of Mr. Robt. Davies, of Thorncliff Farm, Toronto, and I assure you that it is of sufficient importance to call for candid, thoughtful investigation. Surely no more valuable test of a cow's performance can be had than practically and economically, with absolute certainty, putting the butter of her milk into a marketable form which will stand the chemical test. With

all due respect to Dr. Babcock, I think practical men will agree with me when they understand it in that way. Is it any wonder that buttermaking to day stands unique among the arts and manufactures as being the only one that has stood for 6,000 years without one solitary improvement or one scintilla of light being obtained as to the chemistry of an operation which was carried on in Pharaoh's time with as much knowledge and success as it is to day, when the leaders, or say the more prominent men, engaged in the business are so—we will call it conservative? But if one of their employees on the farm was so *conservative* they would call it by some other name.

That there is only 5% between Mr. Rice and myself I will proceed to demonstrate. It may be permissible for me to assume that if Mr. Rice was accused of leaving more than the smallest modicum of fat in his skim or butter-milk he would feel insulted, and we must therefore proceed upon the basis that he does practically obtain all the fat his cow gives him. Now, supposing the Babcock test shows 4% of fat in his milk, that is, 4 per cent of pure fat or oil, and marketable butter. Even Mr. Rice's is not pure fat or oil. There are other ingredients such as water, salt, casein, etc., and Mr. Rice, in his own letter, quotes 80 per cent. fat as what an ideal marketable butter should be. That leaves 20 per cent. of other material to account for. So that Mr. Rice to-day should be working not less than 20 per cent. above the showing of the Babcock test. "Is he doing so?"

How Mr. Rice obtains his data of 80 per cent. fat I shall be pleased to hear. The latest standard in Great Britain allows 18 per cent. water. There is 6 per cent. salt, and some allowance for casein, etc., say only 2 per cent., which gives a total of 26 per cent. But taking Mr. Rice's data of 80 per cent. fat, every creamery that is making a butter much better than the average and is not working 20 per cent. above the test is losing butter. Can any of the readers of this journal point to the creamery that is paying its patrons on the basis of 20 per cent. above the showing of the Babcock?

There is still another important factor in this question and that is the action of the sulphuric acid used in making the test. It has long been known that sulphuric acid combines with fats or oils, and the more volatile oils it volatilizes almost complete. The fat in the milk may be divided roughly into three parts, stearine, palmitine and oleine, the last one of which is volatile, and there is no reason to suppose that the acid should act differently on butter fat than on any other fat or oil. Therefore, we may reckon with reasonable certainty that a portion at any rate of the fat which should show in the test has been driven off and another portion of the heavier fat disposed of by the acid in such a way as not to be available in reading the test, and a very small loss in the test will make all the difference in the working out, that is, if we have a means of obtaining all the fat from the milk and cream.

Granting the premises to be correct, it will be allowed, I think, by any fair-minded man that, if a method can be discovered that will obtain all the fat, making allowance for the water, salt, casein, etc., it should not require a miracle, a fraud nor a fake of any kind to work 30 per cent. above the showing of the Babcock test.

In the hope that I have shown Mr. Rice sufficient to convince him that this invention is not designed for a record maker for fancy cows, and looking to the day when he will permit me to give him ocular demonstration of the fairness of my claims,

I remain, sir, yours respectfully,

WALTER COLE.

Full of Good Wholesome Reading

"FARMING is bristling full of good, wholesome reading. No farmer need be afraid to place it before his family."

E. YORKE.

Alvinston, Ont., Feb. 9th, 1899.

QUESTIONS AND ANSWERS.

ERADICATING WEEDS.

To the Editor of FARMING:

Will you kindly give directions for eradicating ox-eye daisy and purslane; also what is the best material to use on tile joints that are being laid between rows of apple trees where the soil contains small rootlets. I cannot purchase collars and have been advised to use tea lead.

D. H. LEAVENS.

Belleville, Ont., Feb. 24, 1899.

Answered by Wm. Rennie, Farm Superintendent Ontario Agricultural College, Guelph.

To eradicate ox-eye daisy and other weeds, plow shallow in the month of August and harrow the land thoroughly and at intervals during the fall cultivate the land as the weeds appear, harrowing after each cultivating. Use a cultivator with wide joints that will overlap sufficiently to cut off every weed.

To prevent rootlets of trees getting into the tiles and choking the drains, cover the joints with cement. Mix in the proportion of one of cement to six of coarse sand.

GRASS ON LOW LANDS: A POULTRY HOUSE.

To the Editor of FARMING:

I have a large block building of which I intend to make the lower part into a hog-pen. Would it be advisable to make the upper part into a hen-house?

What would be the best kind of grass seed to sow on low lands? If you cannot give me the information, probably some one can through the columns of your paper.

Yours, etc.,

HARMON SHAVER.

Morewood, Feb. 22nd, 1899.

Answered by Dr. Fletcher, Entomologist, Central Experimental Station, Ottawa

In reply to the question by Mr. Harmon Shaver as to what would be the best kind of seed to sow on low lands, I would suggest the following: If this land is not too wet for timothy, I would sow timothy 10 pounds, red top 2 pounds, and alsike clover 4 pounds. If too wet for timothy the only grasses which could be grown satisfactorily would be red top at the rate of 10 pounds to the acre, with 4 pounds of alsike. There are two native grasses of which, however, unfortunately, the seed cannot be bought, which ought to be known and much more widely-cultivated by Canadian farmers who have low, wet lands. These are (1) the canary reed grass (*Phalaris arundinacea*), a tall, rather coarse, but very succulent grass, with wide leaves, which may frequently be found growing in swampy places, in brooks, and on river banks in nearly every part of Canada. This grass springs up vigorously early in the spring, giving a heavy crop of green, leafy stems, which in the experimental

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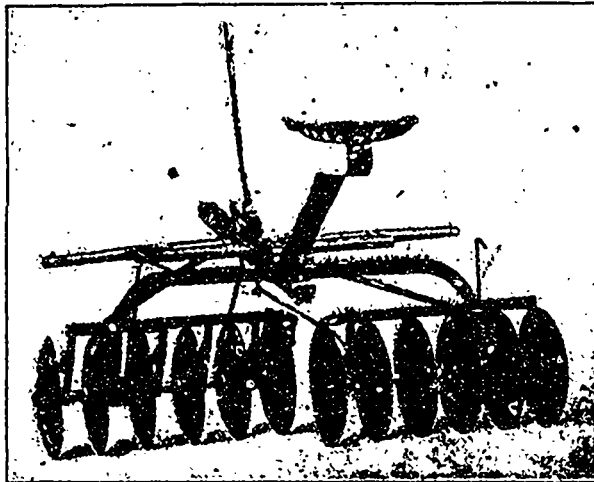
Farmers! Don't be taken in. There is none "just as good" These twines will not bunch at the knotter, and a binder will run all day without stoppage, thus saving time, annoyance and a "lot o' cussin'."

We pack our twine in bags of the size of ordinary grain bags, and we are not ashamed to put our name upon it. Don't take any other.

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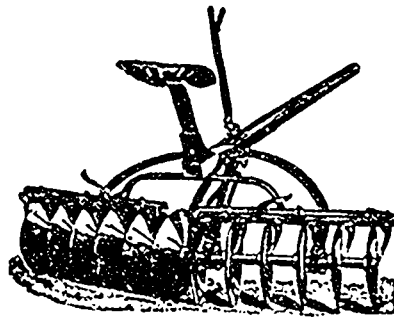


grass plots here were over three feet high by the 1st of June, and when cut at that time a second crop may be cut by the 1st of August. Canary reed grass grows wild in all parts of Canada, and the seed, which resembles rather small, gray canary seed, might be collected in small quantities by almost anyone who wished to try the grass. It is a perennial grass, which spreads rapidly from the root but does not seed freely. The well-known ribbon grass of gardens is a variegated form of the canary reed grass. Although this grass spreads rapidly by the root, it roots near the surface of the soil, and is not a difficult grass to get out of land.

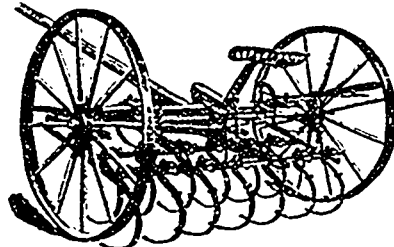
(2) The other grass referred to is known as Canada Blue-joint (*Dequexia canadensis*). This also, like the last, is a denizen of low, wet lands. It produces a large crop of fine leafy stems, which make excellent hay. Like canary reed grass it grows in every part of Canada, is well-known and highly-esteemed, but is seldom cultivated, and the seed is seldom offered for sale by seedmen. A stock of this grass can only be obtained by the farmer who wishes to try it as a cultivated crop, collecting a small quantity of the seed and then saving seed from the plants. If planted in autumn or early the next spring the plants will bear seed the second year. Both of the above-named grasses, although growing naturally in wet land, will thrive on any moderately moist soil.

Your subscriber does not describe the building which he proposes to turn into a hog-pen and hen-house. It is generally thought well to keep hens in a separate building, but if more convenient they can of course be kept in any building which can be easily cleaned out. With poultry, as with all other kinds of live stock, cleanliness is of the first importance. If there is any easy way for the chickens to get up without having to fly up, and a good floor is put down which can be cleaned out at short intervals, there is no reason why chickens should not be kept over the pigs if these latter are properly attended to. As far as the pigs are concerned, there is only one objection to the hens being kept over them, namely, that the chicken mite, which is frequently abundant on fowls, sometimes transfers its attentions temporarily to domestic animals, and has occasionally been complained of as the cause of serious irritation on horses, cows, pigs, etc., when hen-houses have been located as suggested above. However, if the chickens are kept well cleaned out and the perches washed from time to time with coal oil, these mites should not be allowed to increase in undue numbers. When abundant they are the cause of great annoyance to the birds, and will reduce the profits of keeping poultry more than anything else. The hens will not lay nor fatten, the feathers are pecked out, and setting hens will not remain on their nests.

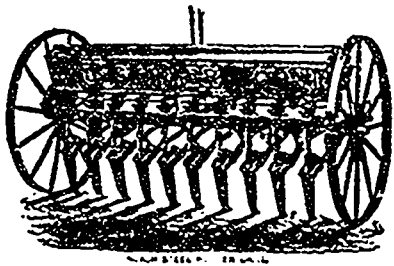
When writing to Advertisers kindly mention FARMING.



NOXON NEW BUFFALO PATENT ALL STEEL DISC HARROW



NOXON NO. 12 CULTIVATOR WITH SPRING TINE CULTIVATOR



NOXON BROS. MFG. CO.

The Buffalo All-Steel Disc Harrow.

This is the only Disc Harrow made or sold in Canada, having independent, adjustable spring pressure upon the inner ends of the gang disc, allowing any amount of pressure to be thrown upon the inner ends of the gangs, by the foot of the operator. By this means a perfectly flexible action is secured and the ground can be worked to a uniform depth. Examine this Machine carefully and compare with others.

The No. 12 Cultivator

IS A MARVEL OF SUCCESS. The only Cultivator made that both lines of teeth will cut an even depth in the ground. Examine it and you will see why. The only Cultivator with a movable tooth set so that the angle of the teeth can be regulated to suit any condition of soil. Pressure can be regulated to act differently on every section requiring it. The teeth are carried between the wheels instead of trailing behind, as in other machines, thus securing lighter draft. This machine is furnished with grain and grass seed box when required. It has reversible diamond steel points for the teeth; also extra wide tilling-cutting points can be furnished. Examine it and you will buy no other.

THE BEST DRILL MADE.

The Hoosier Needs No Introduction.

Over 40,000 Drills and Seeders of our manufacture in use in Canada. The only Drill made with lever for instant and perfect regulation of depth of hoe in all kinds of soil, while team is in motion. Sows absolutely correct to scale; saves seed, as every kernel is deposited at a proper depth to grow. Purchase only the best and you will be satisfied.

We also manufacture Binders, Reapers, Mowers, Rakes, Cultivators and Pulpers, as good as the best. Send for illustrated catalogue.

NOXON BROS. MFG. CO. (Limited)

Ingersoll, Ont., Canada

“THE FAVORITE”



Patented, Roller Bearings, Steel Stand,
Combined Foot and Lever Drive,
The Easiest Driven, The Best Finished,
: : : The Most Durable.
BEFORE BUYING SEE IT.

DAVID MAXWELL & SONS

ST. MARYS, ONTARIO, CANADA.

THE HACKNEY HORSE SOCIETY.

The seventh annual meeting of this society took place at the Albion Hotel, Toronto, on Feb. 23rd. The president, Mr. Robt. Beith, M.P., in his opening address, stated that the Hackney horse had been a great success, and horse dealers who wanted a showy harness horse would pay more for one with a cross of Hackney on either a thoroughbred or standard-bred mare than for any other, thus making an ideal for a brougham or cob horse. Farmers were slow to appreciate this, but were now realizing the fact that Hackney horses brought long prices.

The report of the secretary, Mr. Henry Wade, showed that 32 pedigrees of Hackneys have been recorded during the year. After paying \$75 for premiums and other expenses, the society had \$165.51 in the treasury.

Silver medals were accepted from the English Hackney Society for Canadian-bred stock. The sum of \$25 was voted to the Spring Horse Show for the best Hackney stallion of any age, and \$25 for the best mare of any age sired by a registered Hackney stallion, both classes to be shown on the line.

The following are the officers for 1899: President, H. N. Crossley, Toronto; 1st vice-president, John Macdonald, Toronto; 2nd vice-president, Robert Graham, Claremont. Vice-presidents for the provinces—Ontario, A. G. Ramsay, Hamilton; Quebec, James A. Cochrane, Hillhurst; Alberta, A. M. Rawlinson, Calgary, Alta.; Manitoba, Mr. McMillan, Brandon; New Brunswick, J. R. Frink, St. John, N.B. Directors—Robert Davies, Toronto; Robert Miller, Stouffville; Robert Beith, M.P., Bowmanville; Robert Bond, Toronto; Dr. Andrew Smith, Toronto; O. Sorby, Guelph; John Holderness, Toronto; Geo. Pepper, Toronto; D. B. Simpson, Bowmanville. Secretary-treasurer, H. Wade, Toronto; delegate to Industrial Exhibition, Henry Wade, Toronto; delegates to Western Fair, Adam Beck, London and A. G. Bowker, Woodstock; delegate to Ottawa, Robt. Beith, M.P., Bowmanville; delegate to Montreal, Jas. A. Cochrane, Hillhurst, Que.; delegates to Woodbridge Fair, John Macdonald, Toronto; John Holderness, Toronto; Robt. Bond, Toronto; delegates to the Horse Breeders' Association, Robert Beith, M.P., Bowmanville; John Macdonald, Toronto; auditor, C. F. Complin, Toronto.

Publishers' Desk.

Wm. Ewing & Co.'s Seed Catalogue.
—We have been favored with a copy of the seed annual for 1899 issued by Messrs. Wm. Ewing & Co., of Montreal. It is creditably got up, and contains some new features which will interest every farmer and gardener. The list of new varieties, "novelties and specialties," offered by this reliable firm comprise all the most important flower, vegetable, and field seeds of recent introduction. We recommend our friends to send for a copy of this catalogue, which will be sent free on application.

Power for the Farm.—We have taken considerable interest in the development of

LABOR SAVING UP-TO-DATE BROADCAST SEED SOWER

For Sowing Wheat, Oats, Rye, Barley, Flax, Grass Seed, Clover Seed, etc. In fact any kind of Seed, Broadcast. No careful, economical farmer will continue to sow his seed by hand (the old style) when he can get one of these machines at our reduced prices. They will save their cost almost daily in the saving of seed, to say nothing about the saving of time and more even distribution, which will have a great effect on the crop. They will sow from 4 to 6 acres per hour at a common walking gait.

Valuable labor-saving, seed-saving, crop-increasing machines. The seed is not thrown upward, but distributed right and left evenly, and will save at least one-third the seed used in hand-sowing. They are operated by a crank, which revolves the distributor and works the vibrator rapidly. It is the only seed sower having a satisfactory vibrator which prevents clogging. They are quickly adjusted to sow any quantity desired. The grain sack holds one bushel, made strong, well finished, and weighs about four pounds. It will last many years. At a round will sow wheat 50 feet, buckwheat and barley 48 feet, flax seed 36 feet, grass and clover seed from 27 to 36 feet. These are the best machines ever invented for the purpose, and should be in the hands of every farmer. Satisfaction guaranteed. Send for one to **FW**.



This Crank Seeder is preferred by most people. It is the same as the other, except the gear. We guarantee them to give entire satisfaction.

Price, \$1.75 each.

Robt. Evans & Co.

Seed Merchants & Growers
HAMILTON - - - ONT.

CONSUMPTION

The Great White Plague

THESE
3 BOTTLES FREE

THE DR. SLOCUM SYSTEM is a comprehensive and complete system of treatment which attacks every vulnerable point of the disease and completely vanquishes it. It leaves no point unguarded; it leaves no phase of the trouble neglected; it cures and cures forever.

**WEAK LUNGS,
BRONCHITIS,
CONSUMPTION,**

and all other throat and lung diseases, by absolutely obliterating the cause.

CONSUMPTION, if Properly Treated, is Curable—Left to Itself it is Slow, Sure and Deadly.

There is no human ailment so destructive of life as Consumption. It is the weapon of the grim reaper, carrying off its victims at any time; and in no month or in no season can they feel sure of immunity.

Modern medical science has made many discoveries along many different lines, but in no case is the human race under a greater debt of gratitude than to that distinguished and eminent chemist, Dr. T. A. Slocum, whose researches have resulted in a cure for consumption, bronchitis and all throat and lung troubles,—a cure that exterminates the cause, builds the body and kills the germ of disease.

To prove the efficacy of this cure, 3 bottles are offered free to any sufferer. All that is necessary is to put your name, postoffice and nearest express office on a postcard and mail it to The T. A. Slocum Chemical Co., Limited, 179 King street west, Toronto, Ont., stating you saw this free offer in FARMING, when the three bottles will be sent to you at once.

This test costs you nothing, and it is a duty you owe to yourself and your friends to try the Slocum Cure.



this class of machinery, and have investigated the merits of a very large number of appliances offered by the manufacturer for the purpose of supplying cheap and effective power for the various purposes of the farm. Amongst the best of these is the "Ideal" windmill, made by the Gould, Shapley Muir Co., Limited, of Brantford, one of the most reliable manufacturing firms in Canada. They manufacture other machines of a uniformly excellent character. Their "Maple Leaf" grain grinders, iron and spray pumps, towers, flag staffs, are in use everywhere, and are highly recommended wherever they are to be found.

They All Recommend It.—Douglas, Ont., Oct. 1st, 1898. Messrs. Frost & Wood, Smith's Falls, Ont. Dear Sirs: We, the undersigned farmers, have the past season purchased from your agents at Douglas, I. & S. McEachen, one each of your new No. 2 light binders, and we would say that our machines have gone through the past heavy harvest in first-class shape. The simplicity of construction, low elevation, and force feed of this little machine, make it the most complete binder on the market, and we can each recommend it to any farmer in need of a good binder. Yours truly, Michael Rice, X. Plaunt, D. Kilgour, Chas. McLaughran, John Cheny, Timothy Handrahan, Stephen Towns.

A New Cream Separator.—In our advertising columns will be found the advertisement of J. F. Gill & Co., Niagara Falls, Ont., who are offering The Webber Hydro-lactic Cream Separator to the readers of FARMING for the first time. This machine was first built in the United States in May, 1898, at Knowlesville, N. Y. It is claimed for it that it will make better and more butter with little or no labor in getting the cream than can be made by any other process. In the State of New York, where it has been in use now for nearly two years, it is spoken very highly of and many letters are shown testifying to its merits as a great labor saver and as a means of insuring first class butter every time. Write J. F. Gill & Co., Niagara Falls, Ont., for full particulars.

Every Farmer Should Have It.—Every farmer is interested in the question of cheap power for the farm and this question is discussed in the Northey Manufacturing Co.'s new booklet descriptive of the "Northey" gasoline engines, large numbers of which have been sold for farm purposes during the past two years. The booklet is handsomely illustrated and in addition to a short and pithy description of the various uses to which the engine may be applied it contains the testimony of those who have put it to a practical test under all kinds of conditions. In this connection alone it is worthy of the perusal of every person interested in the subject. A copy will be sent free to any one who will send their name and address to The Northey Manufacturing Co., Limited, 1021 King street Subway, Toronto, Ont., and at the same time mention FARMING.

Signs of Prosperity.—When FARMING visited Watford a few days ago there was found to be no lack of evidence to show that the busy season had set in for Thom's implement works. Marked changes and improvements, additions to buildings and plant, and a full staff of competent workmen were some of the indications observed which show that this enterprising firm not only have but intend to keep a large share of the business which the return to prosperous times will bring to the Canadian manufacturer. This business has been established for more than twenty years, and it is one of the few implement firms that have passed untroubled through the late period of depression. It now shows its vigorous condition by expanding its sails to catch the favorable breeze of prosperous times. The manager, Mr. D. Thom, is a thoroughly practical mechanic, and has done as much probably as any man in Canada for the advancement and improvement of farm implements. His latest and most noteworthy improvement is the "Blower Propeller Elevator" feed and ensilage cutter, upon which

FREE FOR ONE DAY'S WORK



WE GIVE this fine WATCH, with a chain and charm, for selling 2 dozen gold topped, enameled Lever Collar Buttons at 10¢ each, or a lady's watch and guard for selling 3 doz. No Money Required. You run no risk. Write and we send the Buttons, post paid, with our big Premium List. Sell the Buttons, return money and we send watch, free of all charge. Unsold buttons returnable. Liberal commission if preferred. Be the first in your field. Send your name and address to-day. In writing, mention this paper.

LEVER BUTTON CO., TORONTO, ONT.

HELDERLEIGH FRUIT FARMS and NURSERIES

—400 ACRES—

Sixteen years' experience. Everything wanted that is useful and valuable in the Nursery Stock line—either FRUIT or ORNAMENTALS.

SEND FOR CATALOGUE, which is furnished FREE to applicants.

DO NOT MAKE THE MISTAKE OF BUYING CHEAP STOCK—IT IS DEAR AS A GIFT
GOOD RELIABLE SALESMEN WANTED in a number of fine townships, to start work at once. Complete outfit FREE.

Address, **E. D. SMITH** WINONA, ONT.

Why ? Because

In these times of keen competition is there such a great demand for this All Steel Flexible Harrow.



The flexibility of the Harrow enables it to adapt itself as readily to rough and uneven ground as to smooth, and the oscillating motion produced by its flexibility pulverizes the ground, and leaves it in a loose and more porous condition than any other Harrow, and it is made of the very best material money can buy for the purpose. The bars are made of

HARD SPRING STEEL

very stiff and strong, the hinges and teeth being of solid steel, all of which are of a higher grade than is possible to use in any other make of Harrow. We can guarantee more than double the strength and wear in this Harrow than there is in any other make.

Parties wishing a first-class Harrow will do well to write us direct, or apply to the local agent.

Our Motto, "Not how Cheap, but how Good."

TOLTON BROS., GUELPH, Ont.

WANTED

25 MEN Responsible and reliable men to canvass for our

Nomestead Brand Fertilizers

BEST IN THE WORLD

We are prepared to pay a good liberal commission to agents, and will give purchasers of these fertilizers a reasonable length of time to pay for same. Write us for full particulars.

John S. Pearce & Co.

London, Ontario.

he has worked and experimented during the past five years, and which, in spite of the predictions of farmers and experts to the contrary, he has brought to so high a state of perfection that it is now almost universally admitted it will entirely replace the chain and slot carrier style of machine which every one experienced in the filling of silos has found to be so cumbersome and expensive. The fact that the manager and one of the proprietors of a manufacturing firm is a thorough and practical mechanic is a pretty substantial guarantee that the quality and workmanship of the products of their shop will receive the most careful attention in every detail; and this is worth the consideration of the farmer in making his selection of farm implements. This firm make only high class goods of the very latest and improved pattern, and we are pleased to recommend them to our readers. See their advertisement in this week's issue.

Stock Notes

IMPORTED CLYDESDALE STALLIONS.—Mr. James Dargetty, Perth, Scotland, arrived at the Black Horse Hotel, Toronto, last week with a shipment of sixteen Clydesdale stallions. The average weight of these horses is 1,900 lbs., and the average age is five years. All the horses are fashionably bred, and will be disposed of for breeding purposes.

MR. WILLIAM WILSON, of Nortonville, Ont., we understand, has taken the farm of the late Mr. J. G. Snell, of Snelgrove, and will take possession of it about 1st April next. Mr. Wilson has been carrying on dairy farming quite extensively for some years, and intends to extend his operations in this line as soon as possible. We wish him every success.

MR. ROBERT HUNTER, manager of the Rapids Farm, Lachine Rapids, Que., of which Mr. W. W. Ogilvie, of Montreal, is the proprietor, is advertising a number of choice young Ayrshire bulls from last season's importation. They are all from the very best Ayrshire stock in Scotland and should be seen by those desiring a first class bull for the coming season. Mr. Hunter reports that their importation of last fall has passed the winter in fine condition and every individual is showing up to greatest advantage possible.

CORRECTION.—In the write-up of J. E. Brethour's herd of improved Yorkshires in our Stock Notes column of Feb. 21st a couple of errors were made. Instead of reading: "Mr. Brethour has sold no less than 3,500 purebred Yorkshires," it should read: "Has sold no less than \$3,500 worth." And instead of reading: "The herd won, in all, 100 prizes, besides a number at country and township shows," it should read: "Besides the prizes mentioned here over 100 more prizes were won at country and township shows."

MR. RICHARD GIBSON, Delaware, Ont., besides being a breeder of fine Shropshire sheep, is also a breeder of a high class of Clydesdale horses. Among others the following of his horses are of special note: Stallion, Home Secretary (5875), 4704, sire, Windsor (2509), dam Craigmuir Bes. (6239). Mares: The Countess 4820; sire, His Royal Highness (2105), dam, Fanny, Vol. XII.; Jenny Dear 3415, sire, Nasmyth (3024), dam, Jenny Ray 2245; Lady Mab 1st 4094, sire, St. Cuthbert (3210), dam, Lady Mab 1518.

Mr. Alex. Galbraith, of Janesville, Wisconsin, writes: "In Clydesdales—all of which were imported last October—I can offer a selection which for quality, shapes, weight and breeding qualities combined is probably not equalled on this continent. Nearly all the great sires of the day are represented in my stud, and amongst others are the following: The Champion MacGregor is represented by his two three-year-old sons, Prince Ito and Coleridge—the latter from a mare of Prince of Wales' blood and the former from the same dam as the Columbian Exposition champion, Prince Patrick. Sir Everard is represented by the beautiful six-year-old Glen Saddell. Lord Erskine has almost the *fac simile* in his son, Royal Windsor—one of the best types of a draught horse in this country to-day. He

LEADING COLLEGES OF CANADA

TORONTO

THE **Best Job**

Invariably goes to the one with best brain—one who has education, special training. Why not qualify for one of the best places going? You have the chance. The **CENTRAL BUSINESS COLLEGE, TORONTO** opens the door to success for many young Men and Women each year. It offers splendid equipment, thorough work, a strong staff and good results. You may enter at any time. Write for prospectus. **W. H. SHAW, Principal.** Yonge and Gerrard Sts., TORONTO.

STRATFORD.

“NONE BETTER IN THE DOMINION!”

Central *Business College*

STRATFORD, ONT.

A Commercial School of the Highest Grade. Twice as large as many of the commercial schools in the larger cities, enjoys a large patronage; Staff of Nine Male Teachers; moderate rates; board cheap. Students admitted at any time. Write for beautiful Catalogue. **W. J. ELLIOTT, Principal.**

HAMILTON

CANADA BUSINESS COLLEGE

HAMILTON

For nearly 40 years this College has been a leader in Commercial and Shorthand training in this country, and it is the leader to-day. Write for prospectus to **R. E. GALLAHER, Principal.**

The **JONES LOCKED WIRE FENCE**



is the best fence in the market. Also makers of Metallic Roofing and Siding. Write for catalogue and circular

The Locked Wire Fence Co., Limited, London, Ont.

PLANT LIFE, to be vigorous and healthy, must have

Potash

Phosphoric Acid and Nitrogen. These essential elements are to plants, what bread, meat and water are to man.

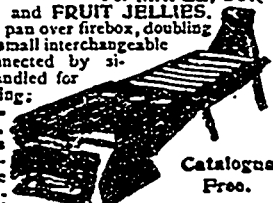
Crops flourish on soils well supplied with Potash.

Our pamphlets tell how to buy and apply fertilizers, and are free to all.

GERMAN KALI WORKS, 03 Nassau St., New York.

CHAMPION EVAPORATOR

For MAPLE, SORGHUM, CIDER, and FRUIT JELLIES. Has a corrugated pan over firebox, doubling boiling capacity, small interchangeable syrup pans (connected by siphons), easily handled for cleansing and storing; and a perfect automatic regulator. The Champion is as great an improvement over the Cook pan as the latter was over the old iron kettle hung on a fence rail.



Catalogue Free.

THE G. H. GRIMM MFG. CO., 84 WELLINGTON ST., MONTREAL

A FIRST-CLASS INCUBATOR

FOR SALE.

ADDRESS—**FARMING, TORONTO, ONT.**

THE RANKIN FENCE



is a coiled Spring wire Fence containing all the latest improvements, is easily and rapidly erected without any expensive tools or previous experience. All particulars in our Catalogue.—Write for one.

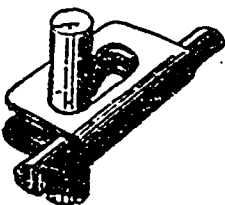
AGENTS WANTED.

THE RANKIN FENCE CO. 275 ST. MARTIN ST., MONTREAL.

THE FROST WIRE FENCE CO.

WELLAND, ONT., CAN.

Manufacturers of....



The Frost Wedge-Lock Spring Wire Fence

Frost Coiled Spring Wire

—AND—

Frost Steel Gates

—AGENTS

—WANTED

weighs over 2,000 lbs in moderately thin flesh with great bone and substance and excellent confirmation. This horse was used in the stud of Lords A. & L. Cecil, who keep nothing but the very best. Then I have a lovely five-year-old bay horse named Prince of Edengrove—possibly the best show horse in America to-day. He is by the Prince of Wales' horse, Patrician—a royal winner, and out of Lizzie of Inchparks, a double royal winner, so that his claims to leading show-honors is legitimately inherited. That's a' Right is the appropriate name of a magnificent 2,100-lb. brown horse sired by Handsome Prince out of the great Darley mare Lenora. Royal Rover, by Mount Royal, out of a prize winning Prince of Wales mare, is another of the "tops," and tips the scales exactly at 2,000 lbs. He has several prizes to his credit. Another of same weight, coming four years old, is Sir Joseph—a winner at the Royal Northern in 1897. Broomlee, by Top Knot, is a handsome brown three-year-old, and also a first prize winner before importation. Another winner is Netherland, by Flashwoods Best, etc., etc. The demand for good horses is increasingly active, and those who are wise will seize this opportunity to purchase very reasonably while a good selection may still be had." As we pointed out in our last week's issue it is the duty of the farmer to breed the right class of mares to the right class of sires, and that good rooomy mares bred to good pure-bred Clydesdale sires is the best way to produce the sort of draft horses now in demand, and Mr. Galbraith's Clydesdales seem to afford the opportunity which those who would take advantage of present favorable conditions should desire. Mr. Galbraith is well-known everywhere as the secretary of the American Clydesdale Association, and any information he may furnish may be relied upon as being accurate. Address: Alex. Galbraith, Janesville, Wisconsin, U.S.A.

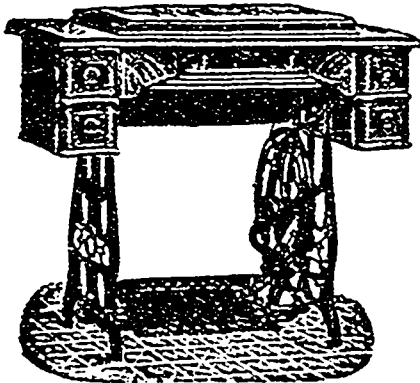
A. & G. RICE, Curries, Ont., write us of date March 1st. We are having an extraordinary demand for Holsteins, so much so, in fact, that we are very grateful for a reduction in postage. But so long as our correspondents follow up their inquiries with purchase at the rate we have had of late we rather guess we can stand it.

Amongst recent visitors to Brookbank we were pleased to welcome those veteran breeders, Henry Stevens, Esq., and his son Ralph, so well known to all lovers of great dairy cows, and Holstein breeders especially, as the owner of De Kol 3rd, official test 26.57 lbs. in 7 days, and Netherland Hengwold, test 26.66 lbs. in 7 days. Having a son of each of these great cows in their herd, they have

"SEAMSTRESS" AND "EXPERT"

High-Grade Sewing Machines at Factory Prices

Equal to any Machine made in every respect, regardless of name or price



Latest improvements, high arm, long self-threading shuttle, automatic bobbin-winder, steel attachments. ALL STYLES. OAK OR WALNUT FINISH. Why spend from \$40 to \$80 on a machine when you can buy as good a machine as ever was made for half the money? Write for catalogue and prices.

THE BAILEY DONALDSON CO.
1 ST. PETER STREET
Department 'F.' MONTREAL

SUGAR. SYRUP.

Redpath's Granulated Sugar \$1.50, Light Yellow \$3.95 per 100 lbs., about 315 lbs. in barrel Grain Bags to hold any quantity 24c. each. 2 gal. pail best Honey Drip Syrup \$1.00. 10-qt. Sap Pails \$7.50. Spiles 60c. per hundred. Sugar Kettles, cast iron, 6 pails, \$2.35. Steel Feed Cooker, good for boiling sap, 45 gallon, with cover, \$12.00.

Thanks to our customers for their patronage. Our sales averaged over \$70.00 a day ahead of last February. Freight paid on feed cooker only.

THE FARMER'S CO-OPERATIVE STORE
THE PEOPLE'S WHOLESALE SUPPLY CO.
144-146 KING ST. EAST TORONTO
R. Y. MANNING, MANAGER.

Important Change in Nursery Firm

Owing to the increased demand for Nursery Stock the undersigned has decided to enlarge his business, and for this purpose has taken in an energetic partner, and the Dominion Nurseries will hereafter be run by Smith & Reed. We propose, as in the past, to offer trees direct to planters at reasonable rates, guaranteeing them to come in good condition and to be just what they are represented. Thanking the farmers for their past liberal patronage we respectfully solicit a continuance of the same.
Send for Catalogue—Free.

SMITH & REED

(Successors to A. M. Smith)

Dominion Nurseries, - St. Catharines, Ont

Winona Nursery Co.

OFFERS FOR SPRING of 1899

A full line of stock, both fruit and ornamental, at very moderate prices. No agent's commission to pay.

Send for price list and catalogue. Dealers will find it to their interest to correspond at once with

J. W. SMITH, Manager,
Winona, Ontario.

NURSERY STOCK IN VERITY!



Our new catalogue is our agent, giving descriptions, PRICES, and how to plant fruit, ornamentals, shrubs, ROSES, Clematis, evergreens and small fruits. All well assorted, clean and handsome at the Central Nursery. Shall we send you one—nineteenth year? Also choice Seed Potatoes.

One Campbell's Early Grape Vine, two years, by mail, 75c.

A. G. HULL & SON,
(Mention this paper.) St. Catharines, Ont.

The Spramotor First

A TRIAL of Appliances when conducted by a BRITISH GOVERNMENT, is sure to prove a valuable asset to the WINNER.

Rival manufacturers would gladly have us let the result of the Contest of Spraying Apparatus die, but how would this suit the purchasers of this kind of apparatus, who have been buying apparatus that has not been satisfactory in use and has caused more people to delay the practice of spraying than all other causes combined?

Send for full particulars in our copy-righted catalogue on the diseases affecting fruit trees, vegetables etc., and their remedies. Over 100 GOLD MEDALS AND THE HIGHEST AWARDS have been granted the Spramotor in 3 years.

Sixty eight outfits are in use by the Ontario and Dominion Governments for experimental work. Adopted by six American and European Governments.

Certificate of Judges' Award:

THIS IS TO CERTIFY that at the Contest of Spraying Apparatus held at Grimsby, under the auspices of the Board of Control of the fruit experimental stations of Ontario, in which there were eleven contestants, the Spramotor, made by the Spramotor Co. of London, Ont., was awarded First Place.

H. L. HUTT, H. PATTIN, Judges.
Agents Wanted.

SPRAMOTOR CO.

357 Richmond St., - London, Ont.

Safes

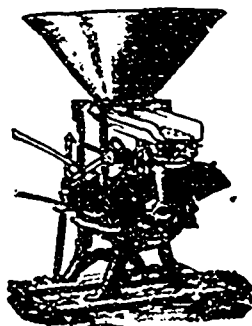
CHAMPION AND BURGLAR-PROOF

Everyone wants a good safe. We make them in all sizes and at prices to suit the times. Sixteen years' trial have proved that ours are second to none.

Send for Catalogue, Etc.

S. S. KIMBALL

577 Craig Street MONTREAL, P.Q



You Can't Make a Mistake

If You Buy this Grinder. It is made by

S. VESSOT & CO.,
Joliette, P.Q

Prices and Terms are right.

now a valuable lot of heifers. To obtain a bull worthy to mate with these heifers they came to the conclusion that Calamity Jane's Paul, the only son of Calamity Jane, though her official test is a little lower (25.1 lbs. in 7 days), it being made after a trip to Brantford. Public test stamps her as a wonderful cow, and this, coupled with her great work in public tests, makes her son altogether desirable, especially as she is no accident, her dam and sire's dam being also great cows, ranking in this respect in the same class as Eunice Clay (84 lbs. 10 oz. in public test), so well known to all breeders. We were extremely loth to put a price on this young bull. But as Messrs. Stevens said, it would be an accommodation to them, as they would let us retain an interest in him, so that we can have the use of him again next year, we thought we should not be selfish. We have bred most of our cows and heifers to this great bull, and his progeny can be had from no other herd in Canada. Calamity Jane's Paul was first prize bull at London and Ottawa. *Hoard's Dairyman* says of a cut of Calamity Jane: "We can find no fault with this cow in any particular."

Maine Farmer says: "She is a grand model of dairy form." Prof. Day allows her in score, total points allowed.

But though we are happy to do a little international trading with our American friends, we are also pleased to have our efforts appreciated at home, and especially right in this great dairy district of Oxford. We have sold four bulls in a short time to remain in Oxford. Mr. Theo. Nancekivell, an extensive dairyman even in the great dairy township of Dereham, where they always go in strong, has purchased a bull from Daisy Texal, and, the heifer that made such a large record at Brantford. Whilst Mr. Boyce, another Derehamite, purchased a yearling bull whose dam is in the advanced registry. Another bull of the same kind we sold to Mr. Kobi. Pedigrew, Bright (Oxford Co.). And our enterprising neighbor, Mr. W. Schell, purchased the young bull Netherland Pieterje Paul, rich in the blood of the best of the breed as his name shows. Mr. Schell has been quite a large feeder of export bees, turning out of his capacious stables each spring 40 to 50 head. But he never does things by halves, and when turning his attention now to dairying believes in having the best dairy breed.

Mr. Daniel O'Mahony, Renton, who is building up a nice herd, purchased a bull calf from the well known veteran as a public test winner, Eunice Clay. So far we have sold eleven bulls this winter. If all buy who have asked for prices we would need a hundred to supply the demand, which shows a great awakening amongst our dairymen as to the necessity of improving their herds.

Mr. Francis Stauffer, Washington, who made some purchases from us last fall, has recently purchased from us the heifer, Dew-drop Clothilde, winner of 2nd in the Brantford test. And Mr. C.A. McArthur, Sarnia, purchased Netherland Jewel Pieterje. She is as perfect dairy machine as they make them.

BRUCE'S SELECTED FARM SEEDS



annual purchases of BRUCE'S SELECTED SEEDS with the same regularity as the agriculturists of Ontario and Quebec. Write for our Illustrated Seed Catalogue, which is mailed free.

JOHN A. BRUCE & CO., Seed Merchants, Hamilton, Ontario

The critical farmer who is more particular about quality than price buys our selected and re-cleaned Clover and Grass Seeds, which are sold at very moderate rates. Write for our special prices, stating quantity required.

SEED GRAIN.

A change of seed invariably increases the product when a good article is procured. We offer carefully re-cleaned samples of Barley, Oats, Field Peas, Fodder Corn, etc.

ROOT SEEDS.

Our stocks of Field Carrots, Mangel Wurzels and Turnip seeds are carefully grown from transplanted bulbs by the most experienced growers in Britain and France; and the Farmers in British Columbia, Manitoba, and the Maritime Provinces make their

Ewing's Selected Seeds

Are thoroughly reliable, and better cannot be found. We MAIL FREE our ILLUSTRATED SEED CATALOGUE FOR 1899

TO ALL WHO WILL SEND US THEIR ADDRESS

PLEASE SEND FOR ONE

Our Assortment comprises all the best varieties of Garden, Field and Flower Seeds, a well as Clovers, Timothy and other Grasses, Corn and Seed Grain. Spray Pumps, etc. Thomas-Phosphate Powder and other artificial manures. Flowering Plants and Bulbs.

WILLIAM EWING & CO.,

147 McGill Street, MONTREAL.

YOU WANT THE BEST SEEDS

We will mail you for trial, post paid, for only **10 CENTS** One Pkt. each of our NEW Golden Dawn RADISH, NEW Sunrise LETTUCE, NEW Everbearing CUCUMBER, Early Tomato and 1 pkt. Show PINKS, Golden CALLIOPSIS, PRIZE PUPPIES, Giant Panicle, Petunias & Satin Flowers

We send you the **10 PKTS.** Seed Annual for 10 cts.

EAGLE SEED CO., Binghamton, N. Y.

Hold On

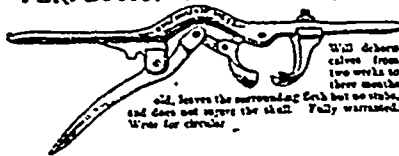
to a good thing when you find it. The planter who once reads Gregory's Seed Book—who once plants Gregory's Seeds, will never begin a season's work without them.

Gregory's Seeds

represent the highest development of scientific seed culture. Gregory's seed book contains the best of seed and flower facts. The book is free to all—the seeds cost no more than the ordinary kind. Send for book at once.

JAMES J. H. GREGORY & SON, Harborside, Mass.

PERFECTION CALF DEHORNER



Will dehorn calves from two weeks to three months old, leaves the surrounding flesh but no skin, and does not injure the skull. Fully warranted. Write for circular.

R. L. WILSON, - Pakenham, Ont.

USE

Ulrich's Ensilage Corn

MAMMOTH WHITE
GIANT PROLIFIC
YELLOW DENT
IMPROVED LEAMING

E. R. Ulrich & Sons
SPRINGFIELD, ILL.

Ask your dealer for samples and testimonials.

The Ashes of Wheat are 76 p.c. Phosphates

By far the greatest portion of which is

...Phosphate of Magnesia...

ALBERTS'

Thomas-Phosphate Powder

Supplies Phosphate of Magnesia as well as Phosphate of Lime and of Iron. Clovers and Turnips should also receive plenty of Phosphate.

WALLACE & FRASER

Masonic Temple,
ST. JOHN, N.B.

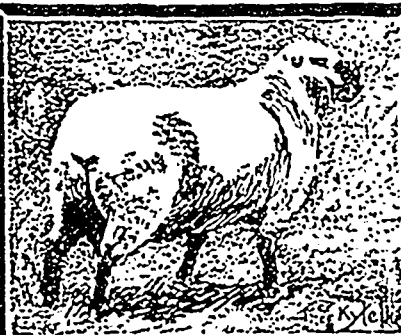
58 Canada Life Building,
TORONTO.

BREEDING NOTES.

The old year is past and gone, and with the new year, 1899, we wish all readers of WEEKLY FARMING a happy and prosperous year. And now, as we start out on the year so well begun, let us one and all endeavor to do all that we can to make Canada's only weekly agricultural paper a first-class, up-to-date live stock journal—a success to the proprietors financially, and to the readers and advertisers a good, readable, profitable journal, full of first-class reading matter and interesting live stock advertisements. If you cannot write something for FARMING, you can go out among your brother breeders and neighbors and get a few subscribers, and don't fail to bring to the notice of your friends the value of a small advertisement. Explain to them the manifold advantages of a weekly over a journal published less frequently.

Is not FARMING a good one for a two year old? Where can you find a better one for the money? If there are any better in Canada I should like to know of it, so I could subscribe. How do you like a weekly agricultural paper? A weekly is certainly a novelty for Canadians. I guess, however, Canadians can appreciate a weekly as well as our friends in the States. Didn't you feel a mite ashamed of Canadian agricultural journalism up to a short time ago, before FARMING launched out as a full-fledged weekly? The Yankees cannot now poke fun at us any more. Let every patriotic Canadian support FARMING—the vanguard of Canadian weekly agricultural journalism. Speak to your neighbor about the paper; ask the breeder, who advertises in other papers, why he does not advertise in this, and any item of yours you imagine should interest its readers send to the Editor.

POSTAL CARD CORRESPONDENCE.—Farmers, as a rule, have not the time to write long articles for agricultural papers. Often many useful ideas come into their minds that would be of great benefit to other readers, and be gladly received by the Editor. Editors, as a rule, hate long articles, and many a good article goes to the waste basket for the simple reason that it is too long. What's the matter, then, with readers sending along items of interest on a post-card. There are a thousand and one things that come up in the everyday work of an observing farmer that, if jotted down on a post-card, and sent to FARMING, would greatly interest its readers. Farmers, send along items of interest on a post card. Don't hide your light. Let it shine on us all.



Persiatic Sheep and Animal Wash

A powerful non-irritant and healing preparation that is proving a boon to farmers all over Canada for sheep and cattle ailments, such as:

- TICKS
- MAGGOTS
- GANGRENE
- SHEAR CUTS
- RED LICE ON SHEEP
- WOUNDS
- RINGWORM
- BRUISES, ETC., ETC.
- AND SCAB.

Full directions on every can. Cures the worst cases. The most effective and economical dip on the market. If your dealer can't supply you, write us direct for it, and if there's anything out of the ordinary in the ailments of your flocks and herds we'll be pleased to give free any additional advice in the matter.

The Pickhardt Renfrew Co.

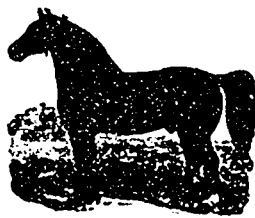
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**Griffiths' Veterinary
...Menthol Liniment**

A Veterinary Medicine Chest in Itself and the most Useful Home Remedy for Horses and Cattle.



IT CURES

Strains, Cuts, Chapped Hocks, Wind Galls, Splints, Strained Tendons, Rheumatism, Over Reaches, Coughs, Colds, Sore Throat, Founder, Lameness, or any Soreness, Swelling, or Inflammation.

Griffiths' Menthol Liniment is endorsed by the highest live-stock authorities as the greatest of external applications.

It never blisters or removes the hair, should be in every home.

Sold by Druggists everywhere—
25 and 75 Cents

The GRIFFITHS AND MACPHERSON CO.
SOLE PROPRIETORS
TORONTO and VANCOUVER, B.C.

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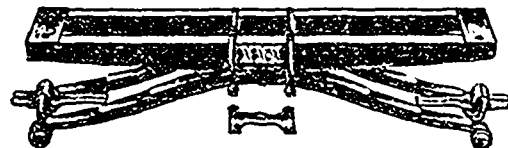
FOR MENDING HARNESS, BELTING, etc. Indispensable to Farmers, Liveries, Men and Threshermen. **STAR RIVETER** complete with 50 rivets. \$1.00 (retailing article ever introduced. Agents write for special prices and territories.

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Carry your Stock and Farm Produce on Waggon's fitted with the celebrated

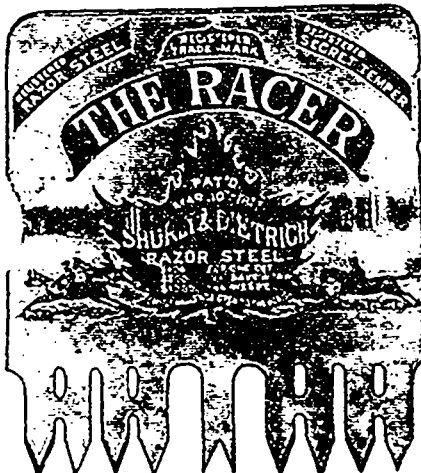
"XXX" Bolster Springs

They are the only perfect spring made in comparison with these all others are useless. Address: J. H. MORROW, General Sales Agent, Brighton, Ont. Special inducements to introduce where we have no agent.



THE RAZOR STEEL, SECRET TEMPER, CROSS-CUT SAW

WE take pleasure in offering to the public a Saw manufactured of the finest quality of steel and a temper which toughens and refines the steel, gives a keener cutting edge and holds it longer than any process known. A saw to cut fast "must hold a keen cutting edge." This secret process of temper is known and used only by ourselves. These saws are elliptic ground thin back, requiring less set than any Saws now made, perfect temper from tooth to back. Now, we ask you, when you go to buy a Saw, to ask for the MAPLE LEAF RAZOR STEEL, SECRET TEMPER SAW, and if you are told that some other saw is as good, ask your merchant to let you take them both home, and try them, and keep the one you like best. Silver steel is no longer a guarantee of quality, as some of the poorest steel made is now branded silver steel. We have the sole right for the "Razor Steel" brand. It does not pay to buy a Saw for one dollar less, and lose 25 cents per day in labor. Your saw must hold a keen edge to do a large day's work. Thousands of these Saws are shipped to the United States and sold at a higher price than the best American Saws.



Maple Leaf Saw Set



Directions.—Place the Set on the point of tooth as shown in the above cut, and strike a very light blow with a tack hammer. If you require more set, file the tooth with more bevel. If you follow directions you cannot make a mistake. Be sure and not strike too hard a blow, and it will set the hardest saw.

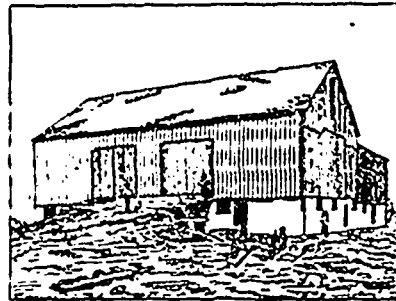
Manufactured only by SHURLY & DIETRICH, Galt, Ont.

Established 1841. 63 Years in Use.

WORK DONE WITH

Thorold Cement

SPEAKS FOR ITSELF



Barn of ALLAN McMANE, Elma Township. Basement Walls, 81x100x9 feet high. Built with Thorold Hydraulic Cement.

ELMA TOWNSHIP, Nov 15th, 1898. It gives me much pleasure to testify to the excellence of your Thorold Hydraulic Cement for building purposes.

If I had stoned on the ground I would not use it, as I much prefer a concrete wall built of your Thorold Cement and gravel.

During the past summer I erected a barn 81 feet by 100 feet, with basement walls 9 feet high. Your Thorold Hydraulic Cement was used in the erection of the said walls. I also put in floors with it for my horses and cattle. It has given splendid satisfaction, and I have no hesitation in recommending it to those who require to use Cement.

My walls and floors are here for inspection, lots 24 and 25, Elma Township. I strongly recommend your Thorold Cement to all farmers who intend building barn walls or putting in stable floors.

Yours respectfully,
ALLAN McMANE,
Atwood P.O., Perth Co., Ont.

Our Thorold Cement is the best and cheapest for Sites, Barn Walls, Floors for Horses and Cattle, Pig Pens, etc. Write us for free pamphlet and full particulars.

AGENTS WANTED in unrepresented districts

ESTATE OF JOHN BATTLE

Mention this paper. THOROLD, ONT.

DISCARD THE SCRUB.—It takes no more to raise a good hog or calf of one of the improved breeds than it takes to raise a poor one. The same amount of care and time is spent on the scrub that would be spent on a pig or calf raised from some one of the improved breeds of hogs or cattle, and when marketed the hog or calf from the improved breeds will bring from one-third to one-half more than the scrub. Besides all this there is the pleasure and satisfaction of handling this stock that you do not have in handling scrub stock. Every farmer should have pride enough about him to discard the scrub from his premises. Every farmer knows that the scrub is a failure. Then why persist in raising him? Why not make the farm profitable by raising the very best horses, cattle, sheep, swine and poultry obtainable? Select the best breed and discard the scrub. Select any breed rather than breed scrubs. Scrubs are hardy? So are the Indians of the western plains. Good stock always pays. Buy nothing but first class males. Don't try improved scrubs! though they may have a pedigree, that some secondary breeders offer at scrub prices. Buy the best or none. The best only pays, and if you have been in the habit of breeding scrub or common stock you will be surprised at the improvement in your flocks and herds. Improved stock means improved feeding, improved owner, and a general improvement all round—in fact, an improved neighbourhood.

AS TO SPRING FARROWS.—In Eastern Canada, and localities of similar climate, I consider from the 15th April to the end of May the best time to have a sow farrow. My sows are bred from about the latter part of December till the first part of February and sometimes later, the older sows being bred first, and the maiden sows being left as late as possible. I have found that March pigs are not profitable and early April is even worse, for they require double the care that a May pig does, and very often in the fall the May pig will outweigh the March pig. A sow farrowing May 1st has had a taste of grass, and has her digestive organs in good condition, and as soon as her litter can run about is ready to be turned on the new grass, and will, aided by a little milk and middlings, push her progeny along very rapidly. The reason given for March farrowing is, at least, a selfish one. It is to get the spring pigs weaned off by the end of April so that the sow may be bred again for an early fall litter. The young March pigs never see the outside, nor taste a bit of grass before being weaned. They are also weaned quite young, as the owner has the fall litter in view. Such spring pigs never make good breeders. Choose a May pig if you want an animal that will make a satisfactory and profitable breeder.

AS TO ADVERTISING PUREBRED STOCK.—Many breeders of live stock stand in their own light. Some depend entirely upon local patronage, and never advertise at all. They cannot make it pay as well as it should pay, for their sales are too few, and at too low a price. They have yet to learn that only a small percentage of farmers buy purebred stock, and that, to secure a share of this patronage, they must make themselves known. There are other breeders who advertise occasionally or spasmodically. They do not get the patronage they would if they kept themselves in view all the time. It is the regular yearly advertiser—the one who keeps his card in first-class mediums every week when he has stock to sell—that gets the patronage. His card may consist of but a few lines—probably not more than one-half inch—and its cost is trifling, but readers become familiar with it, and when they want that kind of stock they know where to apply. When you have an animal to sell the sooner the sale is made the greater the profit; lacking a customer the keep will soon eat up the profit. The man who goes into the business of breeding purebred stock at all should go into it extensively enough to make it pay, and he cannot do this without advertising in reliable journals that are read by intelligent, progressive farmers—the only kind who buy improved stock and are able to pay for it. All things considered, the weekly is the cheapest medium, and, carrying your ad., each weekly visit into the homes of the farmers cannot fail, by reason of its frequency, of good results.
Hermanville Farm. J. A. MACDONALD.

SUNNYSIDE POULTRY YARDS

I have for sale the following varieties of the richest strains of blood that can be produced, winning 495 Prizes at the following shows: Toronto Industrial, Provincial, Quebec, Galt, Drumbo, Paris, Brantford and Burford. Winter Shows:—Ontario, Galt, Brantford and Hamilton.

Choice S.C. and W. Wyandottes, Light Brahmas, Black Langshans, Black Javas, Black Minorcas, Cornish Indian Games, B. B. R. Games, S. G. Dorkings, Brown S. C. Leghorns, Barred, W. and Buff Plymouth Rocks, W. C. Polish, Andalusians, Houdans, B. B. R. Game and Pyle Bantams, M. B. Turkeys.

T. A. COX, - Brantford, Ont.

WE TRUST THE PUBLIC



and send them our Incubator on trial. No charge for it. You pay nothing but first class males. Don't try improved scrubs! though they may have a pedigree, that some secondary breeders offer at scrub prices. Buy the best or none. The best only pays, and if you have been in the habit of breeding scrub or common stock you will be surprised at the improvement in your flocks and herds. Improved stock means improved feeding, improved owner, and a general improvement all round—in fact, an improved neighbourhood.

INCUBATORS Our Machines are the best manufactured in Canada, both hot water and hot air. Surest, simplest, and best system of regulating. Every machine warranted. Prices \$10 up.

EGGS FOR HATCHING from Silver, Golden, and White Wyandottes, Barred Plymouth Rocks, and Pekin Ducks only \$1.50 per setting. Stock unsurpassed.

J. E. MEYER, Box M, Kossuth, Ont



\$8 to \$15 for a Machine to weave your own fence of Colled Hard Steel Spring Wire, 2 1/2 inches high, at 25 Cts. per Rod. 320 buys wire for 100 rods. Agents Wanted. Catalogue Free. WIRE FENCE MACH. CO. Box P Mt. Sterling, O.

S. CROUCH, Box 13 Ridgetown, Ont. General Agent for Canada.
FRED. SMITH, Box 17. Brandon, Manitoba. General Agent for Brandon and The North West Territories.
NO DUTY ON WIRE



SHOEMAKER'S POULTRY BOOK on and Almanac for 1899. 100 pages. 100 illustrations of Yovis, incubators, brooders, Poultry Houses, etc. Tells how to raise chickens successfully, their care, diseases and remedies. Diagrams with full descriptions to build poultry houses. All about INCUBATING, HATCHING and FERTILIZING Poultry, with Lowest Prices. Price only 15c. C. C. Shoemaker, Freeport, Ill., U. S. A.



Incubators and Brooders. Self-Regulating. Special low price for first in any locality. Agents wanted everywhere. Eggs for hatching, by the hundred cheap. B. P. Rocks a specialty. Catalogue free. Address Geo. S. Singer, Cardington, O.



HATCH CHICKENS BY STEAM—with the simple, perfect, self-regulating **EXCELSIOR INCUBATOR**. Thousands in successful operation. Lowest priced in-class hatcher made. GEO. H. STALL, 214 to 220 E. 6th St., Quincy, Ill.



HOW TO START in the POULTRY BUSINESS and how to make it a complete success is the theme of our **POULTRY GUIDE**. Tells all about poultry houses, how to build, cost, etc., and how to breed, feed and market fowls. Treats also of the famous **CYPHERS INCUBATOR** which is delivered freight paid to every purchaser. This machine requires absolutely no artificial moisture. Send 10 cents and get the book. Circulars FREE. THE CYPHERS INCUBATOR CO. Box 69, WAYLAND, N.Y.



Binder Twine
Agents Wanted. Ontario Binder Twine Co., 124 Front St. West. Toronto, Ont.

To the Farmers of this Canada of Ours....

We heartily thank you for the liberal and increased patronage which has made the past year a record-breaker in our business. Remember, we do not class our

Queenston Cement

with the Water-Limes and Hydraulic Cements now on the market, but guarantee it equal to the Imported or Domestic Portlands for all farm structures, such as Basement Walls for Stables, House or Cellar Walls, Cisterns, Hog Pens, Poultry Houses, and for all kinds of Stabling.

Kindly investigate our System of Ventilation. This system is fully covered by letters patent, but to our patrons we make no charge.

Write for our New Pamphlet for 1899, containing containing valuable information, prices, etc.

Isaac Usher & Son, Queenston, Ont.

FIFTH ANNUAL

Canadian Horse Show,

Under the joint auspices of the Country and Hunt Club of Toronto and the Canadian Horse Breeders' Association, to be held in

The Armouries, Toronto, Canada

On Thursday, Friday and Saturday,

April 13, 14 & 15

1899

ENTRIES CLOSE on Wednesday, March 29th, 1899, and should be, as well as applications for Prize Lists, addressed to H. WADE, Parliament Buildings, Toronto.

CANADIAN PACIFIC RY.

Settlers' One-Way Excursions

To Manitoba and Canadian Northwest will leave Toronto every TUESDAY during March and April.

Passengers travelling WITHOUT LIVE STOCK should take train leaving Toronto at 3.15 p.m.

Passengers travelling WITH LIVE STOCK should take train leaving Toronto at 9.00 p.m.

Colonist Sleepers will be attached to each train.

For full particulars and copy of "Settlers' Guide" apply to any Can. Pac. agent, or to C. E. McPHERSON, Assistant General Passenger Agent, 1 King St. East, Toronto.

IMPROVED LARGE YORKSHIRES

A few good boars fit for service. Must be sold at once to make room for sows about to farrow. A cinch if taken at once. Orders booked for March pigs from such sires as Mollington 'ones-3015- and Victor Hugo-3205. Pairs not akin, or single.

L. ROGERS,

Cookville,

Station C.P.R., Tel. and P.O.

Port Credit, G. I. R.

Hermanville Tamworths

PIGS

Ready to wean.

1 Pig, \$10.00

2 Pigs, \$18.00

3 Pigs, \$25.00

Cross-breds

Half-price

Orders booked and filled as received.

Yorkshires Duroc-Jerseys Cross-breds

Every sow in the herd has either been a winner, produced a winner by a winner, or out of a winner. No other herd with such a record. Litters come in April, May and June. Orders now received. Address (P.O. on Farm), HERMANVILLE FARM, P.E.I., Can.

HIGHEST TYPE OF BACON HQS...

Oak Lodge Herd of Large Yorkshires

The Largest Herd of Pure-Bred Yorkshires in America.

This herd has won the best prizes offered for the breed during the last ten years. Only one breed kept, but the choicest of its kind. Three imported stock boars and several sows that have all been winners at the largest shows in England, also winners at prominent Canadian and United States shows. Pigs of a 1 ages for sale.

J. E. BRETHOUR, Burford, Ont.

CHEAP CATTLE FEED

OAT DUST on hand, a good substitute for Bran or Shorts. Delivered at any station of the Grand Trunk or Canadian Pacific Railways. For Prices write to

JAMES WILSON

Monkland Mills, Fergus, Ont.

W. C. EDWARDS & CO. Breeders and Importers

PINE GROVE STOCK FARM, Rockland, Ont.

On the C.P.R. and G.T.R. Railways. Special bargains on young bulls of superior merit and select Scotch breeding. Also thick young heifers at the right price.

Ayrshires, Jerseys, Shropshire Sheep, and Clydesdale Horses.

Post Office, Telegraph Office, and Steamboat Landing, Rockland, Ont., on the C.P.R.

J. W. BARNET, Manager.

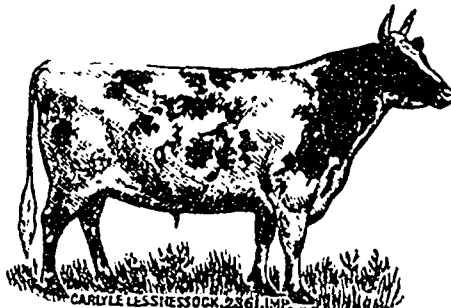


LAURENTIAN STOCK and DAIRY FARM, North Nation Mills, Que.

Ayrshires, imported and homebred herd headed by imported Tam Glen 2nd, No. 1310 D. A. H. B. Jerseys all of the celebrated St. Lambert family; herd headed by Lisgar Fogs of St. Anno's 25704 A. J. C. C. Berkshire Pigs. Young stock of all the above breeds for sale.

Post Office, Telegraph Office, and Railway Station, North Nation Mills, P.Q., on the C.P.R.

A. E. SCHRYKER, Manager.



PUREBRED AYRSHIRE IMPORTED CATTLE

Largest and Most Expensive Importation in America

Bred for the Dairy, with Grand Constitution, and Champion Prize Records awarded them in Scotland and England

Sweepstake Herd—Montreal, Toronto, London and Ottawa in 1897

Awarded four years in succession Herd Prize at Ottawa's Great Exhibition, and Special Gold Medal. At Montreal, Herd Prize and Mr. W. W. Ogilvie's Special \$100 Prize.

Their individual Prize Records are of the same distinguished honors of the four years of their exhibition career.

Stock all Ages for Sale, and at prices in reach of all

Maple Grove Ayrshire Stock Farm
LYN, ONT.
Line—G.T.R.

R. G. STEACY,
Importer and Breeder,
Box 720. BROCKVILLE, Ont.

Auction Sale OF THE VALLEY HOME HERD OF Shorthorn Cattle

On Wednesday, March 22nd, 1899, at our Farm one mile from Meadowvale Station, C. P. R.

Our entire herd of Shorthorns, consisting of 30 head, comprising such well-known Scotch families as Nonpareils, Minas, Jilts, Ceccillas, Bessies, and Duchesses of Gloster. Sired by the best imported Cruickbank and Campbell bulls. Among the lot are some very fine show animals, bred from imported stock, as well as cows that are very heavy milkers. The young things are a choice lot, sired by such imported bulls as British Statesman, Comet, Golden Crown and Grand Sweep. In all ten bulls will be offered, also the imported bull, British Statesman, a first-class show bull, bred from one of the best milking strains in Scotland. See Catalogue, which will be sent on application. All will be sold without reserve, as Mr. Pearson is giving up farming.

JOHN SMITH, M.P.P., Auctioneer, Brampton.

S. J. PEARSON & SON, Meadowvale, Ont.

J. BUCHANAN, Napier, Ont., Breeder reg. Aberdeen Angus Cattle. Stock by Lord Forest for sale.

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| Rubber Goods | Cloth Goods |
| Rubber Coats | Bindor Canvas |
| Rubber Boots | Grain Bags |
| Rubber Overshoes | Malt Bags |
| Half Sole Rubbers | Your Pants |

PATCHALL will not do impossible things. It will not make a worn out garment new, nor mend one run over by a railway train, but it will mend all as stated above, and nothing less. Eight patches, 3 inches square, for a cent. If you cannot obtain it from your hardware dealer, send 25 cents and we will mail a can to your address, prepaid. Manufactured by

DOMESTIC SPECIALTY CO.
Hamilton, Ont., Canada.

REGISTERED

Aberdeen Angus Cattle

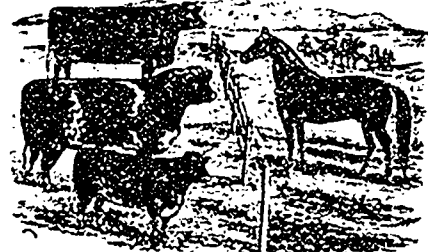
FOR SALE, young bull 13 months old, 3 heifers rising 1 year old, 1 heifer 2 years old, in calf. All registered or eligible for registration in American Herd Book and of first class quality and breeding. Prices and terms reasonable. Apply to

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The Ontario Agricultural Gazette

The Official Bulletin of the Dominion Cattle, Sheep, and Swine Breeders' Associations, and of the Farmers' Institute System of the Province of Ontario.

THE DOMINION CATTLE, SHEEP, AND SWINE BREEDERS' ASSOCIATIONS.

Annual Membership Fees:—Cattle Breeders' \$1; Sheep Breeders', \$1; Swine Breeders', \$2.

BENEFITS OF MEMBERSHIP.

Each member receives a free copy of each publication issued by the Association to which he belongs, during the year in which he is a member. In the case of the Swine Breeders' Association this includes a copy of the Swine Record.

A member of the Swine Breeders' Association is allowed to register pigs at 50c. per head; non-members are charged \$1.00 per head.

A member of the Sheep Breeders' Association is allowed to register sheep at 50c. per head, while non-members are charged \$1.00.

The name and address of each member, and the stock he has for sale, are published once a month. Over 10,000 copies of this directory are mailed monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States, also to prominent breeders and probable buyers resident in Canada, the United States and elsewhere.

A member of an Association will only be allowed to advertise stock corresponding to the Association to which he belongs; that is, to advertise cattle he must be a member of the Dominion Cattle Breeders' Association, to advertise sheep he must be a member of the Dominion Sheep Breeders' Association, and to advertise swine he must be a member of the Dominion Swine Breeders' Association.

The list of cattle, sheep, and swine for sale will be published in the third issue of each month. Members having stock for sale, in order that they may be included in the Gazette, are required to notify the undersigned by letter on or before the 9th of each month, of the number, breed, age, and sex of the animals. Should a member fail to do this his name will not appear in that issue. The data will be published in the most condensed form.

F. W. HODSON, Secretary.
Parliament Buildings Toronto, Ont.

INSTITUTE MEETINGS.

The following is the average attendance at meetings, reports of which have been received since the last list published:

Algoma, East.....	19
Brant, North.....	50
Bruce, Centre.....	62
Bruce, South.....	238
Cornwall.....	65
Dufferin.....	32
Elgin, West.....	58
Essex, South.....	93
Haldimand.....	137
Halton.....	225
Lambton, East.....	63
Lambton, West.....	74
Middlesex, West.....	65
Norfolk, South.....	65
Oxford, North.....	103
Perth, North.....	119
Stormont.....	95
Waterloo, South.....	45

The following is a list of the members received since the last list published:

Algoma, East.....	11
Bruce, Centre.....	31
Bruce, South.....	60
Cornwall.....	3
Durham, West.....	7
Elgin, West.....	61
Essex, South.....	158
Haldimand.....	128
Halton.....	127
Huron, South.....	1
Kent, East.....	95
Lambton, West.....	133
Lincoln.....	58
Middlesex, North.....	6
Middlesex, West.....	8
Norfolk, South.....	107
Oxford, North.....	108
Perth, North.....	57
Prince Edward.....	11
Russell.....	82
Simcoe, South.....	4
Stormont.....	33
Victoria, East.....	2
Victoria, West.....	4
Waterloo, South.....	85

F. W. HODSON.

REPORT OF THE SECRETARY.

ASSOCIATION CARS OF LIVE STOCK.

During the past year six carloads of pure-bred stock have been taken direct charge of by the Live Stock Association, and stock has been delivered at almost all points in Manitoba, the Northwest Territories and British Columbia.

In addition to the above, shipments have been made in other directions. Last spring an order was received from the Newfoundland Government for a Shorthorn bull. The bull was purchased from W. G. Pettit & Son, Freeman, and so much pleased were the purchasers with the selection made that an additional order for forty breeding ewes was received.—20 Cotswolds, 10 Southdowns, and 10 Shropshires. This shipment has recently arrived at Newfoundland and word received from the attendant that he had arrived safely at St. Johns, although a rough passage had been encountered between North Sydney, Cape Breton, and Newfoundland. We have also at the present time an order from the Newfoundland Government for an entire horse. These were trial shipments, and it is confidently expected that this is only the beginning of what will eventually be a profitable trade in pure-bred stock from Ontario to Newfoundland. The car was shipped *via* C.P.R. to North Sydney, where the stock was re-shipped to St. Johns *via* boat. The sheep were assembled at North Toronto—14 being shipped from Guelph, 10 from Brantford, and 10 from Waterford, while 6 were delivered at North Toronto. The C.P.R. and T.H. & B. allowed the privilege of the sheep being placed in the car without being crated, and the charges were as follows: From Guelph, 14 head, \$3.60; from Waterford, 10 head,

\$3.30; from Brantford, 10 head, \$3.08. The car from North Toronto to Sydney (1,200 miles) was only \$57.60, and the attendant was allowed return transportation at one cent per mile over the C.P.R.

During the past year two partial carloads have been made up by the associations to be forwarded to the United States, one for the State of Michigan and the other for the State of New York.

When orders are received, having lists of stock for sale, elsewhere described, the secretary can easily buy to the best advantage both for buyer and seller. No commission is ever charged, and as the railways are very liberal in the matter of transportation the expense of getting an order together it very little.

OUTLINE OF PLAN FOR ASSEMBLING AND DISTRIBUTING STOCK FOR MANITOBA AND THE NORTHWEST.

By the associations taking charge of less than carload lots and assembling and making up the carloads, shippers of small lots obtain the benefit of the carload rate. These rates have been taken advantage of by breeders both in Ontario and the West, and the large number of enquiries now being received regarding rates shows that our efforts in the direction of cheaper transportation are well known among stockmen generally, and that the reduced rates at which pure-bred stock can now be delivered in the West are appreciated.

In order that the cost may be as light as possible to shippers, a car is started at the farthest western point in Ontario at which stock is to be loaded and consigned to the farthest point at which unloading is to be done in the Northwest. Arrangements are made for a stop over at the necessary points for loading and unloading, stock not already on the main line being shipped to the nearest point; the car arrives at the designated places according to a time table which is prepared and a copy forwarded to each shipper. On account of the reduced rates on less than carload lots, the local cost of shipment in order to meet the car on the main line is comparatively light.

LOCAL SHIPMENTS OF REGISTERED CATTLE, SHEEP OR SWINE.

One matter, however, should be impressed on all shippers of purebred stock between local points. In order to obtain the reduced rates for pure-

bred stock (one-half regular tariff rate) it is absolutely necessary to produce the certificate of registration for the inspection of the station agent at the shipping point. See that the name and number of each animal are entered on the shipping bill, then if the reduced rate is not allowed there will be no difficulty in obtaining a rebate. Unless this is done the railway companies will simply state that the rules governing the shipment of purebred stock have not been complied with.

Immediately the car leaves Ontario, full particulars are sent to Mr Robert Kerr, freight traffic manager of the C.P.R. at Winnipeg, giving the various points at which stock will be unloaded and the charges to be collected on each shipment. Upon the car reaching Winnipeg Mr. Kerr gives the attendant in charge of the car a letter to each of the station agents at points where the stock is to be unloaded, authorizing the agent to advance the amount of our charges on the shipment to be unloaded at his station, he (the agent) to collect these charges again from the buyer upon delivery of the stock. The co-operation of the railway company in this respect has been of great service to us, as some parties to whom stock is to be delivered cannot be at the station, not knowing exactly when the car will arrive and living perhaps twenty or thirty miles off the railway. If this system were not employed it would necessitate the car stopping over at each point two or three days in order to deliver the stock and collect the charges. As it is now, stock is given in charge of the station agent, the charges collected and the car goes forward on the same train; from one week to ten days' time is saved in this way. Stock to be delivered at some point not on the main line of the C.P.R. in Manitoba or the Northwest is reshipped from the nearest junction point on the main line, at the reduced rates given hereafter. As the reshipping is done by the attendant in charge of the car a stopover until the next train is necessary. Our charges to the junction point on stock to be reshipped are advanced by the station agent and the amount collected at the destination together with the charges for transportation from the junction point to the destination.

(To be continued).

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Double Strength
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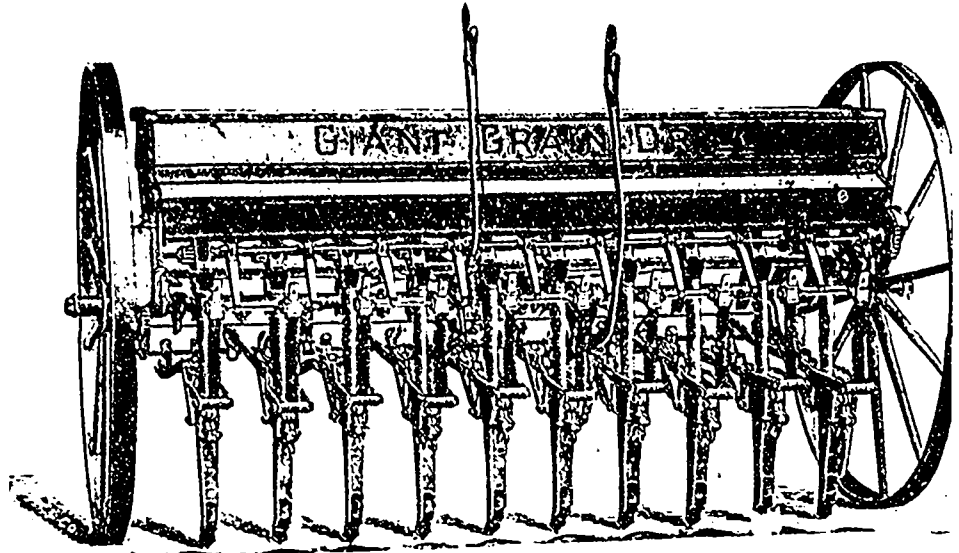
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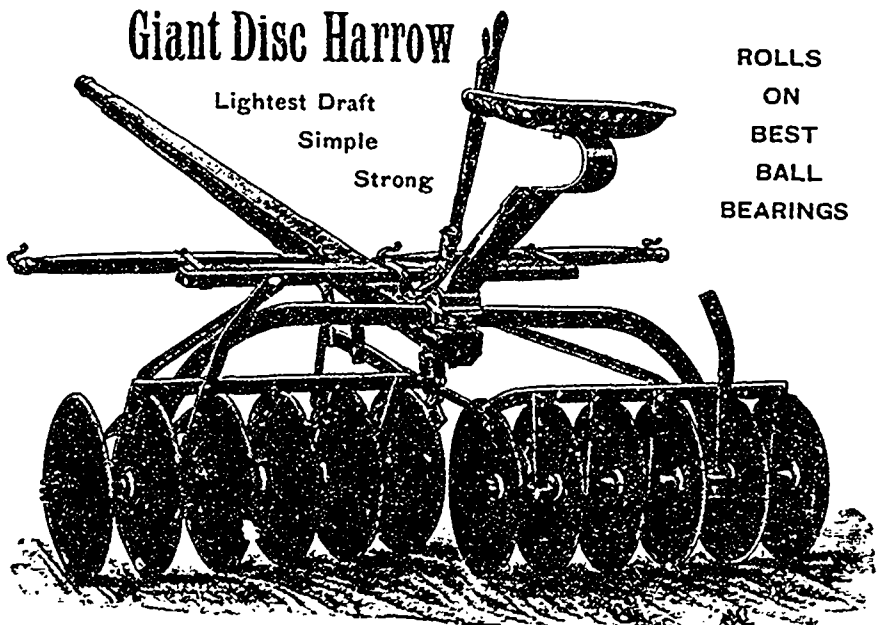
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MARKET REVIEW AND FORECAST.

Office of FARMING,

44 and 46 Richmond street west,
Toronto, Mar. 6th, 1899.

In trade circles the volume of new business is steadily increasing and business men have the utmost confidence in the future. Money seems to be plentiful for all available purposes. There is always a danger, however, when times are brisk of over-trading, which should be guarded against at the present time.

Wheat.

The wheat market continues to move along in about the same groove, and on the whole the situation has not improved any during the week. Speculators are watching the crop reports as to the condition of the coming crops. It is early yet to make any definite estimate as to the position of winter wheat. Farmers report that the wheat fields have a yellow appearance, showing that the leaves of the plant have been affected by the severe cold weather early last month. However, the roots may be all right and everything will depend upon the weather from this out. Reports from the Western States are along the same line and further developments are awaited. On the market situation last week's *Price Current* has this to say: "The wheat markets have not made striking changes during the week, closing moderately better than a week ago. Speculative interests appear inclined to accept the view that the developments concerning the winter crop are likely to prove increasingly unfavorable. But unless this should be justified by later evidence it would appear that the American markets must be largely influenced by the European markets which receive our surplus—for there is yet a liberal surplus in this country, fully equal to meeting any probable foreign call for it."

The leading European and American markets showed an easier tendency during the week. At Chicago the prices of futures went down fully one cent on Thursday out of sympathy with Old Country markets. There is not much doing in wheat at Montreal. The sale of a lot of No. 1 Northern Manitoba wheat at 67½c. afloat at Fort William for export account is reported. The market here has been steady at 69 to 70c. for red and white west. Goose wheat is quoted at 68c. and No. 1 Manitoba hard at 81 to 82c., Toronto. On the local farmer's market red and white is quoted at 73 to 73½c., spring five at 71c., and goose at 69 to 70c. per bushel.

Oats and Barley.

One of the features of the grain market is the activity in oats. There is a good demand at Montreal for export account. Large sales are reported west of Toronto at 31½c. during the week, and a strong feeling appears to exist at most points. Quotations here are higher

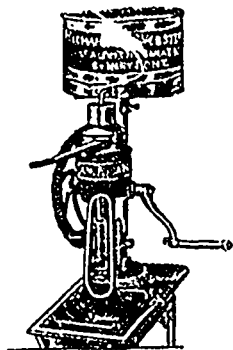
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Richardson & Webster,

ST. MARYS, ONTARIO

at 29 to 30½c. for white west, and 31½c. east. On the local market oats are worth from 34 to 34½c. per bushel.

There seems to be very little inquiry for barley. Quotations here are 46 to 48c. for No. 1 west. On the local market it brings from 47 to 47½c. per bushel.

Peas and Corn.

There is a fair enquiry at Montreal for peas for May delivery, and 76c. is being offered for round lots afloat, but holders appear to want more money. The market here is firm at 65 to 67c. north and east in car lots. The quotations on the local market are 64 to 64½c. per bushel.

Corn in the west is somewhat easier. Canadian yellow is quoted here at 36c. west, and American at 41½ to 42c. on track here.

Dran and Shorts.

Ontario white wheat bran sells at Montreal at \$15 to \$15.25, and shorts at \$15.50 to \$16, and Manitoba bran at \$16, and shorts at \$18 per ton. City mills here sell bran at \$14.50, and shorts at \$16.50 in car lots f.o.b. Toronto.

Clover and Timothy Seeds.

On the Toronto local market red clover is quoted at \$3.30 to \$3.70; white clover at \$5 to \$8; alsike at \$3 to \$4.20, and timothy at \$1.20 to \$1.35 per bushel.

Eggs and Poultry.

Receipts of new laid eggs at Montreal have not been large and the demand is sufficient to take all offerings at prices ranging from 22 to 24c. Lined are quoted there at 15½ to 16½c. and cold storage stock at 14 to 15c. There is not enough good stock here to supply the demand. Strictly new laid bring from 20 to 22c. and lined 14 to 16c. On the local market new laid eggs bring from 18 to 20c. per dozen.

The Montreal poultry market is quiet but firm with very small receipts. Fresh killed turkeys are quoted at 11c.; chickens at 9½ to 10c.; ducks 8 to 9c. and geese at 6 to 7c. per lb.

Potatoes.

There is a fair demand at Montreal for these, and sales of car lots of choice stocks are imported at 55 to 56c. per bag. There is a fair demand here for good stock, and cars on track are quoted at 60 to 65c., and out of store at 65 to 70c. per bag. On the local market potatoes are worth from 75 to 80c. per bag.

Fruit.

Apples on the local market here bring from \$2.50 to \$3.75 per barrel.

Hay and Straw.

There is not much change to report in the hay situation. At Montreal there is a fair demand for baled hay for export, but the local demand is slow. Quotations are: No. 1, \$5.50 to \$6; No. 2 extra, \$4.25 to \$4.75; No. 2 clover mixture, \$4; and clover, \$3.50 to \$3.75 per ton. Baled hay is dull here at \$6 to \$7.00 for cars on track. Baled straw brings from \$4 to \$4.50 in car lots. On the local market timothy hay brings from \$8 to \$9.00, clover \$6 to \$7.00, straw in sheaf \$6 to \$7, and loose straw \$4 to \$5 per ton.

Cheese.

The London, England, cheese market has a firmer tone and the recent decline in prices has stimulated the demand very much. The finest Canadian is quoted there at 49s. to 50s., and seconds at 47s. to 48s. Cheese at Montreal is firm and to buy any quantity ½ to ¼c. more would have to be paid than a week ago. Quite a lot of cheese has gone forward lately, but they were mostly goods stored for English account. Finest westerns are quoted at 9½ to 10c., and finest easterns at 9½ to 9½c. The shipments from New York have been very large of late and last week they were three times as much as they were the same week last year. This would indicate that there is a good demand on the other side which the Americans are ready to supply. The total shipments of cheese from Montreal from May 1st, 1898, to date are 2,199,901 boxes as compared with 2,478,785 boxes for the corresponding period last year, showing a decrease of 258,884 boxes. The shipments for New York for the same time were 366,038 boxes as against 661,428 boxes for the same period in 1897, showing a decrease of 295,390 boxes, thus making the total decrease from both Canada and the United States 554,274 boxes.

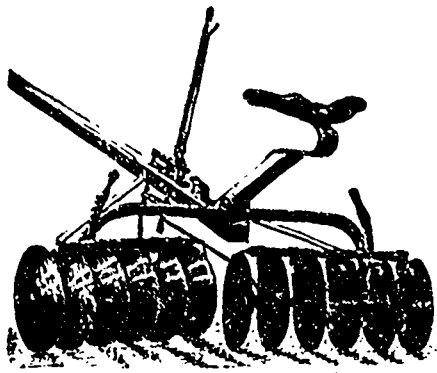
Butter.

The *Trade Bulletin's* special London cable of March 2nd reads thus: "The market is dull and easier for Canadian creamery, owing to liberal imports from Australia, and prices have sustained a further drop of 2s. per cwt. Finest Canadian creamery 96s. to 98s." But the English market at this time of the year affects this market very little as the supplies are only about sufficient for the local demand. There will likely be a larger supply in a few weeks when the spring opens up, when we will have to depend more on the export market. Some sales of fine creamery butter have been made at Montreal during the week at 20½ to 20¾c., and of second quality at 19½ to 20c. There is some export enquiry for Western dairy, and small orders have been filled at 14 to 15c. The total exports from Montreal from May 1st, 1898, to date are 352,735 packages as compared with 258,511 packages for the same time a year ago, showing an increase of 94,224 packages. The total shipments from New York for the same period were 129,217 packages as compared with 184,387 packages in 1897, showing a decrease of 55,170 packages and making the net increase from both places 39,054 packages.

Receipts are a little more liberal here, but there is a good demand for anything good, and prices kept steady at 14 to 16c. for large dairy rolls, and 13 to 15c. for tubs. Creamery is quoted at 20 to 22c. for prints, and 19 to 20c. for tubs.

Cattle.

On the whole the cattle situation shows some improvement over a week ago. Beef cattle have been fairly steady at the western markets, with some complaints of inferior quality. There appears to be an active demand for feeders. The market here is active, and trade has been good, with prices firm and well-maintained for all good cattle. The quality of the fat cattle offered has been fairly good.



A Disk Harrow Given Free to any FARMER who intends buying this spring, if he will first, by actual field work, find any other Cultivator, Disk Harrow, or Pulverizer that will do **AS MUCH WORK** with **AS LITTLE HORSE POWER** as

THE "BISSELL" DISK HARROW

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Export Cattle.—Choice loads of heavy exporters sold on Friday at \$4 85 to \$5, with light exporters bringing \$4 50 to \$4 65 per cwt. Some choice ones brought 10 to 15c. per cwt. more. Choice heavy bulls bring from \$3.75 to \$4 12½, and light bulls \$3.40 to \$3.60 per cwt.

Butchers' Cattle.—Choice picked lots of butchers' cattle, equal in quality to the best exporters, but not so heavy, bring from \$4.25 to \$4.35; good ones from \$4 to \$4.10, and medium at \$3.65 to \$3.85 per cwt. Common butchers' cattle bring from \$3.35 to \$3.50, and inferior \$3.10 to \$3.25 per cwt.

Stockers and Feeders.—Buffalo stockers were in good demand on Friday, selling all the way from \$3.25 for inferior to \$3.40 to \$3.60 for medium, while choice-bred steers bring as high as \$3.75 per cwt. Heavy feeders of good quality are not plentiful, those weighing from 1,000 to 1,100 lbs. bring from \$3.80 to \$4.15 per cwt. Stock heifers bring from \$2.80 to \$3 per cwt.

Calves.—These bring from \$2 to \$10 each, the bulk going at from \$5 to \$8 each

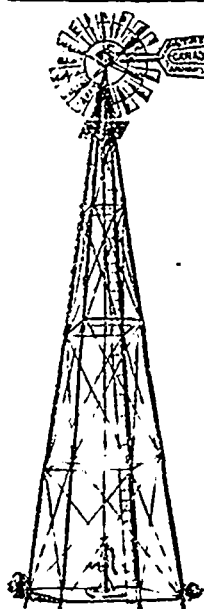
Milk Cows and Springers.—These are worth from \$25 to \$45 each as to quality.

Sheep and Lambs.

The sheep markets have been fairly active during the week. Offerings at Buffalo have been fairly liberal and trade fairly active. The receipts on this market have been fair, ewes selling from \$3.25 to \$3.50 and bucks at \$2.50 to \$2.75 per cwt. On account of a light run yearling lambs were firmer on Friday at \$4.50 to \$4.75 per cwt.

Hogs.

The deliveries on Friday were the smallest of the season, being about 300. Choice select bacon hogs sold for \$4.25 per cwt., light ones at \$4 and thick fats at \$3.75 per cwt. Drivers from all parts of the country report that many farmers are going out of hog raising because of the low prices, but we fancy this is not altogether correct, as there never was a greater demand for breeding stock of the bacon breeds than at the present time.



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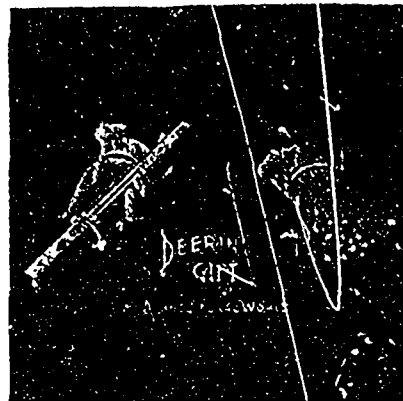
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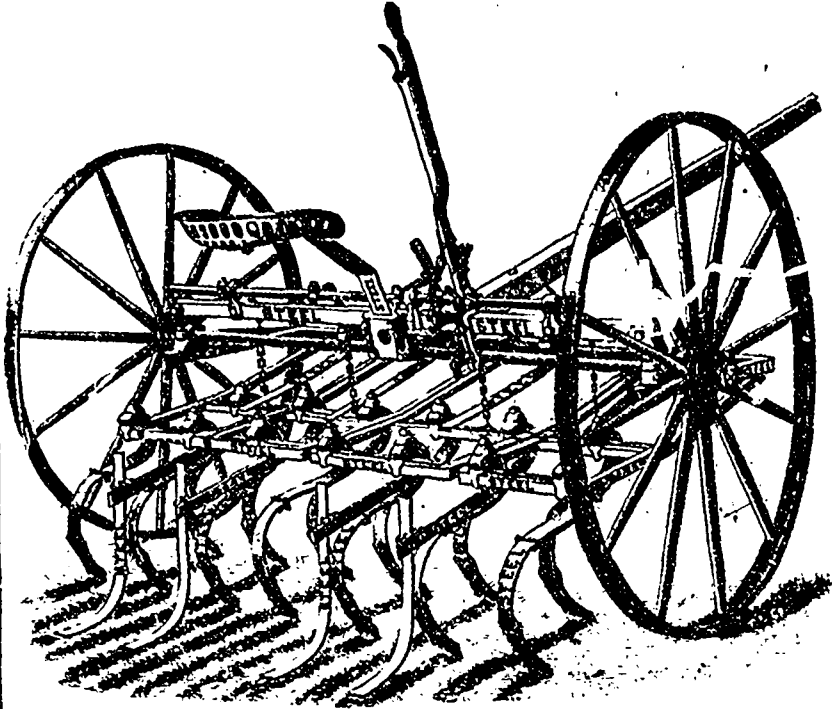
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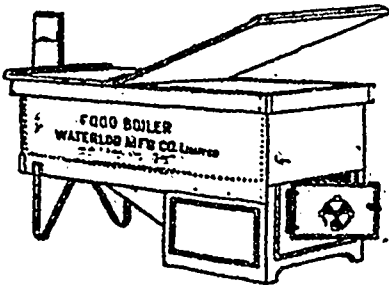
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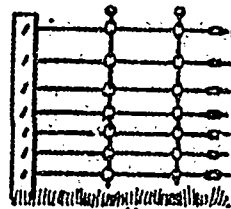
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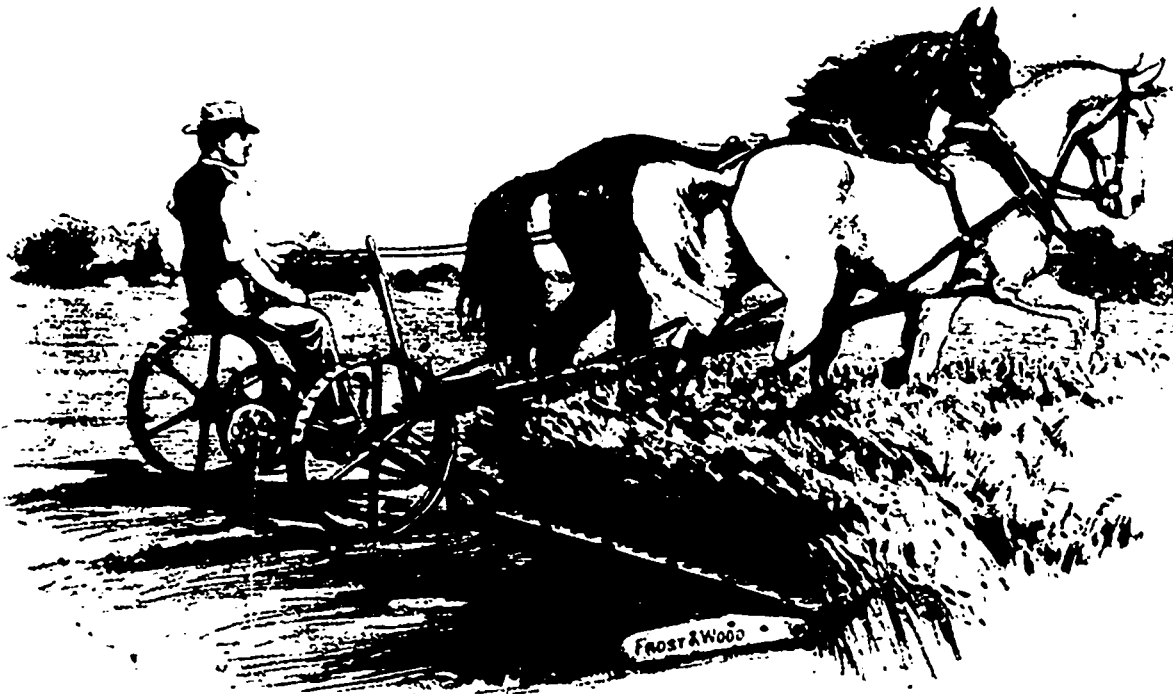
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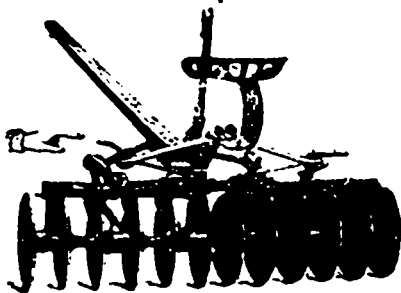
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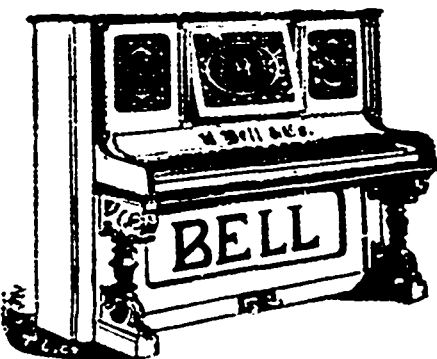
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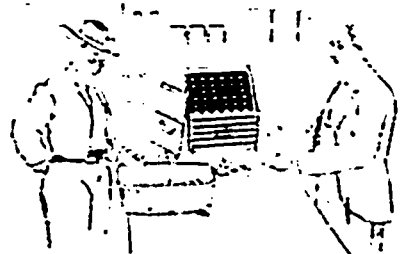
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