

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- Coloured covers/  
Couverture de couleur
- Covers damaged/  
Couverture endommagée
- Covers restored and/or laminated/  
Couverture restaurée et/ou pelliculée
- Cover title missing/  
Le titre de couverture manque
- Coloured maps/  
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black)/  
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations/  
Planches et/ou illustrations en couleur
- Bound with other material/  
Relié avec d'autres documents
- Tight binding may cause shadows or distortion along interior margin/  
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/  
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- Additional comments:/  
Commentaires supplémentaires:

- Coloured pages/  
Pages de couleur
- Pages damaged/  
Pages endommagées
- Pages restored and/or laminated/  
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/  
Pages décolorées, tachetées ou piquées
- Pages detached/  
Pages détachées
- Showthrough/  
Transparence
- Quality of print varies/  
Qualité inégale de l'impression
- Continuous pagination/  
Pagination continue
- Includes index(es)/  
Comprend un (des) index

Title on header taken from:/  
Le titre de l'en-tête provient:

- Title page of issue/  
Page de titre de la livraison
- Caption of issue/  
Titre de départ de la livraison
- Masthead/  
Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/  
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

# Farming

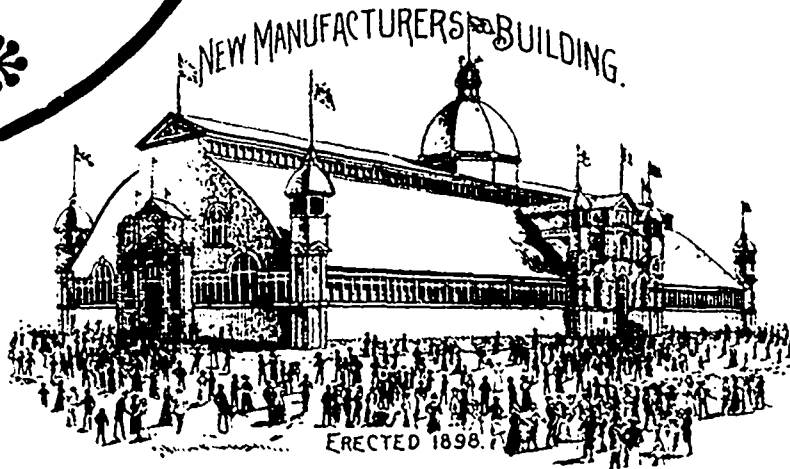
A Paper for  
Farmers and Stockmen



Twelfth Annual

## Exhibition

AT OTTAWA ONT.



Ground Floor space, 11,510 square feet

### Sept. 11th to 23rd, 1899

### TWO WEEKS

For Prize Lists, Posters, Race Programmes, and all information,  
write

E. McMAHON, Secretary, 25 Sparks St.



## Ayrshires

### ...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.

R. NESS & SONS, Howick, Que.

### CHOICE AYRSHIRES

Hickory Hill Stock Farm



Special Offer for March and A. All One Cow and Young Bulls from prize-winning sire and dams that have won milk tests, one with record of 62 lbs. per day.

M. DYMENT, Clappison's Corners, Ont.

FOR SALE

### One Ayrshire Bull

Fit for service. Also some Spring Calves.

WILLIAM STEWART & SON  
Menie, - Ont.

### GLENHURST HERD OF YORKSHIRES.

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.

506

## Ayrshires and Yorkshires FOR SALE

One choice yearling Ayrshire bull, fit for service, will be sold cheap to a quick buyer. Also a number of choice bull and heifer calves, sired by White Prince (imp.). Also Yorkshire pigs of the right bacon type. Prices low.

JOHN H. DOUGLAS,  
MARKWORTH, ONTARIO

### Elm Shade Farm



The head of the herd is Lord Sterling, a prize winner. The imported Cows, Blue Bell, White Glen, and Kate Wallace, belong to this herd. Won the herd prize at Montreal in 1897, against strong competition. Young stock of both sexes for sale bred from imported and prize-winning stock. WM. WYLIE, Howick, Que., or east Bleary St., Montreal.

# Dentonia Park Farm

EAST TORONTO  
(Coleman P. O.)

W. E. H. Massey, Proprietor

Address DENTONIA PARK FARM, Coleman, Ont., Canada

### Dentonia Jersey Herd

Two handsome young bulls for sale, fit for service; one out of imported stock and one a splendid type of the St. Lambert family. Prices and particulars on application.

### Dentonia Poultry Yards

Poultry department in charge of Frank R. Webber, formerly of Guelph. Handsome Pens of White and Brown S.C. Leghorns, Barred P. Rocks, Black Javas, White Langhans, Pekin Ducks. Eggs in season, 15 for \$2, or 30 for \$3.50. Stock for sale. Also Embden Geese or Turkeys.

### Dentonia Trout Ponds

This year's fry in fine healthy condition ready for delivery, also yearlings. Market Trout supplied to the trade.



**DON'T** make a mistake  
**BUT** ask your Dealer for  
**ROBERTSON'S**  
the Best  
**PAINTS** in the Market

THE JAMES ROBERTSON CO. Limited  
The Paint Makers..... TORONTO

H. & J. McKEE, Brookside Farm, Norwich, Ont.  
Breeder's Ayrshire Cattle, Silver Grey Dorkings.

J. YVILL & SONS, Meadowside Farm, Carleton Place, Ont., Breeder's Ayrshire Cattle, Shropshire Sheep, Berkshire Swine and Barred Plymouth Rock.

THE OLDEST ESTABLISHED FLOCK OF  
OXFORD-DOWN SHEEP IN CANADA.

Animals of all ages and both sexes for sale at all times. Reasonable.  
HENRY ARKELL, Arkell P.O., Ont.

### MAPLE CLIFF STOCK AND DAIRY FARM

STOCK FOR SALE

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

R. REID & CO.,  
Hintonburg, Ont.  
Farm one mile from Ottawa. Street Cars to Farm.

### Alva Farm GUERNSEYS



Awarded first prize at Montreal for BREEDERS YOUNG HERD. Young animals of merit for sale. Pedigrees and particulars to parties wishing to purchase. Address, SYDNEY FISHER, Knowlton, Que.

### Binder Twine

Agents Wanted. Ontario Binder Twine Co., Union Station Arcade Toronto, Ont.



ROCK SALT for horses and cattle, 100 lbs., 70c., 500 lbs., \$3.00, Toronto. Cash with the order. Also in car lots.  
Toronto Salt Works, TORONTO

## Des Moines Incubator

SURE TO GIVE  
SATISFACTION

Rock Roy Farm Sole Agent for the Dominion. Send 2 cent stamps for Illustrated Catalogue of Poultry and Poultry Supplies. Poultry's Guide, New Edition, 15 cts. per mail. P.O. Address,

24 St. Sulpice St., Montreal.

## W. D. FLATT HAMILTON P.O. and TELEGRAPH OFFICE



### OFFERS FOR SALE

Twenty-two Choice Shorthorn Bulls from three to fifteen months old. Persons requiring Show Bulls can be supplied from this bunch.

Twenty Cows and Heifers, sired by imported bull Golden Fame-2006. Prices consistent with quality. Inspection invited.

# FARMING

VOL. XVI

JUNE 27th, 1899

No. 43

## The Farm Fence

There is no more important part of the farm work than that of maintaining and keeping in repair the fences. In many sections good fencing timber is getting scarce and the farmer has to resort to other means than the old rail fence to keep his farm in order. Wire fencing has come into general use in many districts and many other kinds of patent fences, all, perhaps, having their good and bad qualities. A great many very durable fences have been made by utilizing the timber in the old rail fences, and this has been perhaps the favorite method where the old rail fences were not altogether out of repair. The barbed-wire fence was much talked of at one time, but seems to have been almost entirely replaced, in this country at least, by the plain or woven wire fence which latter, as will be seen from the correspondence column, is coming largely into use.

In order to get some definite information on this subject, and information covering as wide an area as possible, we wrote to a number of representative farmers and others in various parts of the province, submitting the following questions:

- (1) What kind of fence is mostly used in your locality?
- (2) To what extent is wire fencing used, and does it meet all the requisites of a farm fence?
- (3) Where wire fencing is used on the road-sides, has it been effectual in keeping the roadway free from snow-blockades?
- (4) Do you think the plan of having every farmer fence off or herd his stock, and not having fences along the roadway, workable?

We have already received a number of replies to these questions and expect more. We would also be glad to hear from anyone who has information to offer on the subject. We will publish these replies in full. Part of them appear in our correspondence column in this issue and the publication of the balance will be continued in next week's and succeeding issues.

## Seed Growth and Selection

Dr. Saunders, in his reply to Prof. Robertson, before the Committee on Agriculture and Colonization, lays down the following as the underlying principles in successful farming, and says that the experiments conducted at the farms under his direction have been along these lines:

- (1) The maintenance of the fertility of the soil, by the proper care and use of barnyard manure, ploughing under of green crops, and the economizing of the elements of fertility by judicious rotation of crops.
- (2) Best methods of preparing the land for crop.
- (3) Importance of early sowing.
- (4) Best varieties of grain, fodder plants and roots to sow in the several climates of the Dominion, taking into consideration productiveness, quality, and earliness of ripening.
- (5) Selection of plump and well-ripened seed for sowing.

Though he regards the selection of seed as of great importance, yet he lays stress upon the individuality impressed upon the seed by nature as something beyond control. He concludes that varieties deteriorate by long and careless cultivation, but does not point out whether both these conditions must run together to cause deterioration,

or whether either one of them tends toward it. From the fact that the changing of seed and the use of barnyard manure alone as a manurial application with careful cultivation has practically been strongly advised by the Dominion Experimental Farms, it is assumed that the director considers that long continued seeding of a variety in one locality makes for deterioration in quality and grain yield.

Against this view Prof. Robertson contends that if careful selection and proper cultivation and manuring suited to the production of grain or fruit be employed the varieties will improve and at the same time become so acclimated as to be locally superior, but that in barn-yard manure alone there is such a want of the elements required for the best grain and fruit development that the varieties deteriorate through want of a properly balanced ration even though the cultivation is otherwise superior. If Prof. Robertson is right we have, perhaps, an explanation of the failure to improve, by long continued cultivation, varieties grown on the Experimental Farms.

A danger may lie in these two authorities not understanding one another fully. A practical improvement in wheat, for instance, must give an increased quantity of grain. To effect quantity there must be a full supply of nitrogen both for the grain and the straw. And there must be plenty of potash, more particularly for the straw. Then after this, according to the highest authorities there must be an excess of phosphoric acid to ensure the fullest grain development and ripening. If then the nitrogen is withheld, as Prof. Robertson's remarks seem to suggest, but which he surely does not mean, the grain must deteriorate in quantity though being very plump and hard. If plenty of barn yard manure containing an excess of nitrogen with a deficiency of phosphate, which seems Dr. Saunders' ideal plan, be used, even the nitrogen may be considerably wasted for want of the balance required.

However, by following Dr. Saunders' plan, the yield of straw would incline to be excessive in comparison with the grain, owing to the large supply of potash in the nitrogen. Instead, then, of too much manure causing heavy straw and light grain, the want of balancing the ingredients which the soil offers to the plant, and the throwing of this balance to a slight excess of phosphate, may conduce to the development of grain and the earlier ripening of fruit. If the nitrogen is in excess, large plants will result. And, if the potash is in excess, large and fleshy plants and fruit will result.

As to productiveness and variety, there cannot be much doubt as to the wisdom of cultivating the most productive varieties, but there is no good reason yet adduced, not even by the Dominion Farm's Experiments, to show that varieties will deteriorate under proper cultivation and manuring. But productiveness does not lie entirely in variety any more in plants than in animals, and feed counts for a good deal. If the balanced ration is good for the animal, why is it not good for the plant?

Climatic conditions have an undoubted influence, but more particularly in shortening or lengthening the season of growth, or in the ripening and the moisture supplied, but the condition of soils is of very great importance. To select seed from varieties of plants which have the characteristics most desired, and to cater to those peculiarities in manuring and cultivation, seems a high aim for the cultivator's art. If seeds are brought from warm climates to cold climates, or vice versa, they must be given particular care until acclimated. The tendency to productiveness

may be fixed, but the actual productiveness is the result of cultivation and feeding.

Many will not agree with the Director that the crops raised by our farmers are as good as they should be. The reports of the yields on rejuvenated English lands point to such possibilities that one is inclined to ponder more carefully the remarks of the Commissioner in this particular.

## Canadian Sheep for South America

A shipment of sheep is being made ready by the firm of W. C. Edwards & Co., of Rockland, Ont., for Buenos Ayres, South America. Mr. W. C. Edwards, M.P., writes us to the effect that the shipment will be made up of part Lincolns, a fair lot, and part Shropshires. The Shropshires of the firm's own raising are exceptionally good, but those secured from some other breeders are not what they should be. A gentleman who spent some years in South America, and who knows something of the kind of live stock which breeders there require, saw the shipment last week and corroborates what Mr. Edwards says in regard to them. Part of the Shropshires are an exceptionally fine lot and should command good prices in the La Platte.

The South American breeders in the live stock they import aim to secure only the very best animals to be had. In their importations of purebred cattle and sheep from Great Britain they have been accustomed to pay the highest prices going, with the expectation of getting the very best that is to be had. Because of this any shipments of purebred stock to that country should be of the very best quality, and breeders are standing in their own light in sending any inferior animals. Only the pick of the flocks should be sent if good prices are expected and a market opened up for Canadian stock.

In regard to the preparation of the shipment Mr. Edwards says: "All have been taken the oest of care of and every care has been taken in fitting them, but the foundation not being what it ought to be the finished article falls short of the mark. The market is a distant and uncertain one and the risk is considerable, and even with good market conditions the stock must be first-rate. We ship our own sheep with good hope of success, but for the other two lots we fear we stand to lose unless the market when the sheep reach their destination is in an exceptionally favorable condition."

This is the second venture which this enterprising firm has made in sending Canadian purebred stock to South America. Two years ago they made a shipment of six Shorthorn bulls and cows and some thirty sheep, but the venture was not a very profitable one, excepting it being in the way of experience. But such enterprise and perseverance as is shown in the fitting out of a second shipment after losing on the first one deserves to succeed, and we trust that this new venture will be a more fortunate one and bring results far beyond the expectations of the company, not only in good profit, but in the opening of a new market for Canadian purebred live stock.

## San Jose Scale Commission

At the recommendation of the Minister of Agriculture the Ontario Government has appointed a special commission to enquire into the harm done by the San Jose scale. A wise choice has been made in the *personnel* of the commission by the selection of Dr. Mills, President of the Ontario Agricultural College, and Mr. John Dearnness, Inspector of Public Schools for the east riding of Middlesex. A third commissioner may be chosen. This commission, which is empowered to take evidence in the different fruit-growing districts, will begin the investigation forthwith. Though the scope of the commission seems to be limited to investigating the scale in Ontario, valuable information might be obtained by an enquiry into the harm done in places

outside the province and the efforts put forth to combat its ravages. We are assured, however, from the character and experience of the men appointed that a thorough investigation of the question will be made insofar as their powers extend.

(Since writing the above, which was left out of last week's issue by mistake, we have learned that Mr. W. H. Bunting, a prominent fruit grower of St. Catharines, has been appointed as third Commissioner. The Commission is now at work in the Niagara fruit section.)

## A Well-Merited Honor

At the last session of the Royal Society of Canada, Mr. Frank T. Shutt, chief chemist of the Dominion Experimental Farms, was elected a fellow of the society on the recommendation of the section of mathematical, physical and chemical sciences. This is a well-merited tribute to Mr. Shutt's ability as a scientist and to his splendid services to Canadian agriculture.

Mr. Shutt took his degree of M.A. at Toronto University

in 1885 and was fellow in chemistry at his Alma Mater when appointed to his present position in connection with the Experimental Farms. He is a fellow of the Chemical Society (England), a fellow of the Institute of Chemistry (Eng.), and a fellow of the American Chemical Society. He was British (professional) juror at the World's Columbian Exposition in 1893 — the only foreign chemist, and was there engaged on an analytical examination of cereals sent in competi-



Prof. F. T. Shutt

tion from all parts of the world.

Mr. Shutt has contributed many valuable papers in previous years to the Royal Society and is well worthy to be elected to the honorable position of one of its fellows. Mr. Shutt's work at the Experimental Farm has been characterized throughout by accuracy and thoroughness and he has furnished many results of immediate and practical importance to Canadian agriculture.

## Selection of Seeds

### A Summary of Dr. Saunders' Reply to Professor Robertson

We have received a lengthy statement from the Director of the Experimental Farms setting forth the position he took before the Committee on Agriculture on the selection of seeds and dealing more particularly with his reply to the statements made by the Commissioner of Agriculture and Dairying on the same subject. But as it would take more space than we can spare just now to publish the whole of this statement we will confine ourselves to the summary contained in the latter part of it and which has been prepared by Dr. Saunders himself. It is as follows:

When expressed in plain language, the statements made by the Commissioner may be divided into two groups: 1st, Those which are well known and almost universally approved and which most good farmers have long believed in and practised. 2nd, Some more or less new ideas, broadly

stated, with little or no proof, some of which bear evidence of a very superficial examination of the subject.

#### Class I.

(1) The well known advantages which arise from the selection of seed, which every farmer should practise, and where seed can be selected from vigorous growing plants the best results may be expected.

(2) The desirability of using barn-yard manure with a root or corn crop.

(3) That varieties of grain have very useful qualities and that one of their distinguishing characteristics is productiveness.

(4) That all varieties are liable to vary, and have more or less power of adapting themselves to changed conditions of climate and soil.

#### Class II.

The following statements of the Commissioner may be placed in Class II. :

(1) That there is no productiveness in variety, as such. This is contradicted by another statement of the Commissioner's, and has been shown to be contrary to experience.

(2) It is taught that it is injurious to apply manure to cereal crops. This, also, is contrary to experience.

(3) That variation in varieties appeared to be brought about by growing them under different conditions of soil and climate. This is not proven. On the contrary, our best and most productive varieties have manifested inherent productiveness from the beginning, and have carried this power with them and manifested it in many different soils and climates.

(4) That comparison as to productiveness without selection is of no value. The only illustration used in support of this statement is a series of experiments where selection has been regularly practised.

(5) That change of seed is most absurd and unnecessary. A statement advanced without proof, and contrary to general experience.

(6) That the rules which apply to the crossing of flowers do not apply to farm crops. This is erroneous.

(7) That the only result of crossing is an increasing of the tendency to change. This is contrary to experience.

(8) That rolling of land warms the soil. This statement, which is taken from a book on "The Soil," by Prof. F. H. King (pp. 230-33), is only partly true, and hence may be misleading.

#### FARM CROPS IN CANADA NOT "LAMENTABLY POOR."

I also took issue with the Commissioner when he said that the crops of farm products in Canada are "lamentably poor." Such statistics as are available show a material increase in the crops raised by farmers in Canada during the past five years, and also that they compare very favorably with the crops of other countries in similar climates. Were the farm crops of Canada "lamentably poor," the rapid increase which has taken place in the volume of our exports of farm products could not have occurred.

#### LARGE POSSIBLE GAINS.

A word must also be said with regard to the very large sum of money which he held out as a possible gain to Canadian farmers by the general adoption of the plans recommended—from \$50,000,000 to \$80,000,000. While such a handsome addition to the returns realized by Canadian farmers would be greatly appreciated, I fear that the calculation rests on a rather faulty basis. The Commissioner mentions a possible increase of from 20 to 30 per cent. in all farm crops by following his teaching. The \$280,000,000 on which his calculation is based includes the hay crop, the largest of all crops in Canada; and all the root crops and corn. With the exception of a limited area in Western Ontario, the farmer has not the opportunity for selecting his own seed on his own farm for these crops, since he does not produce his own seed. The Commissioner's statement is not very clear as to the basis on which his hopes of an increase of from 20 to 30 per cent. rest; but the impres-

sion was that they were built on the results of experiments in the selection of seed grain at Guelph.

The experimental work done there by Mr. Zavitz has been good and he has shown himself a careful worker; but these particular tests have not been planned in such a way as to admit of their being fairly used in such a calculation. The largest and plumpest kernels of grain were selected for one experiment and the smallest plump kernels for another, and in sowing, the number of kernels used in each case was the same. Hence, the plump grain would have nearly double the weight of the small grain. No farmer selects the very smallest seed he can find for sowing, and if he sows unselected seed, he would, in most cases, have in this from one-half to two-thirds of good plump seed, and in sowing he would use in every instance the usual weight of seed. A fair consideration of these conditions would take away a large part of the foundation on which these dazzling figures rest.

I have endeavored to present this subject in a fair and straightforward manner, submitting the reasons for the opinions I have advanced, and must now leave the intelligent public to form their own conclusions.

## To Visit Europe

Mr. F. C. Harrison, Bacteriologist, Ontario Agricultural College, left last week for Europe, where he will spend the summer in study under some of the best scientific teachers in the Old Land. Among other things Professor Harrison will give some attention to gathering information in regard to tuberculosis and the tuberculin test, and will visit Germany, France, and Great Britain in the interest of his department. Coming in contact with the great men who have devoted their lives to the study of the sciences bearing upon agriculture cannot help but be of great value, not only to Prof. Harrison personally, but to the agricultural interests of this province.



F. C. Harrison, B.S.A.

Harrison personally, but to the agricultural interests of this province.

## The Agricultural Situation

### A Business Man's View of It

At the annual meeting of the Canadian Bank of Commerce, held last week, the General Manager, Mr. B. E. Walker, in his address made some references to agricultural conditions in Canada that are worth reproducing. The extract, which we quote below, is valuable as showing the view which a business man in direct touch with the great commercial interests of the country has of its most important industry. The review he presents to us of the farmers' position is certainly very encouraging, and we can only hope that this favorable outlook will be fully realized :

"As you all know, there is little to be said about the results of agriculture last year, which is not favorable. We were disturbed about the wet weather last autumn in Manitoba, but nevertheless the railroads have already moved twenty-one million bushels of wheat out of the Northwest, and three-quarters of this graded as Nos. 1 and 2 hard, and No. 1 Northern, so that, with more wheat not yet shipped, the farmers in that part of Canada have prospered. The figures for cattle exports are still very small, and it is disappointing to learn that out of about 60,000 cattle shipped from the Northwest, as many as 22,000 were lean cattle sold in the United States, to be fattened there instead of in Canada. This is, of course, a much more serious matter than the mere loss of the profit of feeding them. Considering all sources together, the farmers of Manitoba and the adjacent territories have in the past two years received

thirty million dollars for their products, a very large sum, indeed, for such a small number of farmers. This bountiful return, in proportion to the labor, points most sharply to the desirability of immigration. Farming is paying better than it did some years ago, and men are again getting the land hunger which seemed to have been dying out. During 1898 about 28,000 immigrants came into the Northwest, but in the five months of 1899 about 21,000 have already arrived. It is true we are discussing the desirability of many of these as settlers in Canada, but if they will work at the outdoor labor of farming with only reasonable industry, we need not be afraid of the result. Until we are a great manufacturing country with crowded cities we cannot afford and do not need to discuss too closely the people who come to Canada, provided they will but work.

In this part of Canada, where our farming, as a rule, is of a higher order, we have had another good season for our dairy products. The quantity of cheese exported was 183,288,624 pounds, valued at \$15,916,507, a falling off of 14,961,024 pounds, valued at \$1,983,103; but this is partly due to the great increase in our recently developed creameries, the export of butter reaching 18,974,572 pounds, valued at \$3,492,000. From many places we hear of cheese factories being converted into creameries, although, as a rule, the one industry is growing up alongside of the other. In any event we are putting our dairy business on a firmer basis by manufacturing for export the two articles.

A large and profitable business has been done by the farmer in cattle and hogs, although the buyer has not always been so fortunate as the seller. The sale, in recent years, of lean cattle to the United States has had the effect of lowering seriously the quantity of cattle in Ontario, and both in numbers and in quality we should witness an improvement during the next few years. As to the outlook for the ensuing season, the fall wheat is clearly in a bad way, but the spring crops, about which we were troubled at one time, are now promising a good harvest. The farmers, dissatisfied with the price, are holding back a good deal of wheat in many counties; the pasturage, from which most of our wealth comes, is abundant, and there seems to be no reason to think that the majority of farmers will not have as large receipts this year as usual."

A point worthy of special attention by our farmers is that referring to the selling of lean cattle to go to the United States. To such an extent has this been carried on that over one-third of the cattle sent out of the Northwest last year were lean cattle, which went to the United States, there to be fattened for the market. The same thing is true in regard to Ontario, though not to so large an extent; yet a sufficient number of stockers and lean cattle was shipped from this province last year as to make them a very scarce commodity.

This is hardly a healthy condition of affairs for a country like Canada, where abundance of good fodder and fattening material can be produced at a very low cost. By fattening and finishing his cattle for the butcher or the export trade the farmer is creating a market for a large share of the rough grains grown on his farm at his own door. Then, as to the question of profit, we fail to see why it would not pay our farmers as well to finish off the cattle they raise as to sell them when half-grown or when half-finished to someone else who puts the finishing touches on and gets the top of the market.

## Summer Care of Chicks

By Cora A. Richards, in Reliable Poultry Journal

Why do the early hatched chickens as a rule do better than those hatched in July? This question was asked me by a woman who visited my yards yesterday. Usually the breeding stock is supposed to be in better condition early in the season and the lice are not so bad then as they are when the weather gets warm. Early in the season the chicks do not want so much to drink. A chick that wants to drink in preference to eating seldom proves worth much.

This is one thing we have noticed during the past years and it is one reason why we think the later broods sometimes prove a failure. If overheated they do nothing but drink and soon they have indigestion. The healthy chick is the hardy little worker that is running under the shade of trees, where there is plenty of grass and a cool breeze.

We hatched chicks in July last season that did fine. The breeding stock was in good condition, having large yards in an alfalfa patch, with good shade provided, and if anything they were in better condition than earlier in the season. Had these chicks not been so comfortably situated the chances are they would not have laid as well nor looked as fine. Our young broods that were hatched late had access to an alfalfa patch on one side and a sunflower grove on the other. Their coops being placed under large trees, they did not mind the heat, but grew right along. They were kept in colonies as near the same age as possible, with the mother hen, under a large coop, so that the chicks would not go too far away. These coops are made large, so as to be comfortable, and in a rain storm are snug and dry, although our early broods are housed.

Our coops are thoroughly cleaned in the spring before the chicks are put in them. We put a boiler of water on the stove and when it boils take a pailful and add enough liquid lice killer to have it smell very strong. We then scrub the coop inside and outside with this, also sprinkle it about on the ground, having the earth spaded up later, so it is like a new place for the little fellows, with no chance of old lice coming about. The mother hen when sitting is provided with a nice box that has been painted with a liquid lice killer, with dirt filled in the bottom in order to make the nest high enough so that the hen does not have to jump down on the eggs, but can step in. The nest is rounded out so that the eggs lay nicely and do not pile up or spread over the box. Fine straw is put on the dirt, and then a good supply of insect powder. The hen also has this powder well sifted into her feathers and fluff, with grease under her neck and on top of her head, for it is about the head that nits are often left to hatch; and it must be remembered that the insect powder will destroy only the lice, not the nits, and these same nits are hatching while the hen is sitting, so that they in turn will lay more eggs.

In order to destroy all lice it takes several applications of insect powder each week during incubation. It is not half the work to apply this to the hen often and rid her entirely of lice that it is to bother with the young broods. The extra work in the beginning is a saving in the end, as the lice do not come again for several weeks after the chicks are hatched. It seems as natural for chicks to grow lice as a canary bird that has been hatched free from them, as we have learned they will grow on the bird and on the little chicks in time. We watch closely and do not spare the insect powder, nor consider it a saving not to use it. Last season we used over one hundred pounds and our birds never did better.

When setting a hen we write on the box the date of sitting. We then know just when the chicks are due, and in due time clean out the straw, put in new, and wash the eggs in water, first having the chill taken from it, and wet the nest. This gives moisture to the eggs, as in this climate, or any other for that matter, when the weather is dry we believe in moisture, and usually have better results from using it. In fact we seldom have a poor hatch in the way we manage, as we try a hen on china eggs, and can get a pretty good idea in a few days as to whether or not she will make a good sitter.

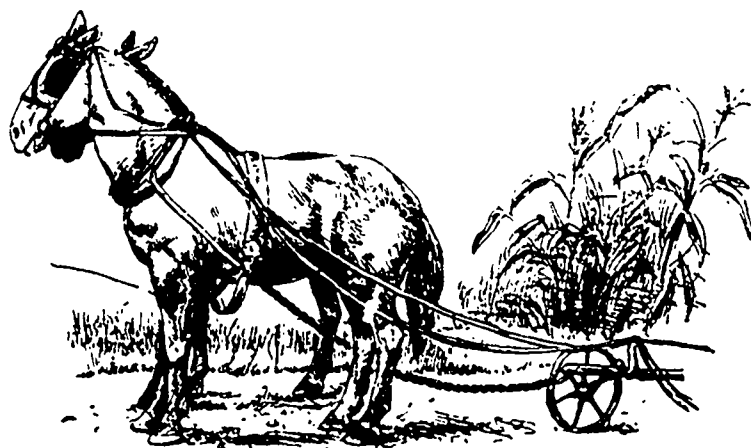
For winter layers the Leghorn will lay better if hatched in May or June, as those hatched earlier moult and do not lay as well in winter, although they are more fully matured for breeding stock for the next season. Where one wants them for breeding or for an early fry they can hatch them in March, but it must be remembered that the Leghorns mature at five months, and when hatched in May they are then prime winter layers, and those hatched in June and July will lay in winter if kept growing, but the conditions have to be good as stated before. So many write me, as

did a lady in Spencer, N.Y., stating that she hatched Leghorns in February of last year, that they laid in August, and in cold weather moulted a few feathers and stopped laying until spring. It is not understood by some that in order to have the best winter layers the different breeds do best hatched at certain times. The large breeds should be hatched earlier for winter layers, as they are longer maturing than Leghorns.

## The Soiling System

The "soiling" system of stock raising is becoming more common among American farmers, and it might be profitable for some of our smaller Canadian farmers to try it. Where the system is properly carried on it is surprising the number of cattle that can be well kept on a comparatively small farm. On this subject Mr. Waldo F. Brown has the following to say in one of our American exchanges:

"What is meant by soiling is cutting the green food and feeding it to the stock instead of pasture land. On small farms, which the owners wish to stock heavily, it is often practised with great profit, as it enables the owner to carry double the amount of stock which he could to pasture, does away with fences and so save and apply all the manure so as to get the greatest amount of good from it. There is no doubt as to the profitability of the plan under the conditions named, and if I had a small farm I should certainly adopt it. There are some objections to the plan



Harness for Orchard Work.

which seem formidable to one who has never tried it, but which in practice give little trouble. These are: First, keeping the cattle clean; but this will be easy to do if a well-graded yard is provided and a little care taken to keep it clean. It is best to provide portable mangers to feed in, as they can be moved to a new place when desirable. I would not attempt to keep cows in the stable during hot weather, and when they are eating succulent food; they would be sure to get soiled so that it would be disagreeable to milk them. The best form of manger to feed in is six feet wide and ten feet long. Use posts at the corners of 2 by 4 studding, and make a floor two feet from the ground, bolting on a 2 by 4 studding around the top, which should be one foot from the floor. Six dehorned cattle (and I would have no others) can eat from one of these mangers. We find it profitable to give green food to hogs and confine them in the hoghouse and a small feed lot. Many object to the labor of cutting feed and taking it to the stock all summer, but I have found it much less than I anticipated, and by a little wise planning it can be done in a short time. If there is much stock to feed the cutting should always be done with the mowing machine, and enough cut to last three days, and with many kinds of feed there will be no need of cutting more than twice a week, as a little wilting will not hurt the feed at all. Perhaps the most serious difficulty is the providing of green food through the early spring months, but it is not very expensive to give extra grain feed for five or six weeks in the spring, or to save some of

the best hay to feed them, as no hay will be needed through the fall and early winter. In my latitude we can begin to cut clover before the end of May, and a plot of rye will furnish feed ordinarily by May 1, and then this can be plowed down to grow a full crop of sorghum, which is the best possible soiling crop. We begin feeding sorghum in July, and not only feed it until winter sets in, but pack the large, juicy canes in the barn and feed them through the winter, and this plant alone will give succulent food for more than half the year. On most farms the best plan is to adopt partial soiling, as this will enable you to pasture through the spring until the soiling crops are ready to cut, and you can remove your inside fences.

If this rule is adopted, about one-third of the farm should be put in permanent pasture, and there is no other grass equal to blue grass for this purpose, as it starts early and will bear trampling and close grazing better than any other grass, and is very nutritious, and cattle will fatten on it quicker than any other feed. This pasture may be heavily stocked early in the season, and then, when the soiling crops are ready, they can be fed on the pasture or taken to the feed lots, as is thought best. In a drought, the cattle can be fed on the ground and will not waste anything. In the three years of drought (1893-95, inclusive) I fed from August 1 to Thanksgiving in this way, and do not think more than 100 pounds of feed was wasted in the three years. I have now practised this partial soiling for six years and am so well pleased with it that I would not have my division fences put back if it would cost me nothing to do it.

A low wagon or sled can be used to draw the feed out to the cattle, and when they are fed on the pasture one feed a day is all that will be needed. It is best to always feed at a regular hour, as the cattle will eat and then go and graze, while if the feeding is deferred later they will wait for it and be restless. When I first began feeding sorghum green to stock I sowed it broadcast and used a bushel or more of seed to the acre, but experience has shown that it is better to plant it in rows and cultivate it and only use a small amount of seed, as the cane is much sweeter and a greater weight can be grown to the acre, and when we cut it by hand, as we often do to feed a few cows, it is much easier to handle. It also makes much better hog feed when grown thin on the ground, and I have found this crop especially profitable for them. We want to sow thick and cure as hay for feeding to horses and for late winter feeding of cattle, but prefer the large, juicy canes for the fall and the first half of winter.

Another crop which is excellent for feeding green during the fall is sweet corn, and if one is near a canning factory or a city market it will pay to grow it extensively, as the ears can be marketed and a large amount of excellent feed furnished. It is best to plant a succession of plots, so that there will not be too much of it at once, and I find in this latitude that it may be planted on rich, well prepared land as late as July 4 and will mature before frost, and the price of and demand for roasting ears is usually better in October than earlier, and if it so happens that frost comes before it is mature enough to sell, it does not hurt it for feeding, and it can still be made profitable.

On farms where the plan of pasturing is followed it is rare to get through a year that there is not a time when the pastures are short so that the stock are not doing as well as they ought, and this is likely to be the case late in the season, and the wise farmer will be prepared to feed his stock under these conditions, and so keep them thriving, and when an acre will give full feed for a month to thirty cattle, it certainly will pay to be prepared to furnish this feed. Another point of great importance is this: Our closest observers and experimenters have reached the conclusion that the great cause of loss of hogs by disease is the feeding of corn, a rich, heating food not well balanced, without furnishing a bulky succulent food with it, and that the health of the animals and the power of resistance to disease will be better if bulky food is given with the corn, and at the same time the cost of the product lessened, and there is no feed I know of that can be grown so cheaply for this purpose as sorghum. Five or six pounds of seed



will plant an acre, and it costs the same to cultivate it as corn, while the amount of feed it will produce is many times as much as the corn would make. I advise all of the farmers who read this to plant a trial plot this year and report their success with it in the fall.

## The American Crop Outlook

The United States Department of Agriculture has issued its regular crop circular for June. Returns indicate a reduction of 470,000 acres or 2.5 per cent. in the acreage sown of spring wheat. The average condition of spring wheat is 91.4, as compared with 100.9 on June 1st, 1898, 89.6 for 1897 and 93.2, the mean of the June averages for the last thirteen years. The average condition of the fall wheat is 67.3, as compared with 90.8 in 1898, 78.5 on June 1st, 1897, and 83.4, the mean of the June averages for the last thirteen years.

The total reported acreage of oats is about 169,000 acres, or seven-tenths of one per cent. less than last year. The average condition of oats is 88.7, as compared with 98 on June 1st of last year, 89 in 1897, and 91.2, the mean of the June averages for the last thirteen years. The acreage of barley shows an increase of 3.1 per cent. over last year and the average condition is 91.4, as compared with 78.8 on June 1st, 1898, 87.4 in 1897 and 89.6, the mean of the June averages for the last thirteen years.

The fruit crop prospects are on the whole not as good as last year. In the thirteen apple-growing states where there were 3,000,000 or more apple trees in bearing at the last census, the condition on June 1st as compared with the average condition for the last fifteen years was above in six states, below in six and no difference in one. The peach crop will probably come as near being a total failure as it will ever come in a country of such vast extent and such varied climatic conditions as in the United States. With the exception of California, where the conditions indicate from 75 to 95 per cent. of a full crop, there is not a state that has the promise of so much as two-thirds of a normal crop; few look for even a half crop and in many important peach growing states there will be practically no crop whatever.

Some interesting information has been gathered in regard to the crop outlook in other countries. A British commercial estimate tentatively puts the world's wheat crop of 1899 at 2,504,000,000 bushels against 2,748,000,000 bushels in 1898, a reduction of 244,000,000 bushels, or nearly 8.9 per cent. In some parts of Russia both fall wheat and rye are almost destroyed by drought and though other localities report more favorably it is thought that the Russian crop cannot be a good one. Next to the Russian wheat crop France is the largest and most important in Europe and the outlook for a good yield is decidedly better than in the former country. The wheat area is about the same as last year, while the condition is about 5 per cent. lower. On this basis the crop would be about 20,000,000 bushels less than that of last year.

The area under wheat in Manitoba is given by the Provincial Department of Agriculture as 1,629,995 acres, as against 1,488,232 in 1898 and 1,290,882 in 1897. A corresponding increase is shown in the acreage in oats and barley. Seeding was later than usual but reports indicate general satisfaction as to crops.

## Destroying Canada Thistles

A Michigan farmer gives the following method for killing Canada thistles:

"About this time of the year, or a little later, when the thistle is in bud and before it is out of blossom, thoroughly apply strong brine to the plants. Make a brine of salt and water as strong as can be made, and in order to be sure add more salt than can be dissolved in the water. I then choose a clear, dry day with bright sunshine, such as would be a good hay day, and after the dew is off the thistles take

a pail of this strong brine with a handful or two of salt added, keeping the brine constantly agitated, and with my hand sprinkle the thistles until they are quite wet; look as though there had been quite a shower upon them. If here should be particles of salt adhering to the plants, so much the better. The dryer the day the better, as a rainy day would reduce the strength of the brine and perhaps result in failure. Should there appear a new growth of thistles do not say the treatment is a failure, for the root has eyes from which new thistles grow, and when they come again give a second treatment, and continue as long as new plants make their appearance."

A few weeks ago we made a note to the effect that some authorities claim that rape will kill thistles, and now we have another remedy in the shape of a dose of good strong brine. We cannot say from practical experience whether this would prove effective in destroying Canada thistles or not. The plan followed when we worked on the farm was to cultivate the land well, and when the crop was growing, to use a sharp piece of flat iron attached to a long handle, with which piece of machinery the task known as "spudding" thistles was performed. This is a good plan where the weeds are comparatively few in number, and if the "spudding" is done early, before the thistle seeds, there will not be so many thistles in that locality the following year.

With the advent of the self-binder thistles have become a less objectionable weed than they were when the grain had to be tied by hand. Then the cutting, or "spudding," the thistles was a necessity in order to make the work less arduous in harvest time. When it became no longer necessary to tie the grain by hand many farmers became somewhat careless and began to relax their efforts in regard to this pest, with the result that in some localities Canada thistles are more common than they were ten years ago. This is to be regretted. While the Canada thistle may not be the nuisance it once was in getting the harvest off, it is just as active as ever in taking up nutriment from the soil that should be retained for the growing crop. Hence it is important that every farmer should be as vigilant as ever in his efforts to keep down the thistles. There is no profit in growing them. In fact it is a loss, as every thistle plant in a field replaces a grain plant and takes nourishment from the soil that our Canadian farms cannot afford to lose.

## Tomato Rot

A Wisconsin gardener has the following to say in regard to tomato and potato rot:

"The rot in the tomato has been extremely bad for the last three years, in this section of the country fully two-thirds of the crop having been destroyed. In the course of my experiments to counteract this fungus growth in the tomato, I found last season, that setting out late, about the last of June, by which time my plants had attained a large growth, and mulching heavily with straw, setting the rows nearly five feet apart by three in the row and keeping them pruned to from two or three stalks in each hill, proved to be a very much improved condition, not only much less rotted, but also a much better tomato than the other way and not more than a week later than those that were set out the first day of June and planted in rows three feet ten inches apart and two and one-half foot in the row, supported on trellises, two and one-fourth feet high with moderate pruning. This season I have set out a row, a stake for each hill three feet apart, and rows five feet apart pruned down to two stalks in the hill, pruning off the tops to hasten ripening. I find a further improved condition, scarcely any rotting and ripening earlier, whilst those planted in the usual way are rotting worse than other years, for the season is worse, being very hot and dry for the last month. The potato crop will prove nearly a failure from a similar cause which rots the tomato. As soon as the soil was too dry I put on a light mulching between my tomato rows and when it needed further cultiva-

tion I raked the mulching up around the hills and cultivated between rows, keeping the soil loose and as fine as I could make it, although it was apparently completely dried out."

## Avoid Changes in Feeding Steers

The following from the pen of that well-known authority, Professor Henry, on the subject of feeding steers, is practical and to the point:

The fattening steer is one of the most dainty of farm animals and no other shows so quickly and positively the ill effect, of changing conditions of almost any kind provided the previous ones were fairly satisfactory.

If forced to change conditions, let it be done gradually and in such manner as to produce the least shock possible

subsistence, or to turn them on the pastures for a few weeks. Unless the cattle are to be out as much as six or eight weeks this change is hardly advisable.

An experiment by Thorne and Hickman, of the Ohio station, well illustrates this point. In this instance, about May 1, steers which had been fed grain and hay in the stable were divided into two lots and one turned to pasture during the day, receiving hay and grain in the stable daily in addition, while the other lot was kept in close confinement with the grain allowance continued. The steers kept in the barn made a daily gain of two pounds per day, this gain costing \$7.67 for the feed consumed. The steers turned to the pasture for thirty days, while still receiving feed morning and night in the stable, made a daily gain of only 1.42 pounds, and the gain so made cost \$9.10 per hundred for the feed consumed, not counting that supplied in the pasture. In another trial conducted in the same manner steers kept in a barn after the first of May



A CHAMPION PEN OF SOUTHDOWN EWES.

with the fattening cattle. In a feeding trial once conducted by the writer, one bunch of steers was getting shelled corn and the other corn meal made from grain from the same bin. Both lots were gaining rapidly as shown by the repeated weighings. Deeming it the fairest for the experiment to change the grain for the two lots, that getting shelled corn was given corn meal, and the lot which had been receiving corn meal was supplied with whole corn, the change being made without gradation. As a consequence of this change, both lots of steers seemed dissatisfied with the feed given them and there was no gain in weight for some time. The loss was considerable.

When one must make changes, let him arrange to bring them about as quietly as possible, and slowly, so that the animals hardly notice the difference. Often in spring the stockman hesitates whether to keep his fattening cattle still confined to the shed or yard with dry food for their

and fed on dry food made a hundred pounds of gain for \$9.14 worth of food, while those turned to pasture for 45 days cost \$9.16 for each hundred pounds of gain for feed eaten in the stable, not counting that consumed in the pasture.

At the Iowa station twenty Shorthorn and Angus steers were turned from the feed lot to pasture, and, although still given grain, made a daily gain of only 0.6 of a pound each for the fifteen days during which the gradual change was being made. At the same station, when changing a lot in the fall, there was likewise a gain of only 0.6 of a pound per head daily during the fifteen days in which the change occurred. Previous to making the change the steers had gained each two pounds daily on the pasture.

Wilson and Curtis, commenting on the results at the Iowa station, write: "A changing period is a losing period, if the change is radical." They might have said that a

changing period is usually a losing period with fattening cattle under almost any condition. The aim of the stockman should be to initiate the feeding period with the best conditions possible, and with all arrangements for carrying the feeding through to the end without breaks or interruptions of any kind. Every pound of gain with fattening cattle is produced at a heavy cost for feed consumed under the best of conditions, and the expense may be easily run up very materially by neglecting or overlooking some of the simple rules which lie at the basis of successful practice.

## Raising Geese

While rearing turkeys and chickens is a most profitable line of poultry farming, raising geese is also a source of profit if managed properly. The following treatise on the subject, written by a Michigan farmer's wife for the *Farmer*, gives some useful hints on the subject of geese raising:

"We have bred and raised geese for the last ten years, but most extensively during the past two years. We have the pure Toulouse, both American and English bred, twenty fine breeding birds. We find by experience they are more profitable and easier raised than any poultry we have ever tried. Have raised Bronze Turkeys and Pekin ducks, besides several varieties of pure-bred fowls. Geese are easily confined by a low fence, but they require plenty of fresh water to drink with a free run of fresh green grass. They do not require as much grain as many varieties of poultry. Two or three mornings each week we feed a warm mash of corn-meal; bran, oats, barley, and cooked vegetables are good. In the evening whole grain, usually corn, oats and barley mixed

They commenced laying in March. They lay three different times if not allowed to sit. During the season they produce from twenty to forty eggs each. We put the first ones, about five, under hens; later allow the geese about fifteen. They make excellent mothers. The male bird watches and cares for the little ones very tenderly. I often think it would be a good lesson to some parents to watch him. When hatched by the geese we never pay much attention to them, as they take them out in the orchard and keep away from the house. We feed the ones hatched by hens bread and sweet milk, with a little lettuce or onion tops chopped fine, also fine mica crystal grit, or have clean sand where they can get to it. They grow very rapidly. We keep the hen in a coop inside a small pen of fresh grass, changing often, until they are two or three weeks old, then allow the hen to run in the yards of fresh grass, but where they can be easily secured if a hard shower should come. At this time I steam a bread made of corn meal, bran, middlings or graham flour, sour milk or water, with soda and a little salt; stir stiff so as to crumble when cold. They are very hardy and more quiet than ducks. They bring a good price in market about two weeks before Christmas, besides a fine supply of feathers. When matured they weigh from fourteen to twenty pounds. We have had them weigh twenty-two pounds.

We do not pluck the feathers from our breeding birds before July if at all.

## Fattening Pigs by Electricity

Dr. W. J. Herdman of the Medical Faculty, Ann Arbor, Mich., is reported to have discovered a new use for electricity. It is fattening pigs. He has used two cages of guinea pigs for the experiment. The pigs in each cage were the same age. Around one cage electric wires were strung which were charged daily. The pigs in this cage gained 10 per cent. more in weight in a given time than the pigs in the cage where there was no electricity.

Whether this new discovery will be of benefit to the agriculturist in fattening his hogs remains to be seen. Should it prove so another experiment will have to be tried to find out whether pigs fattened in this way will suit the bacon trade. Perhaps a new brand might be started to be known as electric bacon.

## CORRESPONDENCE

### Removing Roadside Fences the Ideal Condition

To the Editor of *FARMING*:

In reply to your enquiries regarding fences I would say:

1. Mostly rail fences.
2. Wire fences are used to a considerable extent and seem to suit the owners of the land better than bicyclists who ride along them on wheeling trips.
3. As a rule there is freedom from drifts on roads where wire fences exist.
4. Removing the fences and herding cattle is the ideal condition. Whether it is practicable depends upon the people. Some places, notably from Hamilton to Grimsby, it works all right. Half of the people are not ready for the change.

C. W. YOUNG.

Cornwall, Ont., June 10th, 1899.

### Rail Fences in General Use

To the Editor of *FARMING*:

Yours received re Farm Fences, and in reply I would say:

1. Rail fences are still in general use. They are now being built straight to save rails which are becoming scarce.
2. Wire fences are being introduced along lanes and roadsides, but have not yet come into general use. A great many of the first wire fences put up did not fill the bill. The Page fence, with some others that are being now introduced, seem to give satisfaction.
3. Where wire fences have been built on roadsides the roads never become impassable, although they fill up, the track getting very high and disagreeable to drive over.
4. I do not think it would be practical to do away with roadside fences. In this country there are too many cattle driven along the roads, and it would be impossible to keep them out of the crops.

G. B. HOOD.

Guelph, Ont., June 13th, 1899.

### The Wire Fence Not Yet Perfect

To the Editor of *FARMING*:

In reply to your questions I would answer as follows:

- (1) Cedar log and rail fences.
- (2) Wire has been used to a limited extent.
- (3) Wire fencing on the roadside is helpful in preventing snow blockades.
- (4) I do not think the time has yet arrived for doing away with roadside fencing, and compelling every farmer to fence in or herd his stock. That time, I fancy, is a long way off.

Allow me to add to (2) that in my opinion there is not a real good wire fence yet produced. Those with wire for upright stays have the very serious objection that when animals rub against them they bend and stay crooked.

JOHN CAMPBELL.

Fairview Farm, Woodville, June 13th, 1899.

### Larger Fields and Less Fencing

To the Editor of *FARMING*:

In reply to yours of 9th I would say:

- (1) This part of the country had abundance of cedar, and most of the farms were fenced in ten acre fields. Later the advanced farmers saw the folly of small fields and en-

larged them, and, the timber being durable, they have abundance of rails left. Many tidy farmers build along the front straight post and rail fence, the rails and post being wired. The great majority of fences on the farms are the "snake" variety.

(2) and (3) Some fences are built of wire on the line of the road when there is a likelihood of a snow block, the township contributing to the cost. The only difficulty in that case is of the road becoming high because of the constant packing of the snow while drifting, filling up the track, cutting off and frequently causing the sleighs to upset.

(4) It might be, but would be the cause of much ill-feeling if a neighbor's cattle or hogs should happen to get out and destroy his neighbor's crops.

Uxbridge, Ont.

J. E. G.

## Nearly Every Kind of Fence in Use

To the Editor of FARMING:

Yours of June 8th to hand, and would reply to questions as follows:

1. Nearly every kind of fence (except stone) is seen in this locality, including considerable quantities of the old "stake and rider" and other zig-zag fences.

2. Much less than one-half of the fences are of wire, but constantly on the increase.

3. Where wire-fencing has been erected on the road-side it has caused the "track" to build up with the traffic so that it is seldom really good in winter, but never impassable from blockades.

4. I think the plan of having the roadsides clear of fences an "ideal" one as it would mean that no stock would be allowed to roam at large on the highway to the annoyance of both residents and travellers. But it is not workable in this locality as large numbers of live stock are driven to the various shipping points nearly every week in the year. And it would be next to impossible to prevent damage to growing crops in summer, and the stock would be much more difficult to control, even in winter, without the aid of roadside fences.

GEO. WRIGHT.

Elora, Ont., June 13th, 1899.

## Has Two Miles of Wire Fence

To the Editor of FARMING:

Yours of the 9th inst. to hand re "Farm Fence." I have nearly two miles of wire fence on my farm of 140 acres and some of it has been in use fifteen years, and I can with confidence recommend it as a most suitable fence. (2) Wire is used to a large extent, and I will say that it meets all the requisites excepting for sheep. They will go through it unless the wires are close. (3) Wire fencing has been effectual in preventing snow blockades in our township. All the north and south roads have it on, the wire being supplied by the Council. (4) I do not think the plan of having no fence on the roadway workable. Every farmer should have all his roads fenced and should keep all the gates closed.

Wire fencing is not expensive. It takes 60 lbs. of wire four strands, which is quite sufficient for all stock, except sheep and hogs, to the acre or 13 rods. The posts are 12 feet apart, and are 6 feet long, pointed to a sharp point and sloping up 18 inches, and driven with a mall after a hole is punched with a crowbar, which is very easily done in the spring when the ground is soft. I find it a most suitable fence and easily kept in order, and there is no

waste land. I plow within six inches of the posts, and there are no weeds, as you can cut everything clean, getting under the wire.

Spring grain looks well for the time it has been on the ground, but the hay crop is going to be very short in this locality.

R. R. SANGSTER.

Lancaster, Ont., June 12, 1899.

## The Wire Fence the Coming Fence

To the Editor of FARMING:

The fences in this locality were for the most part of black ash and pine rails, with a few cedar rails brought from the township north of us. The rails are mostly about done except the cedar. Some have, by buying cedar posts, made a good straight fence out of the old rails, but it is an expensive fence, as it requires a post every 10 feet; and costs a good deal for labor in building. Others have had the sound old rails put into a straight fence without posts, building some kind of a patent affair, at a cost of about 10 cts. per rod for labor. These do fairly well for a few years. They look neat and do not take up much room, but are apt to go endways in a few years, or to be blown over with a strong gale if in an exposed situation.

The new fences that are being built are almost all wire fences of some kind, using a post at about every 20 or 24 feet. There is not much barb wire being used now, since the different modes of weaving the plain wire perpendicularly has come into use. Some use the Page fence, which comes ready woven. Others are building the Gem fence, which is woven on the fence. The right to build it, along with full set of tools, for 100 acres, is about \$5 or \$6. Any farmer can weave his own and use any kind of wire he chooses. As to which of these is best, every farmer must judge for himself. Counting cost and the durability of each, any of these seems to meet every requirement of a farm fence. I have no doubt that in a few more years our fences will be all of wire.

There seems to be a wide difference of opinion as to the effect of these wire fences on the roads in winter. In some places they are just what is needed, while in others they seem to keep the road heavy. On lines where there is much travel the snow gathers on the track and piles up gradually until it becomes bad for heavy loads. This I believe can be helped some by hitching a common plow behind a sleigh and plowing out the track. But on the back lines, where there is not much travel, this objection will not apply. On these lines, often for most of the winter, the roads are blocked, and people have to resort to all kinds of roads, through fields, over plowed land, and often across water-courses, which in spring are often dangerous. The wire fences in this case will be a boon, as the road would never be blocked or impassable. Much labor would be saved which is now expended in opening roads which could be used in some other road improvement. Besides, where there are wire fences the road dries sooner in spring after the sleighing is done. There are no drifts on the sides of the road to obstruct water-courses and to keep the roads muddy and wet long after the snow is off the centre.

The plan you mention of having every farmer herd his stock, and having no road fences is, I fear, not workable. Wire fences along the road would have the same effect as no fence, and would save the labor and annoyance of herding, a task which most Canadian boys are not fond of. What will be used when posts are out of buying will be a problem to solve, but I have no doubt it will be, like all others, solved as soon as needed. A wire fence, well built, is a neat, tidy fence, taking up little room, is easy on itself, as wind-storms have little effect on them. They do not blow over, collect no rubbish, and have no corners for weeds to grow in. Snow does not drift in large piles as

along rail or board-fences or hedges, and they should last if of galvanized wire, for many a year.

R. McCULLOCH,  
Chinguacousy Tp., Peel County,  
Ontario.

last. I have been so very busy for the past month that I have had little time to write you.

J. A. MACDONALD.  
Hermanville, P.E.I., June 17th, 1899.

## Crop Outlook in the Maritime Provinces

To the Editor of FARMING:

Rain was general all over the Maritime Provinces during the past week. Since the advent of June the weather has been generally moist, and all crops have been doing well. The first rain from April 11th fell on May 27th, and was of eighteen hours' duration, completely saturating the ground, and the seed previously sown quickly shot up, healthy and strong. On June 5th and 6th rain also fell. On the night of the 6th a splendid rain fell; the next day, 7th, was warm and humid, affording the very best growing conditions for the crops. On the afternoon of the 14th a heavy rain fell, as also during the night. The 15th was rather cool, and fine for working in the fields. A good many sowing barley. I sowed my barley on that day. I sowed a half an acre of mangels for pig feed on the 14th, meeting the best conditions for seed germination. On the night of the 15th it rained almost all night, and showers during the following day. To-day, 17th, is a fine growing day, and I, like many others, am sowing turnips. A large amount of fertilizer is being used on the turnips by farmers this year, and the acreage is unusually large. Thomas-Phosphate is largely used. I am using it on my turnips, a part of the field, without any barnyard manure, at the rate of 400 lbs. per acre.

The crops are all growing very well, and the outlook is bright. Dairy men also are jubilant, for the pastures are now nice, and afford good feed. The factories are all running, and the quantity of milk has greatly increased. The outlook for a great year in the dairy is bright. A new factory is in course of construction in my parish. We have all reason to be thankful to a bountiful Providence for the fine growing weather given us for the last two weeks.

I have quite a conglomerate aggregation of pasture crops for my swine now growing. I have early flat turnips and early rape now well on in growth; a patch of peas, oats, and vetches, a nice square of mangels, some soja beans, an acre of swedes, and an acre of late rape. I am going to sow to-day. I have some of the new success beardless barley, which I am testing. I did not yet sow any alfalfa, though I am now preparing to sow five acres of alfalfa next spring. I am going to bank on beardless barley, alfalfa, and rape, with soja beans as my mainstay for next year. I regretfully did not get any *Bromus inermis* sown this year. Mr. Wing, of Ohio, in a private letter strongly recommends it for swine pasture. The Central Experimental Farm is not doing much in the way of introducing new varieties of forage plants. While the American experimental stations readily send me samples of their new forage plants to test, the Canadian farm refuses to do so. I don't expect to purchase so much mill feed this coming fall and winter as

## Farm Cream Separator

To the Editor of FARMING:

In a recent issue of your paper there appeared an article under the heading of "Farm Cream Separators," in which the writer has, though perhaps unintentionally, done us an injustice in his criticism of our Hydro-Lactic Cream Separator.

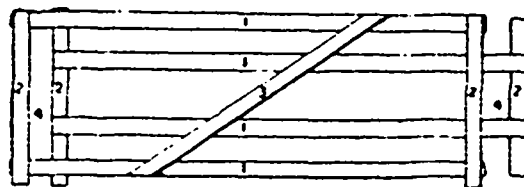
In his statement of the result of tests made with it at the Experimental Farm, he concludes that it is wasteful as compared with the Centrifugal Separator, but at the same time from the figures given shows that it is more economical than the deep setting methods, and much more so in comparison with a series of tests made at farm dairies of various methods in use there. We presume that the writer in question assumes that we expect our separator to supplant the Centrifugal Separator, when in fact such is not the case at all. It (the Centrifugal Separator) is all right in its place, and is doubtless a good investment in large dairies where butter-making is made the principal factor in the farm management, but its cost, and the expenditure of time, labor and expense required to operate it, will forever exclude it from four-fifths of the farms of the country.

It is for just this class of farmers who keep from four to a dozen cows, and make and market their own butter, that our separator is designed. At an average cost of about one dollar per cow capacity, we offer them something which will be a great advancement over their old methods of cream raising, whatever they have been. We ask no one to purchase without having first had an opportunity of testing for themselves the merits of our goods and from the fact that we do this, we certainly are not endeavoring to humbug our customers. The best criterions of the genuine value of any manufactured article are the people who buy it and use it for themselves, and if we were perpetrating any fraud upon the public it would have been discovered long ago. We do not claim that our separator will skim as closely as its expensive competitor, but we do claim that the slight loss of butter fat is more than compensated for in the additional first cost, and subsequent extra expense of operating in small dairies. That our separator has come to stay is attested by the fact that our best sales this year are made where it was introduced last season.

Firmly believing that we give every purchaser good value for his money, and cheered by the many words of encouragement received from them we shall continue to manufacture and sell them wherever possible. Trusting that this will define our position to the satisfaction of all concerned. We remain,

Yours respectfully,

HYDRO-LACTIC CREAM SEPARATOR CO.  
Niagara Falls, Ont.



PORTABLE HURDLE FENCE

The above figure represents a moveable hurdle fence used on the farm of Theodore Louis, Wisconsin. It is used for hurdling swine, but is equally valuable for sheep and cattle. The width between the bars and the height of the hurdles may be made to suit the sort of animals to be kept by it. DESCRIPTION: (1) Fence boards, 12 feet long; (2) one by three-inch or four inch slats; (3) two-inch slat. Observe that the slats (2) are alternately reversed. The open space (4) must be one inch wider than the slats (2). The fence stands worm or zig-zag fashion, the right hand end of one panel protruding through the left hand end of the next panel, and so on throughout the whole fence. If required stakes may be driven a fashion to hold the fence firm.

# The Farm Home

## Domestic Science in Schools.

Boston has public school kitchens and sewing is taught thoroughly in the schools, but girls require advantages to correspond with those which boys have in the manual training at the Mechanics Arts High School. For this reason courses in domestic science have been tried experimentally in three high schools for girls. This branch has been taught after regular school hours and the cost has been borne by several women interested in the plan. A science high school for girls will probably be the outcome of these experiments.

More is done for city school girls than for those in the country because of the convenience of getting teachers and apparatus, and because of the nearness to interested people of means and influence. Yet is everything done for country school girls which might be accomplished if there were a demand for better education and if innovation were not looked upon with disfavor by conservative people? How many mothers feel an active interest in the movement to secure a national domestic science bureau? Yet this is a move to bring advantage to girls from farm homes.

---

## Canning Fruit.

By MRS. J. S. MCKENNEY.

There are so few fruits, such as gooseberries, that can be successfully canned without the use of sugar and away from the hot fire. In canning the gooseberry fill the bottles with the stemmed fruit as far as the first screw of jars, then overflow with water which has previously been boiled and cooled and seal the bottles securely while under the water, wipe off the jars, wrap in brown paper and set away in a cool place. Were our water free from all impurities it would not be necessary to boil it, but as the chances are against any well of water being absolutely pure it is best to be on the safe side and boil it.

Everyone is more successful with some kinds of fruits than others, and in my labors success has probably been most apparent in my canning of peaches and pears. In canning either of them my method has been to allow one teacup of sugar to every quart jar. Dissolve the sugar in a very little water, let come to a good boil, put into it sufficient fruit for one quart which has been previously peeled and halved, and at soon as you can pierce the fruit with a silver fork fill the jar, overflow with the syrup and seal at once. In canning the peaches two or three of the peach kernels should be dropped in the centre of each jar, as these give a flavor to your fruit which otherwise

it lacks. If the fruit seems hard, either steam it or cook tender in water before dropping into the syrup. During the years that I have put up fruit I have never had a can of peaches or pears to spoil in the least. I always wrap the jars in paper. Anything canned in glass should be kept in a cool, dry and dark place, or wrapped in paper, as the light bleaches and injures so many of our fruits.

In speaking of keeping fruit, I cannot forbear digressing from my subject a moment to praise the use of paraffine in keeping our jellies and jams from molding. Perhaps some one like myself may have had trouble in this direction, but paraffine has removed all trials. For ten or fifteen cents one can purchase a good-sized cake of it. When your jelly is cool shave off a little of your paraffine into a cup, set on the back of the stove and melt, then turn a little over the top of the jelly. A couple of teaspoonfuls is sufficient for a glass of jelly, care being taken to cover every particle of the jelly. This is an extremely nice and economical way to care for jams and jellies.

Before closing my few remarks I should like to tell you of the method given by the cooking-school teacher last winter for canning tomatoes. All who have tried it pronounce it the most successful of any method they have used. Scald the tomatoes, dipping them first in hot water a minute, then in cold water a minute, then remove the skins. Place in the jars either whole or sliced, packing closely by working down on sides with silver knife. Fill the jars full, put on rubbers and screw the lids part way down. Place your boiler on the stove, put in the bottom of it a perforated tin, on which place your jars, and fill boiler with luke warm water sufficient to cover as far as the neck of the jars. As soon as the water boils steam ten minutes. Then take out one jar at a time, screw lid on air tight, and replace in boiler. When all have been replaced steam eighteen minutes longer, being careful to have the water completely cover the bottles this time. At the end of that time remove the jars, allow them to cool, and screw the lids on tighter if possible.

---

## Hired Help on the Farm.

### A Wife's View

While the employment of more or less extra men upon the farm is at certain seasons unavoidable, yet their employment adds greatly to the work of the housewife. On the majority of farms it is expected that the "hands" will find lodging and meals with their employer, and the farmer's wife finds her family increased from spring to

fall by one or more hired men. Just what this means only those who have passed through the experience can understand. Wherever possible it is far preferable to hire a married man, and this for several reasons.

First, it affords an opportunity for the man to board at home, thus relieving his employer's wife of the additional work. Every farm of 100 acres or more should have its tenant house, as most of them do in the more thickly settled sections of the country. A man can be hired who will board himself, and this more cheaply than any one else would be willing to do it. No farmer's wife can afford to board and lodge a man, doing his washing, ironing, and mending for two dollars a week, yet for less than eight dollars additional a month men can be hired who will relieve her of all this. It is only required to supply a small house, with or without a plot of ground for a garden. Sometimes fire wood is furnished free if it is abundant, and some men stipulate for the pasture of a cow, but in most cases these are of very little actual expense to the employer, and not to be considered in view of the great saving of work to the farmer's wife. I believe I am stating the facts in the case exactly as they exist in saying that it is this one thing—boarding the men—that adds more to the burdens of the country housewife than any other in connection with farm life.

It is not always possible to procure help in the house. In some parts of the country girls cannot be found willing to do kitchen work. Could the above plan be adopted it would so lighten the farm housework that no "girl" would be needed. In many localities this plan is adopted and always to the perfect satisfaction of at least one of the parties concerned and that is the farmer's wife herself.

Another argument in favor of employing married men is that they are more apt to be steady. They do not care to run about the country nights after their work is done; they have home ties the same as the farmer himself. Again, the married man is not so liable to take affront and leave in a hurrying time, for he has his family to look after and is not going to leave one job until sure of another.

Still another argument which might be urged is that the man with a family can be partly paid in other things than cash. He can make use of butter, meat, flour, etc., which are just as acceptable to him as money and which help out more than one would think when pay day comes.

In fact the man with a family takes his pay as he goes along, which is certainly easier on the employer than to have to raise one hundred or more

dollars at the close of the season, as is frequently done in settling with an unmarried man.—*Ella R. Wood*

### Two Homely Recipes.

To make what we call "Hard Times," beat two eggs in a plate, dip slices of stale bread into milk for a minute, or until they begin to get a little soft, but not crumbly, then lay them into the beaten eggs, turn them over, and then fry like pancakes in meat fryings or butter or half lard and half butter. We think these much better than bread pancakes, and they are lighter.

Stale bread may be used in bean soup. Take two cups of white beans, wash well, and cook in soft water. About two hours before dinner, add five or six slices of fat salt pork. Add water from time to time, so as to have three or four quarts when it is done. Flavor with pepper and more salt, if necessary, and serve hot with squares of bread in each bowl.

### Whole Wheat Bread.

The following is a good recipe for making whole wheat bread: One and a half cups of sour milk or buttermilk, a little salt, an even teaspoonful of soda; stir in enough whole wheat flour to make a very stiff batter. Bake either as gems or in a large pan. Sugar or molasses may be added if desired, but we prefer it without. We also prefer whole wheat to graham flour, though either may be used.

### Something for the Young Folks.

The following is a good list of conundrums which we would like the young people to try and answer for themselves. We will publish the correct answers in next issue:

1. Why is the nose placed in the middle of the face?
2. What is neither flesh nor bone, yet has four fingers and a thumb?
3. What vegetable products are the most important in history?
4. Why is life the greatest of all riddles?
5. Why does a duck put its head under water?
6. Why does it take it out again?
7. What is the color of grass when covered with snow?
8. What did Adam first plant in the Garden of Eden?
9. What side is a handle of a pitcher on?
10. What is bought by the yard and worn on the foot?
11. What is that which walks with its head downward?
12. What two letters in the alphabet express the destiny of all earthly things?
13. Why is a lame dog like a schoolboy adding six and seven together?

14. What relation is the doormat to the scraper?

15. When is butter like Irish children?

16. If a colored man carrying a turkey on a china dish should by accident let it fall, how would it affect the nations of the earth?

17. Why are the United States and a clipped horse alike?

18. Why is a horse like a piece of candy?

19. Why is a solar eclipse like a mother beating her boy?

20. When is a cigar like dried beef?

21. Why is a kiss like gossip?

22. When is charity like a top?

23. At what time of day was Adam created?

24. Why are fowls the most economical things a farmer can keep?

25. When does a ship tell a falsehood?

### An Awful Predicament.

Thomas K. Beecher, of Elmira, N. Y., once said that when he was a small boy his aunt used to give him mince pie; then when it made him sick and she saw that he looked pale and ill, she would say, "Tommy, you look real pale; just go into the pantry and get a piece of ginger cake." He felt bad, and she did not know what else to do, so she gave him something to eat.

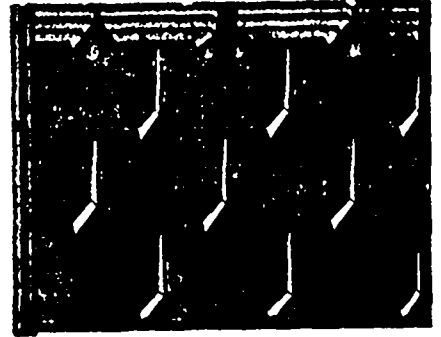
People used to think that when a man was sick he needed something unwholesome to eat. The thrifty housewife stored away a quantity of preserves, brandied cherries, and jellies, so as to have them in readiness if some member of the household should happen to be ill. An old friend of mine, who was very fond of pie and cake, came home late one night and found that his wife had retired. Discovering no pie in the pantry, he went to the door of his wife's room and called out, "Mary, where is the pie?" Mary replied, "I am very sorry, John, but there is no pie in the house." Returning to the pantry, he made a search for cake. Finding no cake, he again sought the chamber door, and shouted, "Mary, where's the cake?" Mary very reluctantly confessed that the supply of cake was also exhausted. The old gentleman then cried out in stern tones, "Why, Mary, what would you do if some one should be sick in the night?"—*Good health.*

### Living in Town and Country.

City life has many attractions to those unacquainted with them. The glare of electric lights and the bewildering forms of the spectacular have a peculiar charm for those living in the isolation of country life. There is much to allure and invite the resident of the rural district and to cause him to form a distaste for the humdrum life he is leading on the farm. He

### Cover Your Barns

with **E**astlake  
Shingles  
(Galvanized or Painted)



#### BECAUSE

They are quicker laid than others—fitting perfectly by means of their patent side lock, only found in EASTLAKES.

They give absolute protection from all kinds of weather—and are also fire, lightning and rust proof. They can't be equalled for durable economy. Write us for full information.

**METALLIC ROOFING CO., Limited,**

1192 KING STREET WEST, TORONTO.

predicates his hope of enjoying life, not on his own efforts and from his own resources, but on the efforts and from the resources of others.

But when the farmer holds a rigid inquiry into all the details of life in both city and country, and draws the balance sheet, he will find that he can bridge over hard times more easily on the farm than in the city. True it is that life in the city offers at times greater remuneration for labor, but the demands on the purse for shelter, warmth, light, and nourishment must be met even though employment ceases and disease lays its hand upon the family.

The resident of the city must have money to pay for his dinner before he eats it; if he has no money, he must either starve and suffer or depend upon the charity of others for clothing and food.

On the farm, however humble the cottage, it is a home for which the monthly rent gatherer does not come around. Fuel, pure air and water he can have free and as fully as he desires. Personal effort will secure from the soil necessities for the sustenance of himself and family. Less money is required than in the city, and the farmer can get along with less. The only demands to be met are for taxes, for clothing and a few necessities. In making the farm self-sustaining, the farmer is building up for himself and family a home where for real happiness and pleasure the palace of the Cæsars will not begin to compare. Instead of decrying life in the country, let us rather labor to make each farm self-sustaining and each cottage a home of happiness and contentment.—*Ex.*

# Farming.

A PAPER FOR FARMERS AND STOCKMEN

**Farming** is a paper for farmers and stockmen, published weekly, with illustrations. The subscription price is one dollar a year, payable in advance. **Postage** is prepaid by the publishers for all subscriptions in Canada and the United States. For all other countries in the Postal Union add fifty cents for postage.

**Change of Address.**—When a change of address is ordered, both the new and the old address must be given. The notice should be sent one week before the change is to take effect.

**Receipts** are only sent upon request. The date opposite the name on the address label indicates the time up to which the subscription is paid, and the change of date is sufficient acknowledgment of payment. When this change is not made promptly notify us.

**Discontinuances.**—Following the general desire of our readers, no subscriber's copy of **FARMING** is discontinued until notice to that effect is given. All arrears must be paid.

**How to Remit.**—Remittances should be sent by cheque, draft, express order, postal note, or money order, payable to order of **FARMING**. Cash should be sent in registered letter.

**Advertising Rates** on application. Letters should be addressed:

**FARMING,**  
Confederation Life Building,  
TORONTO.

## Questions and Answers.

### LICE ON CATTLE.

A subscriber at Uxbridge asks for a cure for lice on cattle. There are a number of remedies recommended for this trouble, all of which are effective if properly applied. The chief difficulty in applying a remedy is that the application is not continued long enough. A number of the remedies will get rid of the lice in about one application, but as the eggs are not killed they hatch out and the animal is as badly infested as ever.

One application of linseed oil will destroy lice but will not destroy the eggs. About a week after the first application, when the eggs will be hatched, a second application of linseed oil should be made. A kerosene emulsion, made of kerosene and soap, will also prove effective. Another remedy we have heard strongly recommended is to wash the animal well with good strong soapsuds, so strong that soap bubbles are plentiful. When well washed with this it should be allowed to dry on; that is, after the suds have been applied do not wipe them off, as many do.

### DISCRIMINATION IN THE PRICE OF HOGS.

To the Editor of **FARMING**:

Is there any difference in the price of our hogs and what the drovers term northern hogs, on the Toronto market, providing they are of equal quality? The drovers say that ours will not sell for as much money. By an answer through **FARMING** you will greatly oblige.

G. FISHER.

Willow Bank, Chatham, Ont.,  
June 17th, 1899.

We do not think any difference would be made in the price of hogs from different districts on this market, providing the hogs were of equal quality. Some of the packers, however, do make a distinction in the price which they pay for hogs from different sections of the country, not because

## SCHOOLS.

TORONTO

# LOOK AHEAD

Young Man! Young Woman!

to a happy and successful future, and remember that Education is a most important factor in winning success just now. Give your education a practical turn and you'll never regret it.

Lay your plans for spending a term in the

## CENTRAL BUSINESS COLLEGE

of Toronto at an early date. Some of you can enter **D.W.** Others can't start until the fall. Get a Catalogue at any rate, and study our advantages. Write

to W. H. SHAW, Principal.

## Business Men's Ideas

That's what you want when you enter business. Business men have little use for anything except the practical. All the training of this business college is along practical business lines—a college owned by some of Toronto's leading business men and financiers.

## British American Business College

Y.M.C.A. Building, Cor. Yonge and McGill Streets  
DAVID HOSKINS, TORONTO  
Chartered Accountant, Principal.

## STRATFORD.

It Pays to Possess Business Brightness

## Central Business College

STRATFORD, ONT.

Properly prepares young men and women for business life. 44 of our recent students have accepted good situations. Write to-day for a beautiful catalogue.

W. J. ELLIOTT, Principal.

# Spramotors

FOR

FARMING SUBSCRIBERS

**WE** can furnish bona fide subscribers to **FARMING** with any description of Spramotor outfit at reduced prices. A limited number of machines suitable for orchards (large or small), gardens, small fruits, painting and whitewashing are at our disposal for the benefit of subscribers only, either for cash or as premiums for new subscriptions.

For full particulars and prices address

## FARMING,

Confederation Life Building,

TORONTO, ONT.

# Patchall

WILL REPAIR

Rubber Goods	Cloth Goods
Rubber Coats	Blender Canvas
Rubber Boots	Grain Bags
Rubber Overshoes	Mall 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, 2 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

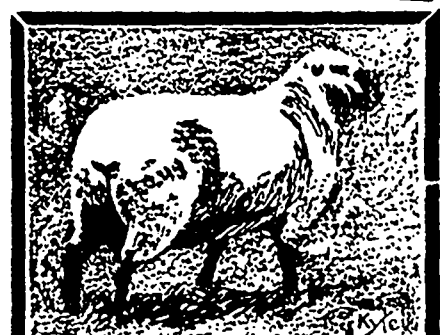
Ramilton, Ont., Canada.

**TORONTO ENGRAVING CO.**

THE ART ENGRAVING HOUSE OF CANADA

CUTS BY ALL PROCESSES

**92 BAY ST. TORONTO**



## 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.

(LIMITED)

STOUPVILLE, ONT.



## BOYS FOR FARM HELP.

The managers of Dr. Barnardo's Home invite applications from farmers throughout the country for the boys they are sending out periodically from the English homes.

**MR. ALFRED B. OWEN, Agent,**  
Dr. Barnardo's Home, 214 Farley Ave.  
Toronto, Ont.



they favor one district more than another, but because, they claim, the quality from certain sections is invariably inferior to that of other sections. One representative packing concern in this city informed us, when we made enquiries about the question asked above, that almost invariably the hogs from a district west of Hamilton, and south of the old Great Western track right through to Windsor, were inferior for bacon purposes to those got from the district north of this line, more especially in the Lake Huron and Georgian Bay district. The difficulty seems to be, as far as we were able to find out, that the hogs from this southern district are usually too fat for the best export trade. One member of a packing establishment stated that both the breeding and feeding in this district were all wrong. It is claimed that along nearly the whole length of the Michigan Central Railway through the southern part of Ontario too much corn is being fed, resulting in soft, fat hogs, which do not bring the top prices. It was also stated that in some sections the feeding of beans might have something to do with this very fat condition of the hogs.

The above are the facts as far as we could gather them. Whether there are grounds for making this discrimination in price we are not prepared to say. There is no doubt that the district we have named, which would include that where our correspondent lives, has got into disrepute among the packers because of the generally inferior quality of the hogs for bacon purposes which have come to this market from that section. To such an extent is this the case that packers are very suspicious of every carload from the district referred to. And this very suspicion seems to be sufficient to make them discriminate in the price even though the quality sometimes may be as good as that from other districts. This whole question is something that the farmers in the southern part of the province should consider, and if there are good grounds for the discrimination referred to an improvement should be made in the breeding and feeding of the hogs.

### Central Canada Fair

The prize list of the Central Canada Fair, which is to be held at Ottawa for two weeks, commencing Sept. 11th, is to hand, and shows special inducements to the farmer and live stock raiser. The prize lists for live stock have been revised and augmented. In the horse department three new classes have been added. These classes are carriage, drivers, single and double, and heavy draught horses, open to farmers only, and French Canadian horses. The special prizes for horses numbered twenty-eight, and include twenty-one of the magnificent gold medals annually given by the Fair Association.

Five gold medals and seven money prizes, one a \$50 purse, are offered in

## E. Gartly Parker

### MINING BROKER

And Member of the Standard Mining Exchange, Toronto

DEALS IN

British Columbia  
Ontario  
Republic

Mining  
Issues  
on  
Commission

I have direct and exclusive representation at REPUBLIC (Wash.) and have some good specialties on hand.

12 Adelaide Street East, - TORONTO

Phone 1842

## WEST'S FLUID is a positive preventive of CONTAGIOUS ABORTION AND HOG CHOLERA

and a most effective DISINFECTANT, simply because it is a strong ANTISEPTIC, and destroys the germs upon which such conditions depend, and does not contain corrosive nor irritating properties.

Circulars (specially prepared by a veterinary surgeon) on application.

THE WEST CHEMICAL CO.,  
TORONTO, ONT.

DEPT. F Agents wanted in all counties.  
Headquarters for LINCOLN SHEEP DIP

## Feeds and Feeding

A book for Farmers and Stockmen.  
Price, \$2. Sent postpaid on receipt  
of price. Address

Farming  
TORONTO

## Quick Cure For Lump Jaw

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

Fleming's  
LUMP  
JAW  
CURE



Trade Mark Reg'd.

Lump Jaw has heretofore baffled treatment. It has infected herds and pastures, and caused loss of hundreds of thousands of dollars. This new remedy cures quickly, thoroughly, and permanently. Leaves jaw smooth and sound. Easy to apply; costs but a trifle compared with results.

GUARANTEE.—Every package sold under positive guarantee; money back if it should ever fail to cure.

Sent everywhere by mail. Price, \$2.00.

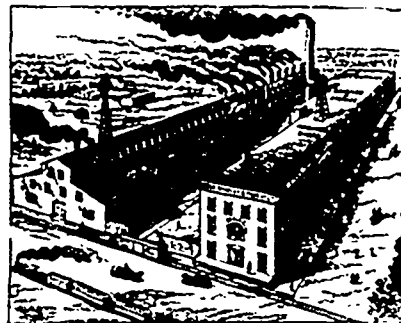
FREE A valuable illustrated treatise on cure of Lump Jaw sent free to readers of this paper.

Address: FLEMING BROS.

Chemists, ST. GEORGE, ONTARIO

## Brantford

Galvanized Steel Wind Mills  
Towers and Grinders



Our New Factory—Large and Well Equipped

Send for Illustrated  
Catalogue of Wind  
Mills, "Maple Leaf"  
Grinders, Iron and  
Wood Pumps, Bee  
Supplies, etc.

(Mention this Paper)



BRANTFORD CAN.

## BUTTER WRAPPERS

GENUINE VEGETABLE PARCHEMENT, made to our order in Germany, especially for the Canadian market, and its purity and sanitary qualities are guaranteed. It is very strong, has a nice, silky finish, fine fibre, and will not taint the butter like cheap imitations. Highest testimonials from dairymen all over Canada. We sell these butter wrappers, 7 1/2 x 11 inches, cheaper than any house in Canada, and large dealers who have wrappers printed should get our samples and quotations. Free samples sent anywhere. Address,

THE SENTINEL-REVIEW  
WOODSTOCK, ONT.,

Imports Genuine VEGETABLE  
PARCHEMENT for butter wrap-  
pers. It is the largest house  
in Canada selling and printing  
butter wrappers. This paper  
is not an imitation. It is the

SENTINEL-REVIEW,  
WOODSTOCK, ONT.

the seventeen classes of the cattle premium list. Moreover, there is a \$100 purse, divided into prizes of \$50, \$30, and \$20, for a milk test open to all cows exhibited, and prizes of \$25 and \$15 for a test of milk of cows recorded in the book of the Holstein-Friesian Association of America.

A class for Canadian-bred Shropshire Down sheep has been added to the sheep prize list, and special money prizes offered in addition. The American Shropshire Registry Association also gives specials in the open Shropshire class.

The amounts of the premiums have been augmented in all the classes of poultry and a special is offered for the best exhibit of turkeys, geese and ducks.

The Central Canada Fair directors have always encouraged live stock men, but this year their offerings to this class of exhibitors are really munificent and the accommodation for live-stock at the Ottawa grounds is superior to any in America.

Live-stock men who have not yet exhibited at the Ottawa Fair should go there this year. Those who have shown at the capital will be there again, for all say they have gained great benefit from exhibiting at the Ottawa show.

Mr. Ed. McMahon, the secretary, writes that he will gladly forward a copy of the prize list to everybody desirous of obtaining one on receipt of a post card.

Something is very often lost by keeping the fleeces over too long. Wool dries quickly and then becomes harsh to the hand, and thus loses something in selling value. It becomes weak and loses its native elasticity, and this is another detriment. It is the moisture in it which gives strength to the fibre, and for these reasons the place and method of storage should be neither dry nor wet, but cool and well aired and a little damp.

Don't forget at this time of the year to begin preparations for a full stock of food for next winter. Don't try millet, or Hungarian grass, or sorghum, all members of the same family—the millets. The foliage is harsh, sharp-edged, and not so digestible as other foods are. Sweet corn, common corn, clover hay and oats and peas mixed together are all good in every way and very easily grown and saved, and, whether green or cured, are unexceptionally good, nutritious and digestible.

## Bailey's Hydraulic Ram

Runs 24 Hours a day and 265 days a year.

40 Year's Experience.

Water Water Water  
FOR FOR FOR  
House Stock Irrigation

Once started costs one cent per month. As simple as a wheelbarrow and as efficient as a Corliss engine. Information and instruction in plain terms. Prices on Ram or complete outfit by return mail. Address

PRYCE W. BAILEY  
Expert, Seneca Falls, N.Y.



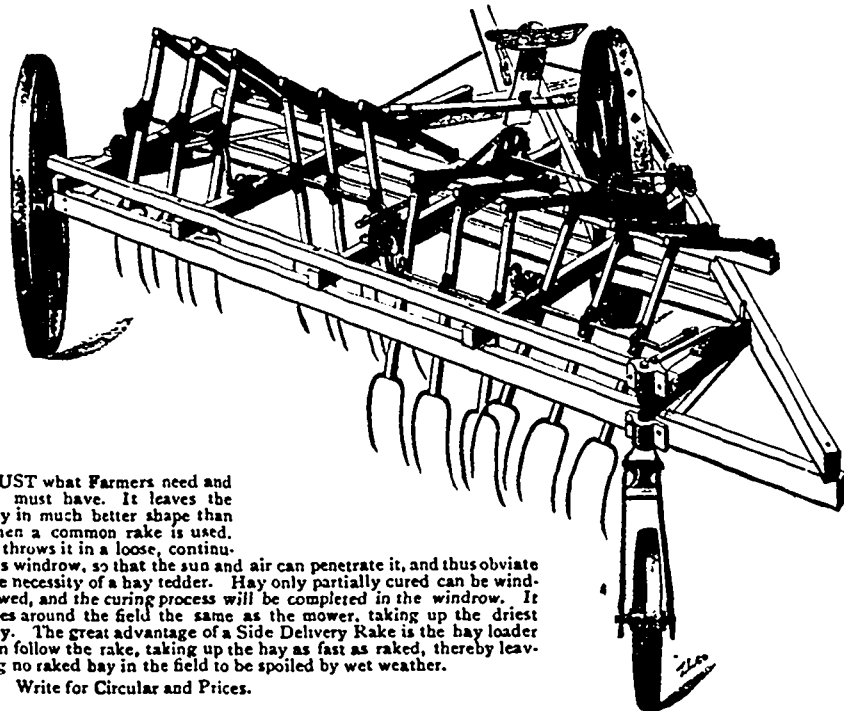
Mr. Harix, after reading letter from son at college—"John says he is a quarter-back."

Mrs. Harix—"Wa-al, send him th' quarter an' let him pay up. We can't afford to hev him in debt fer th' sake uv a small sum like thet."

### SOMETHING NEW FOR FARMERS

Make hay when the sun shines and use a

## "WATERLOO" SIDE DELIVERY HAY RAKE



JUST what Farmers need and must have. It leaves the hay in much better shape than when a common rake is used. It throws it in a loose, continuous windrow, so that the sun and air can penetrate it, and thus obviate the necessity of a hay tedder. Hay only partially cured can be windrowed, and the curing process will be completed in the windrow. It goes around the field the same as the mower, taking up the driest hay. The great advantage of a Side Delivery Rake is the hay loader can follow the rake, taking up the hay as fast as raked, thereby leaving no raked hay in the field to be spoiled by wet weather.

Write for Circular and Prices.

Waterloo Mfg. Co., Limited, Waterloo, Ont. and Elmira, Ont.

## BINDER TWINE

F  
A  
R  
M  
E  
R  
'  
S

PURE MANILLA, 650 FT. TO LB.  
SPECIAL MANILLA,  
TIGER, STANDARD.

Farmers! Don't be taken in. There is none "just as good." These twines will not bunch at the knottor, 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.

CONSUMERS' CORDAGE CO.  
LIMITED,  
MONTREAL.

Smut on corn stalks, and equally the hard, dry, weather-beaten leaves of the stalks, are quite indigestible, and if there be smut on them the indigestibility will itself be a source of disease.

Rye hay is not a desirable winter feed for sheep; nothing near as good as oat, wheat or pea straw if the latter is cut in early bloom. It is hard, woody and not greatly relished by any kind of stock. If cut for hay at all it should be done during its early bloom.

### Stock Notes

DR. SIBBALD, Sutton West, Ont., reports his Shorthorns as doing exceptionally well. He has made a large number of sales in the Northwest during the past year, and also in this province.

#### THE TROUT CREEK FARM.

The Trout Creek Stock Farm, Millgrove, near Hamilton, owned by Mr. W. D. Flatt, of Hamilton, bids fair to rank as the premier farm of Ontario, if not of Canada. The beautiful herd of Scotch and English Shorthorns numbering about 110 head, is worth going many miles to see, for there is not an animal but might stand to lead anywhere as a prize winner.

Mr. Flatt has just returned from Great Britain, where he purchased 23 head of improved English Shorthorns ranging from a few months to four years old. Five of this number are cows that have been specially bred along the dual purpose line, for beef and milk. These Mr. Flatt purposes breeding to Scotch bulls. Mr. Flatt is strongly of the opinion that Canadian breeders do too much line breeding, and as a result Shorthorns have a tendency to become too fine in structure and lacking in strength, character and size. He has for some time given special attention to breeding up his herd on the dual purpose plan, and to-day Shorthorn lovers can see with pride some fine work in this connection. For beauty of form and strength of constitution it may well be doubted if the superior or even equal can be found anywhere in America to compare with the Trout Creek herd.

While in England Mr. Flatt visited the famous dual purpose herd of William Duthie, Collyne, Scotland, consisting of about 300 head. "Anyone," says Mr. Flatt, "whoever doubted the possibility of a dual purpose cow would never doubt again after seeing Mr. Duthie's herd."

The Trout Creek herd is headed by a remarkable animal, Golden Fame, Scotch imported, a truly grand animal, having great constitution and symmetry.

Mr. Flatt thinks stock-raising will never make the progress it should in Canada so long as the present system of registration has to be traced back to British importations. If the British breeder can start out on any line he wishes, to build up a herd to his taste, without foreign importations, and still register his animals, why should not the Canadian stock-raiser be able to do the same? The present system in Canada, Mr. Flatt thinks, is unprogressive and very expensive, and seriously retards the best interests of improved stock-raising.

W. J. T.

## THE CO-OPERATIVE FARMER

SUSSEX N. B.,

reaches the farmers of the Maritime Provinces. Get a sample copy—you'll be sure to like it. Ad. rates on application. Address:

CO-OPERATIVE FARMER,  
Sussex, N. B.

### Golden Link Herd of Berkshires

I have the 1st-prize boar under 12 months at Toronto for sale, and 1st at Western Fair; also 2nd prize boar under 6 mos. at Toronto. Have 4 first-class boars fit for service, 5 and 6 mos. old. Have 2 of the sows for sale that tried for 1st of the three pigs bred from one sow, and the 2nd and 3rd prize sows under 6 mos. These winning sows are bred from Perfection, the unbeaten yearling. Have a few good sows bred for sale. Have 25 head of young pigs from 10 to 8 weeks. Am booking orders for March and April pigs.

T. A. COX, Brantford, Ont.

### HERMANVILLE ..TAMWORTHS..

I HAVE several litters nursing, and also a number of June litters of the highest quality and bluest blood in North America. The "Parkhill Mab" strain of Tamworths can only be obtained from me. I make a specialty of choice Breeding and Exhibition stock. I like to ship when "ready to wean." I respectfully solicit your valued orders, and will be glad to quote you prices, de livered free in any part of Canada or the U.S. Address—

Hermanville Farm, P.E.I., Can.

### Wm. Butler & Son

Dereham Centre, Ont.

Importers and exporters of Pure-bred Live Stock. Breeders of Guernsey cattle, Chester White and Duroc Jersey Swine. Stock delivered free in carload lots to any part of Canada. Write for circulars, calendars, etc. tf



#### .. HIGHEST TYPE OF BACON HOGS. .

### Oak Lodge Herd of Large Yorkshires

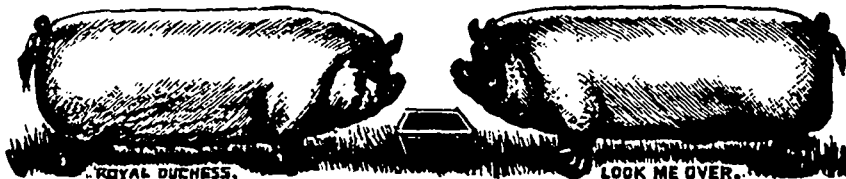


The Largest Herd of Pure-Bred Yorkshires in America.

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 all ages for sale. tf

J. E. BRETHOUR, Burford, Ont

### SUMMERHILL HERD OF YORKSHIRE HOGS



#### The Lengthy English Type

Largest herd of imported Yorkshires in America. Purchased from the most noted breeders in England. Also 300 Canadian-bred pigs of all ages for sale. Stock guaranteed as described. All trains met at Hamilton by appointment. (tf)

D. C. FLATT, Millgrove, Ont.

PUREST AND BEST

## Windsor Salt...

#### FIRST PRIZES

Were awarded to 8 exhibitors at the Industrial Fair, Toronto, and Western Fair, London, 1897, who used Windsor Special Cheese Salt in curing cheese exhibited, and to 9 exhibitors at the same exhibitions who used Windsor Special Butter Salt in salting butter exhibited.

#### GOLD MEDALS

Awarded for the best exhibits of Creamery and Dairy Butter at both exhibitions were won by exhibitors using Windsor Butter Salt.

No stipulation was made as to the use of Windsor Salt.

The Windsor Salt Co., Limited  
Windsor, Ont.

...FOR SALE...

### 8 SCOTCH SHORTHORN BULLS

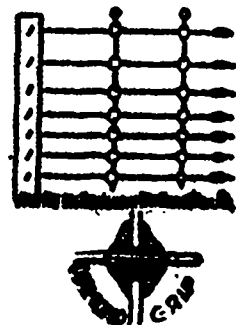
From 10 to 18 months old. 1 BULL 2 years old, bred by O. & W. B. Watt, Salem. Also a number of

### COWS AND HEIFERS

DAVID MILNE, - - - Ethel, Ont.

### Fence Machine Free

With 100 Rods. Gold Stem-Wind Watch Free.



To introduce Diamond Grip Fence in new localities. Don't have to wind wires around each other (like old woven fences), as cross wires are gripped and protected from weather; can never slip or break; 5 times as strong and lasts 10 times as long, as any woven wire fence made; can use coiled spring, plain, twisted or barb wire. Cheapest Fence in end that was ever invented. Agents wanted; write quick to

CANADA FENCE CO., London, Ont.

# The Ontario Agricultural Gazette

VOL. II.

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

No. 37

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

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

### 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' Associations 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.

## Cotswolds Wanted.

Cleveland, O., June 19th, 1899.

F. W. HODSON, ESQ.,  
Toronto, Ont.

DEAR SIR,—I am in the market for four hundred head of Cotswold ewes and five bucks. Can you tell me who breed these sheep and about what they are worth, also if there is any duty on them to this country.

Yours truly,  
(Sgd.) D. R. HANNA.

The above is a letter which has been received by the secretary of the Dominion Live Stock Associations, who respectfully requests that breeders of Cotswold sheep correspond with M. A. Hanna & Company, Cleveland, Ohio.

## An Abridged Report of American Experiments which are of Value to Canadian Farmers.

HORTICULTURE.

### Cross-Pollination in Relation to Fruitfulness.

It is well-known to experienced fruit-growers that a large number of different species of fruit are self-sterile, that is to say, they must receive pollen from other varieties in order to insure the production of fruit. Several investigations into the cause and extent of this self-sterility have been held by some of the stations.

The pollinations of peas has been studied by the United States Department of Agriculture. Extensive experiments were conducted in three localities in New York, and one in Virginia. They were continued through two seasons, and included work with thirty-eight varieties. A majority of those tested were entirely self-sterile, but fruited well when pollinated by other varieties. Pollen from another tree of the same variety appeared to be no more effective than from another branch of the same tree, or than from the same flower. A number of varieties were found to be self-fertile, but, even with these, cross pollination appeared to be more certain and more satisfactory under adverse conditions. There were shown to be marked differences between self and cross-pollinated fruits of the same variety, especially in the case of Bartletts and Buffums, and also fairly well pronounced in Anjou, Angouleme, and the Heathcote trees. Self-pollinated fruits are somewhat smaller, tend to be narrower, and not so well filled out toward the blossom end. Most of them are entirely seedless. They also tend to ripen slightly later than cross-pollinated ones; this, however, being

## Reports of Annual Meetings.

We respectfully call the attention of secretaries of Farmers' Institutes to Clause 58 of the Rules and Regulations Governing Farmer's Institutes. See page 15 of the pamphlet entitled Act, Rules and Regulations of Farmers' Institutes of Ontario, recently issued. Clause 58 reads:

"Within one week after close of each institute meeting, or series of meetings, the secretary shall forward to the superintendent a detailed report of said meeting or meetings, in which shall be stated the name of the place or places where sessions were held, the number of persons present at each session, the name and address of each person who read or gave an address, the title of the address or paper, and a comment upon its value, whether fair, good or indifferent."

A number of the annual meetings were held two and three weeks ago, but still some of the secretaries have not yet sent reports to the superintendent. We wish to draw their attention to the fact that this clause governs the report of annual meetings as well as the report of any other meetings held by the institute. In any case the annual report must reach the superintendent on or before July 1st, otherwise the local institutes will lose the annual grant and the services of speakers sent to address institute meetings in their division.

Annual Reports have been received from the following Institutes:

- Algoma East.
- Amherst Island.
- Brant South.
- Bruce Centre.
- Bruce West.
- Carleton.
- Cornwall.
- Elgin East.
- Grey South.
- Hastings East.
- Hastings West.
- Huron East.
- Middlesex West.

- Muskoka Centre.
- Norfolk North.
- Peterboro' West.
- Renfrew North.
- Simcoe South.
- Stormont.
- Wellington East.
- Wellington West.
- Wentworth South.
- Wentworth North.
- York East.
- York North.

## Institute Memberships

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

Algoma East.....	8
Bruce Centre.....	3
Bruce North.....	2
Bruce West.....	2
Grey North.....	7
Grey South.....	5
Hastings East.....	2
Hastings West.....	3
Lambton West.....	4
Leeds N. & Grenville North.....	2
Middlesex West.....	1
Muskoka South.....	20
Norfolk North.....	3
Peterborough East.....	1
Peterborough West.....	3
Port Carling & Bala.....	2
Prescott.....	10
Renfrew North.....	3
Simcoe East.....	26
Simcoe South.....	3
Victoria West.....	4
Waterloo North.....	3
Wentworth South.....	6
Wentworth, North.....	2
York East.....	5
York North.....	2

## Ontario Provincial Winter Fair.

It has finally been decided that the next Ontario Provincial Fat Stock and Dairy Show will be held in London, Ontario, December 12th, 13th, 14th, and 15th. The prize list is now in the course of preparation and will be issued at an early date.

more noticeable with late than early varieties.

Experiments were made with apples and quinces similar to those with pears. The quince was found to fruit nearly as well with its own pollen as with that of another variety. As regards apples, it appeared that the several varieties are more inclined to be sterile to their own pollen than the pears. With the former, in the great majority of cases, no fruit results from self-pollination. The results, however, were less conclusive than with pears, because on most of the self-sterile varieties of apples an occasional fruit set under self-pollination, and none of the varieties were very completely self-fertile.

The New York State Station had studied the sterility of grapes for several years. Of the 145 varieties studied, 86 were practically self-fertile, and 59 were either entirely self-sterile or produced imperfect clusters when self-pollinated. Of 116 varieties tested at the Georgia Station 90 were mostly self-fertile and 26 mostly self-sterile.

In a test with plums at the Vermont Station but one variety out of fourteen tested set fruit normally by self-pollination. The European and Japanese plums have not hitherto needed cross-pollination, self-sterility being confined, so far as is known, to American plums. It is probable that some cases of apparent self-sterility in plums are due to defective pistils rather than to any impossibility of self-fecundation.

In a test with peaches reported by the Delaware Station a number of varieties either failed to fruit or fruited poorly when covered to prevent cross-pollination.

Among the smaller fruits, instances are found of self-sterility among raspberries, blackberries, dewberries and gooseberries, while certain varieties of strawberries, pistillates, as it is well known, will not produce fruit satisfactorily unless mixed with perfect-flowered varieties.

Some of these self-sterile varieties of fruits are the most desirable for many reasons and, on that account, discarding them is out of the question. They should, therefore, be planted in orchards containing other varieties. As we have seen, even self-fertile varieties are benefited by being planted near trees of a different variety. In cases of unproductive orchards of but a single variety top-grafting part of the trees with other varieties is recommended, care being taken to mix varieties that bloom at the same time.

"How do you know they were your ducks?" asked the lawyer. "I should know my ducks anywhere," replied the farmer, giving a description of their various peculiarities whereby he could distinguish them. "Why," said the lawyer, "those ducks cannot be of such rare breed. I have seen some just like them in my own yard." "That's not at all unlikely," admitted the farmer, "for they are not the only ducks I have had stolen lately."

## ALEXANDRA AND MÉLOTTE CREAM SEPARATORS

For Particulars apply to

**R. A. LISTER & CO.,**

Limited

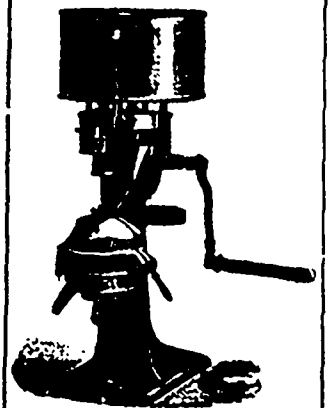
Eastern Branch Works, 579-581 St. Paul Street,

MONTREAL.

Western Branch, 232 King St., WINNIPEG.

Head Office and Works, DURSLEY, ENGLAND.

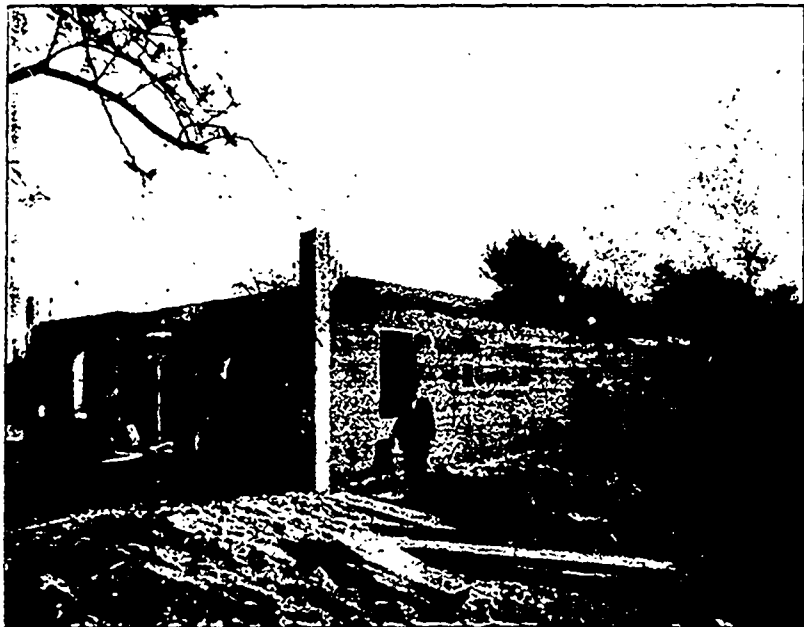
TRY THEM



TRY THEM

# Thorold Cement

Replaces Timber, brick and other costly materials in the construction of modern stock barns, fine residences, etc. There are hundreds of magnificent and costly structures in the Dominion built during the last 50 years with Thorold Cement, all in a state of perfect preservation. The cost of erecting structures with Thorold Cement is considerably below that of other materials.



BARN OF J. W. VANDYKE, GRINSBY, ONT. (IN COURSE OF ERECTION)

If you contemplate the building of a House, Barn, Hen House, Pig Pens, Cement Floors, etc., etc., write us your requirements and we will cheerfully furnish full information and estimates.

Estate of **JOHN BATTLE**  
THOROLD, ONT.

# Market Review and Forecast

Office of FARMING,  
Confederation Life Building, Toronto,  
June 26th, 1899.

One of the features in general Canadian trade is the expansion of trade in Manitoba and British Columbia. Although business in wholesale circles has fallen off still it is ahead of last year. The annual bank statements which are now appearing show a very healthy condition in financial circles and in the general business situation of the country. Money is in a little more liberal supply at Montreal.

## Wheat.

The wheat situation does not present any new or striking feature. Chicago, which is the centre on which all eyes turn in wheat circles, has been up, then down and at the end of the week easier. Everyone is watching the harvesting reports and the crop prospects. In many of the States fall wheat harvesting has begun, and while the yield is generally reported as not being large the quality is good. On the crop outlook and market situation the *Price Current* has this to say:

The prevailing condition of spring wheat in the Northwest is fully as favorable as previously, and although the plant is unduly rank in growth to a considerable extent from the excessive moisture the situation generally is fairly good, and admits of satisfactory results, without likelihood of especially high yield.

The wheat markets have been well sustained most of the week, winding up with considerable break at Chicago, so that closing prices are somewhat lower than a week ago. Corn has been fairly firm, but at the close has sympathized to some extent with the weakness in wheat, closing fractionally higher than a week ago for deferred deliveries.

So far, the reports from Manitoba are good and the acreage of wheat sown is considerably larger than last year. In regard to the Ontario crop, the weather conditions, etc., have been, on the whole, favorable for growth, though the winter-killed fields have not improved much.

The English wheat markets continue steady, though there seems a general inclination not to follow the advance on this side. Considerable business has been done on this side in Manitoba wheat. The Montreal market is quiet and quotations are nominal. There seems to be a fair demand on this market from millers and the market is steady at 70 to 71c. north and west for red and white, 65c. for goose. On the Toronto farmers' market red and white fetches 72½ to 73c.; spring five, 67 to 69c., and goose, 67½ to 68½c. per bushel. Cable reports weak on Saturday.

## Oats and Barley.

The English oat markets are dull. At Montreal there is a little advance, said to be due to the grain being wanted for freight space. About 34½c. seems to be about the ruling prices there. It is reported that there is considerable old stock held by farmers and local country dealers. Oats are firmer here at 29 to 31c. west. On the farmers' market they bring 35 to 36½c. per bushel. The barley market is merely nominal.

## Peas and Corn.

There is an advance of 3d. in the London market and the situation is strong under light supplies. The Montreal market is firm at 76c. afloat. On this market peas are steady at 65 to 66c. west. On the Toronto farmers' market they bring about 60c. per bushel.

The growing American crop is reported to be doing well, though there has been considerable wet weather. American corn is quoted here at 41 to 42c. on track here.

## Bran and Shorts

These are easier at Montreal, where quotations are \$14 to \$14.50 for Ontario

bran, and \$16 to \$16.50 for shorts in carload lots. City mills here quote bran at \$12.50 and shorts at \$15, in car lots f.o.b. Toronto.

## Eggs and Poultry.

Supplies of eggs from the continent are reported to be decreasing on the English markets, and there should be a good opening for Canadian fresh stock, though none of it is arriving. The Montreal market keeps firm at 12½ to 13c. for choice No. 1 candled stock, and 10 to 10½c. for No. 2. The offerings here are not large, and quotations are 12½ to 13c. wholesale. On the farmers' market eggs bring 14 to 16c. per dozen.

On the Toronto farmers' market chickens bring 50 to 90c. and ducks 80 to \$1.00 per pair, and turkeys 10 to 12c. per lb.

## Potatoes.

The Montreal market is firmer and higher under a falling off in supplies previous to the new crop coming in. Prices are 85 to 90c. per bag, with some going higher in jobbing way. Cars on the track here are quoted at \$1 per bag, and \$1.10 out of store. On the farmers' market they bring \$1.10 to \$1.25 per bag.

## Fruit.

There have been large supplies of strawberries at Montreal, and the market there is quoted at 5 to 7c. per box. Cherries are quoted at \$1.25 to \$1.50 for red, and 75c. to \$1 for white. Strawberries are quoted here at 4½ to 5c. per box; common cherries at 50 to 75c. per basket, and green peas at 75c. per bushel.

## Hay and Straw

These are quiet. At Montreal baled hay is quoted at \$7.50 to \$8 in car lots for No. 1 quality. There is a fair demand for choice, good quality here, which brings \$8.50 to \$9 for cars on track. On the Toronto farmers' market timothy fetches \$9 to \$10.50; clover, \$7 to \$8.50; sheaf straw, \$5.50 to \$7; and loose straw, \$4 to \$5 per ton.

## Wool.

The surprising feature in the wool situation is the continued dullness of the Canadian market, while the Boston and other American markets remain firm and strong, with the outlook bright for further advances. Why this strong tendency of the eastern markets is not having some effect on the market here we are not able to fully understand. The local market here for new clipped wool has been dragging all week, and there seems to be very little, if any, competition between buyers. Buyers are very cautious about buying, and contend that any purchases made now are on a purely speculative basis. It is expected that if business in woollens continues active there

may be some export demand for Canadian wools. The offerings of new clipped wool are now very liberal, but the market is a dragging one. Prices here are 13 to 14c. for washed, and 8 to 9c. for unwashed.

## Cheese.

A week or two ago it was reported that the advance in cheese on this side was principally due to short selling. While this was true in some measure it now seems that the advance was on a more healthy and permanent basis. Low prices have greatly increased consumption in Great Britain and a much better demand has set in, buyers being inclined to meet the higher cables from this side. Exports continue to show a large increase over last year, and from the beginning of the season show an increase of about 110,000 boxes.

The Montreal market keeps firm and prices have advanced to 8½ to 8¾ for finest westerns which is ½c. higher than a week ago. There is also a decidedly better market reported at New York and some exporters have been paying ½c. more than for the local trade. At the local markets during the week prices have advanced and more business has been done. Prices have ranged from 8¼ to 8½c. the latter prices being paid at some eastern Ontario market late in the week. Quite a lot of early June cheese are sold and salesmen seem more ready to dispose of their goods at current values.

## Butter.

The creamery butter situation continues strong and active. The *Trade Bulletin's* London Cable of June 22nd reads thus: "The market is firmer and higher, finest Canadian creamery selling at an advance of 2s., owing to better demand and falling off in supplies. Finest Canadian creamery 86s. to 88s., a few parcels of extra June having fetched 90s. Advices of larger shipments on the way from Canada has checked upward movements."

There has been considerable done in creamery butter at Montreal and prices have ruled firm at 17¾ to 18c. for finest June, 17 to 17½c. for second, and 16¼ to 16¾c. for off grades. It is reported that the present activity in creamery butter is due to short sales. The New York market is firm, there being considerable speculation for cold storage purposes. Shipments from Montreal have so far this season increased by 11,000 packages over last year, while those from New York are less than one-half of what they were for the same period last year, or over 8,500 packages short.

There has been considerable doing in Western dairy at Montreal, where 13½ to 14c. are the ruling figures for tubs with some choice quality going as high as 14½c. per lb. There has been a fair supply of choice dairy

## WITH WHAT WE CANNOT KNOW

we cannot be concerned, but we do know that The

## American Cream Separator

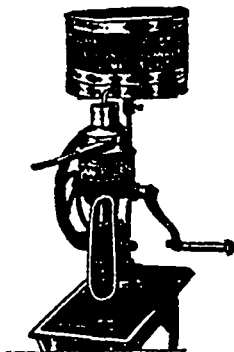
stands without rival on the market to-day.

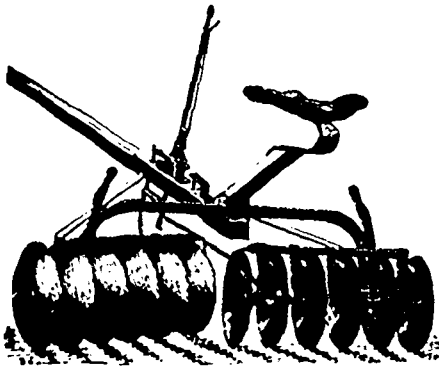
THE AMERICAN will be sent on trial, and we guarantee perfect satisfaction.

Get prices and illustrated catalogue from

**Richardson & Webster,**  
ST. MARYS, ONTARIO

Also Manufacturers of Cheese Factory and Creamery Apparatus.





## The Bissell-Prescott Disk Harrow

Is especially adapted for Summer-fallow cultivation, preparing seed bed for wheat, working stubble fields after harvest.

Successfully works hard ground where other Harrows fail.

### The Leading Disc Harrow

T. E. BISSELL, - FERGUS, ONT.

on this market and the demand is good. Prices are steady at 13 to 14c. for choice tubs and 9 to 11c. for low grades. Creamery butter is in good demand here at 17 to 18c. for prints and 16 to 17c. for boxes and tubs. On the Toronto farmers' market butter brings from 14 to 16c. per lb.

#### Cattle

The cattle markets during the week have ruled strong for good grain fed cattle. Really good fat beasts are getting scarce in some quarters. The cable shows a steady feeling, and on the whole the situation is strong for desirable lots. On the Toronto market on Friday trade was fair with prices well maintained for all grain-fed stock of good quality, but inferior quality, especially grassers, were slow at 40 to 70c. per cwt. less than prices quoted below. The quality of the stall-fed cattle was fairly good, but among the grasses there was some very poor quality, which is not wanted.

**Export Cattle.**—Choice, well finished exporters of heavy weight sold at \$5.10 to \$5.10 and light ones at \$4.75 to \$4.90 per cwt. A few choice picked lots sold at 10 to 15c per cwt. at over these figures. Heavy export bulls of good quality sold at \$3.87½ to \$4.25, and light ones at \$3.60 to \$3.80 per cwt.

**Butchers' Cattle.**—Choice picked lots of these equal in quality to the best exporters, weighing 1,000 to 1,150 lbs. each, sold at \$4.65 to \$4.75 per cwt. Good butchers' cattle brought \$4.50 to \$4.60, medium \$4.35 to \$4.50, and common \$3.85 to \$4.10 per cwt.

**Stockers and Feeders.**—Stockers show a little weaker tendency at Buffalo. On this market on Friday Buffalo stockers sold at \$3.25 to \$3.50 for medium, and \$3.75 for good, with a few picked lots bringing \$4 per cwt. Stock heifers are easier at \$3.25 per cwt. Inferior stock bulls bring \$2.75 to \$3 per cwt. Heavy feeders are in demand, with prices firm at \$4.40 to \$4.60 for well-bred steers half-fat, and weighing not less than 1,000 to 1,150 lbs. each.

**Calves.**—These are in fair demand at Buffalo. On Friday about sixty sold on this market at \$4 to \$8 each.

**Milch Cows and Springers.**—These are worth from \$27 to \$46 each.

#### Sheep and Lambs.

These show a weaker tendency here, though at Chicago and Buffalo the market has been firm and strong. On this market on Friday sheep were easier at \$3.25 to \$3.50 for ewes and \$2.75 to \$3 per cwt. for bucks. Yearling lambs were easy at \$4 to \$4.50 per cwt. Spring lambs were firmer at \$3.50 to \$4.25 each.

#### Hogs.

The hog market is a little down from what it was a week ago. On Friday deliveries on this market were light; select bacon hogs brought \$5 per cwt., and \$4.37½ for light and thick fats. The Montreal market is weak and lower, the ruling price being \$4.75 per cwt. The Trade Bulletin's cable re Canadian bacon trade read thus:

London, June 22, 1899.—The market has ruled quiet for all kinds during the week, but with light stocks holders of Canadian brands are not pushing sales.

#### Horses.

The horse market last week showed a falling off in numbers and prices ruled lower than

## The Machines that made America Famous.



Have you purchased a DEERING Machine? If not call on our nearest agent and do so, then you can rest assured that your harvest will be taken off to your entire satisfaction.

### Deering Harvester Co.

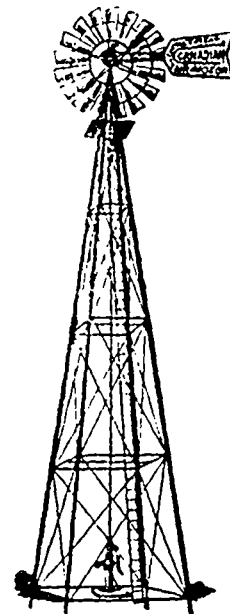
Main Office and Factory: CHICAGO, U.S.A.  
Permanent Branch Houses: LONDON, Ont.; WINNIPEG, Man.

the previous week. About 60 horses were offered at Grand's Repository. One pair of bay geldings, weighing 3,200 lbs., brought \$280. A good action gray horse, 16 hands, sold for \$150 and a chestnut of about the same stamp \$140. A number of general purpose horses ranged in price from \$75 to \$140 according to weight and condition; drivers from 15 to 16 hands from \$80 to \$120, and secondhand horses (those more or less used up from constant use on the hard city pavements) brought from \$25 to \$60.

#### Counterfeit Food Products.

An imitation is a counterfeit, and a counterfeit is a fraud *per se*, and should have no rights before the law as against an honest product of the farm. No matter how many hired chemists assert to the contrary, counterfeit food products are a menace to the health of the public, and the prosperity of the farmer and the nation. In every state there is needed a dairy and food commission to act as a bureau for the enforcement of good laws against food, drug, and drink counterfeiting. The only law we have is the enforced law. This body can, and, in my opinion, should, express no doubtful opinion on these subjects.—W. D. Hoard.

## WIND MILLS



If You Need a  
RELIABLE  
WINDMILL

Before Buying See  
the

### Canadian Steel Air Motor

Will { Save Labor  
Save Time  
Save Money

Points: { Power  
Strength  
Simplicity

Supplied H.M. Government  
and C.P. Railway.

Pumps, Tanks, Grinders,  
Hay Tools, Water Basins.

Ont. Wind Engine and Pump Co., Limited

TORONTO.

Canada's most progressive  
Farmers

USE

# Massey-Harris Farm Implements

BECAUSE:

They give excellent satisfaction.  
They are made of the best materials that can be bought, and by the most skilled Canadian Artizans.  
The money you pay for Canadian-made Implements benefits your fellow-countrymen.

REMEMBER:

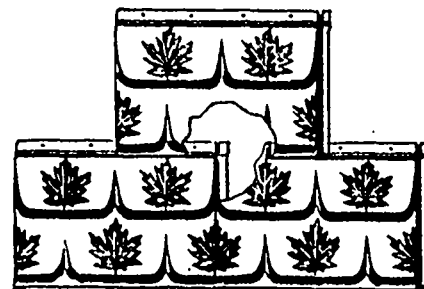
The Wages earned by Canadian Mechanics are spent in Canada, and indirectly, but most surely, benefit the Canadian Agriculturist.

Therefore: Why buy Foreign-made  
Machines?

THE MASSEY-HARRIS CO., LIMITED, TORONTO, CAN.

## IF PEOPLE ONLY KNEW

the advantages of using metal roofing, constructed on our patent "SAFE-LOCK" principles, they would not accept a substitute.



### OUR "SAFE-LOCK" SHINGLES

interlock each other on all four sides—leaving no openings for snow or rain to get in. They are easily put on by anyone—are practically fire and lightning proof and give a building a neat, finished appearance. We can tell you more. Ask for free catalogue and samples.

The Metal Shingle and Siding Co.  
(Limited)

PRESTON. - ONT.

## CANADIAN PACIFIC RY.

Will Run	AT RETURN FARES
Home Seekers' 60-Day Excursions To the Canadian North-West	Winnipeg....
	Deloraine....
	Reston.....
	Estevan.....
	Binscarth....
	<b>\$28</b>
	Moosomin....
	Cowan.....
	Regina.....
	Moosejaw....
	Yorkton.....
	Prince Albert.....
	Calgary.....
	Red Deer....
	Edmonton...
	<b>\$30</b>
	<b>\$35</b>
	<b>\$40</b>

Going June 27. Returning until August 26.  
(All Rail or S.S. Alberta).  
Going July 13. Returning until Sept'r 12.  
(All Rail or S.S. Athabasca).  
Going July 18. Returning until Sept'r 17.  
(All Rail or S.S. Alberta.)

For tickets apply to any Canadian Pacific Agent, or to C. E. McPHERSON, Asst. Gen. Pass. Agent, 1 King Street East, Toronto.

## Farmers who are wise

IT PAYS TO BUY  
THE BEST



This Trade Mark is on  
every Tag.  
See that you get it.

Will not be persuaded into purchasing the unreliable Binder Twine which some dealers wish to sell for the sake of the additional profit derived therefrom. Crudely made from low-grade fibres—such twine contains but a fraction of the quality, strength and uniform evenness of the highly constructed Plymouth Brands.

NO OTHER TWINE IS

"JUST AS GOOD"  
AS PLYMOUTH

District Plymouth Binder Twine Agency, 54 Bay St., Toronto.

## Lump Jaw

If it once gains a foothold in your herd will in all probability carry off from ten to twelve per cent.

### MITCHELL'S ANTI-LUMP JAW

has proved by its effective work that a bottle of it should be in every cattle raiser's hands.

WE ABSOLUTELY GUARANTEE  
TO CURE ALL CASES.

If it fails we return your money. Endorsed by Canada's leading cattle exporters, Gordon, Ironside & Fares, Montreal and Winnipeg.

Price \$2.00.

Postpaid to any address.

FREE—Treatise on Lump Jaw and booklet of Testimonials sent on request.

W. J. Mitchell & Co.,

CHEMISTS,

Prince Albert, N.W.T.  
Winnipeg, Man.

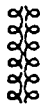


**THE FROST & WOOD COMPANY, Limited** HEAD OFFICE AND WORKS: SMITH'S FALLS, Ont.

**FROST & WOOD NO. 8 MOWER**

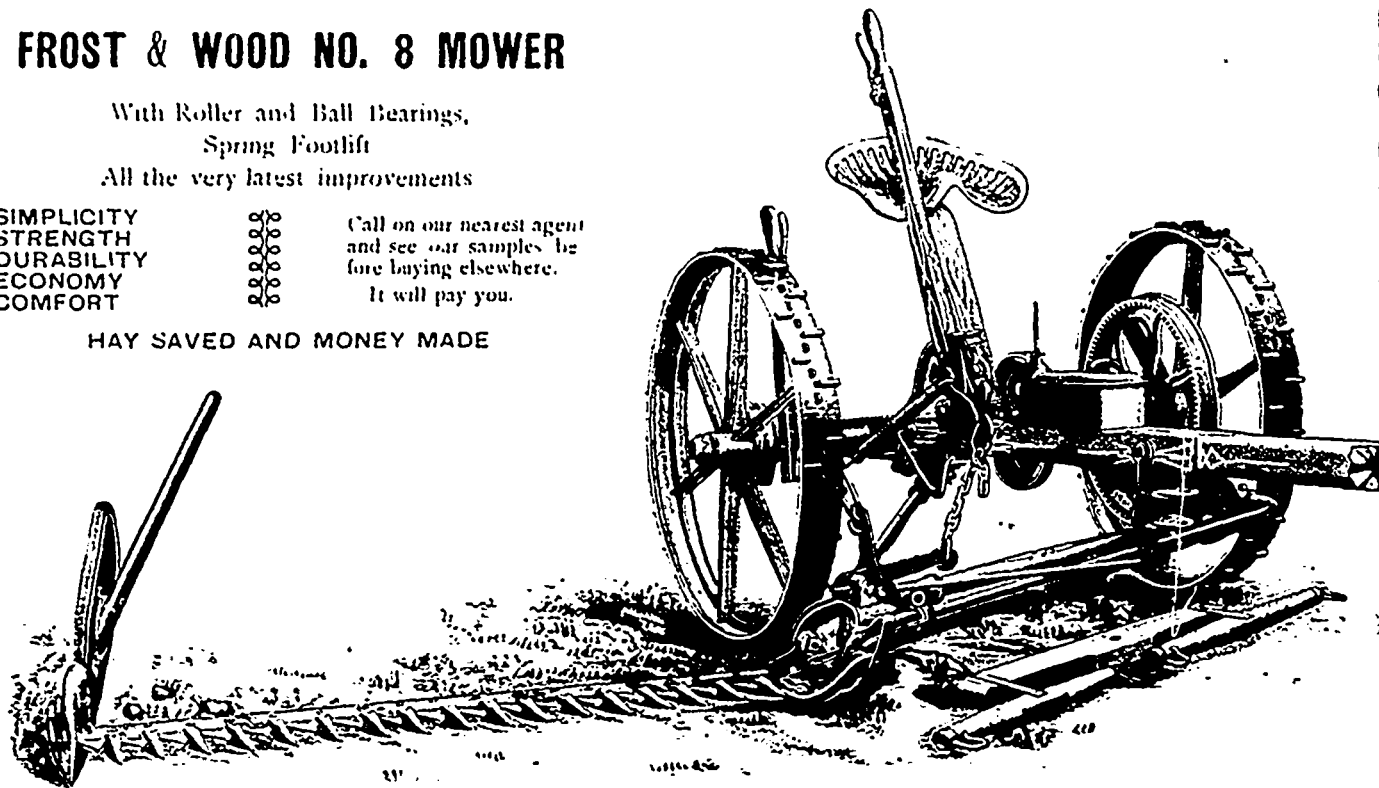
With Roller and Ball Bearings,  
Spring Footlift  
All the very latest improvements

SIMPLICITY  
STRENGTH  
DURABILITY  
ECONOMY  
COMFORT



Call on our nearest agent  
and see our samples before  
buying elsewhere.  
It will pay you.

HAY SAVED AND MONEY MADE



WIDTH OF CUT, 4', 5 AND 6 FEET  
THE ONLY MOWER THAT REALLY DOES WHAT OTHER MOWERS CLAIM TO DO

If your crop is LIGHT, you need the BEST CUTTER to SAVE IT ALL. If your crop is HEAVY, you need the most powerful cutter to CUT IT ALL. The FROST & WOOD NO. 8 stands for the highest perfection in grass-cutting machinery. You make no mistake, and SAVE MONEY when you buy a No. 8. IT IS THE BEST.

BRANCH OFFICES: 77 Jarvis St. Toronto; Our Market Square, Winnipeg, Man.; London, Montreal, Quebec, Truro, N.S.; St. John, N.B.  
Send for illustrated catalogue. When writing mention F&W.

**The Vessot Sub-Soiler**  
**Price, \$5.00**



The one thing  
needed to  
ensure  
good  
crops.

Made to fit any Plough

NOW  
IS  
THE  
TIME  
TO  
BUY

Mr. J. H. Peters, Mossburn, Assa.,  
says: "We like it fine. You can tell  
the row where it was used."

Circulars on  
application

**S. Vessot & Co.,**  
Joliette, Que.

**FREEMAN'S  
THREE-PLY READY ROOFING**

... EASILY APPLIED ...

Great Reduction in Prices. Send for Price List, etc

Parliament Buildings, Toronto,  
October 20th, 1895.

THE W. A. FREEMAN Co., 57 Ferguson Ave., South,  
Hamilton, Ontario:

Gentlemen.—Nine years ago I purchased from you a large quantity of material known as Freeman's Ready Roofing, with which I roofed the north half of my barn and two sheds, 6' x 20 each. This year we re-painted this roof and found it in excellent condition. A shingle roof put on part of the barn two years before was badly in need of repair. I shall hereafter use your ready roofing on all my out-buildings.

Yours truly,  
(Signed) F. W. Housen

≡ **SALT** ≡

"A WORD TO THE WISE"

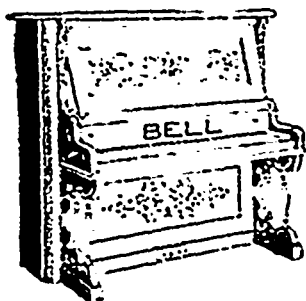


SALT may be described as a powerful chemical agent for providing and preparing soluble foods for plants from the materials present in the soil. This is a most important consideration when we remember that in all soils there are about two-thirds lying dormant and only one-third in active condition.

We sell all kinds of Salt in all kinds of packages. Barrels, bags or bulk. Unequalled shipping facilities. Higher grades of Salt for dairy uses a specialty.

Established  
1872

**R. & J. Ransford**  
CLINTON, ONT.



**BELL  
PIANOS AND  
ORGANS**

BUILT TO LAST A LIFETIME

SEND FOR DESCRIPTIVE CATALOGUE (NO. 4) TO

The BELL ORGAN AND PIANO Co., Limited, Guelph, Ontario.

LARGEST MAKERS IN CANADA.