# Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original

L'Institut a microfilmé le meilleur exemplaire qu'il

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.							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					Coloured pages/ Pages de couleur													
1 1	Couverture endommagée					Pages damaged/ Pages endommagées													
	Covers restored and/or laminated/ Couverture restaurée et/ou pelliculée						Pages restored and/or laminated/ Pages restaurées et/ou pelliculées												
1 1	Cover title missing/ Le titre de couverture manque						Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées												
1 1	Coloured maps/ Cartes géographiques en couleur						Pages détachées Pages détachées												
	Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire)						Showthrough/ Transparence												
	Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur						Quality of print varies/ Qualité inégale de l'impression												
	Bound with other material/ Relié avec d'autres documents						Continuous pagination/ Pagination continue												
	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						Includes index(es)/ Comprend un (des) index  Title on header taken from:/												
1 1	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.							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											
Additional companies (							Masthead/ Générique (périodiques) de la livraison												
Additional comments:/ Commentaires supplémentaires:  This item is filmed at the reduction ratio checked below/																			
	em is filmed cument est fi						sous.												
10X	<del></del>	14X		1	18X			<del></del>	22X		ļ	-	26X		<del></del>		30 X	<u>-</u>	
	12X		16X				20X				24X				28X				32X

# Does Environment Influence Type in Live Stock?

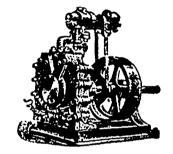
Vol. XVI. No. 6.

One Dollar per Year. Published Weekly.



October 11th, 1898.

# @\@\@\@\@\@\@\@\@



# The Dake Patent SQUARE PISTON

# STEAM ENGINE

For Creameries, Cheese Factories, etc.

Simple.

Economical.

Cleanly.

NEW CATALOGUE IN PRESS Send your address on a postal cird and a copy will be mailed to you when ready.

THE JENCKES MACHINE CO. 30A LANSDOWNE STREET Sherbrooke, Que.

# Horse Owners! Use



GOMBAULT'S

The Safeat, Heat BLISTER ever used Takes the place of all liniments for mild or severe action. Itemores Buncheser Bluemishes from Horse and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impaintle to produce zear or olemin. Every bottle sold is warranted to give satisfaction Prico \$1.50 per bottle. Sold by drugants, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars. THE LAWRENCE-WILLIAMS 10-10 RUN 10. A Safe Spredy and Positire Care

# **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



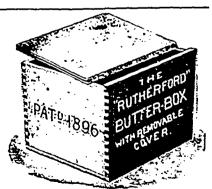
Trade Mark Reg'd.

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 Avery package sold under positive guarantee money tack if it should ever fail to cure. Sent everywhere by mail. Price, \$2.00.

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

Address FLEMING BROS. Chemists, ST GEORGE, ONTARIO



Made of Kiln dried spruce. Smaller at bottom All bases parallosed inted. For saie by Dairy Supply Furnishers and Produce Dealers.

Wm. Rutherford & Sons

# Why not be sure

of permanent beauty in your interior finish.

# METALLIC CEILINGS AND WALLS



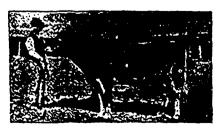
They suit any room -are economical, easily applied, fire-proof, and hygienic-and make the most tandsome, lengest lasting finish you can find.

Make up your mind in their favor. We will send you an estimate on receipt of outline showing shape and measurements of the walls and ceilings to be covered.

# METALLIC ROOFING CO.,

1192 King Street West, Toronto.

# <sup>ALY</sup>ARM GUERNSEYS



Awarded first prize at Montreal for BREBDERS'
YOUNG HERD. Young animals of MERIT for sale.
Pedigrees and particulars to parties wishing to purchase. Address,

SYDNEY FISHER, Knowlton, Que

*ۿڒۿڒۿڒۿڒۿڒۿڒۿڒۿڒۿ*ڒۿ 

The Bryant Press

44-46 Richmond Street West Toronto.

# Brookbank 🕥 Holstein Herd

CHAMPIONS FOR MILK and BUTTER

A number of desirable young bulls on hand from one to eight months old from our show herd and great milking stock. Also females of all ages

Write for just what you want.

Registered Poland China Pigs, one month old, for sale.

A. & G. RICE, Currie's Crossing, Oxford County, Ont.

#### MAPLE-HILL Holstein-Friesians

THE GOLD MEDAL HERD OF 1897

Service Bulls-

SIR PLEDGE DE KOL, Imp. DE KOL 2ND'S PAUL DE KOL DUKE, Imp. Can spare a few young things of both sexes from strictly first-class cows of De Kol, Empress Josephine, Mechibilde, and other famous butter families.

G. W. CLEMONS St. George. Ont.

#### ROSE HALL STOCK FARM. HOLSTEIN-FRIESIAN

FOR SALE—Two choice young bulls, sired by Lord Everet and, a great grandson of Barrington; one of the best bulls ever imported. Dams are Cecilia Mink Mercedes, ist and 2nd, both of good milking strains. Also heifers and heifer calves. Prices reason-able. T. W. OHARLTON, 3t. George, Ont.

# ...Gem Holstein Herd...

STOCK FOR SALE. We only keep and breed Registered Holstein-Friesians. Cholce Young Bulla and Fielfort, also some older animals, all of the very best dairy quality for sale. Correspondence solicited.

Shipping Stn., TORONTO.

ELLIS BROS., Bedford Park. Ont.

#### SPRING BROOK HERD OF

## HOLSTEIN-FRIESIANS and TAMWORTH SWINE...

TWO choice young BULLS of best quality and breeding; also, a few nice young TAMWORTH BOARS and SOWS, 3 and 4 months old, by prize-winning, imported boar Nimrod. Several SOWS to spare, due to farrow. Writeatonce for prices. A. C. HALLMAN, New DUNDER, Waterloo Co., Ont. Railway Stations: Petersburg, G.T.R.; Ayr, C.P.R.

E. PANNAB LCKER, Fairview Farm, Hespeler, Ont., Breeder of reg. Holsteins. Stock for sale.

CREGOR MACINTYRE, Renfrew, Ont., Breeder Thoroughbred and High Grade Holstein Cattle. Stock for sale.

J. A. RICHARDSON, South March, Ont., Breeder U. Holsteins, Dorset Horned Sheep, Tamworth Swine.

WM. ARMSTRONG, Locust Hill, Ont., Breeder of Purebred and High-Grade Holsteins.

#### GALLOWAYS.

A. & R. SHAW, Brantford, Ont., Breeders of All Galloway Cattle. Choice young animals for sale.

DAVID McCKAE, Janefield, Guelph, Canada, Importer and Breeder of Galloway Cattle, Clydesdale Horses, and CotswoldSheep. Choice animals for sale.

#### JERSEYS.

# BRAMPTON JERSEY HERD.

Full stock of A.J.C.C. cows, beifers, heifer calves and bulls. Ask for what you want. A number of young Berkshires.

B. H. BULL & SON, - Brampton, Ont.

J. H. SMITH & SON, Willow Grove Farm, High-tifield, Ont., Breeder St. Lambert and St. Helen's Cattle. Prize berd at the Industrial.

OBT. REESOR, Locust Hill, Ont., Breeder Jersey R Cattle and Shetland Ponies. Young stock for sale. Locust Hill is 20 miles from Toronto on the C.P.R.

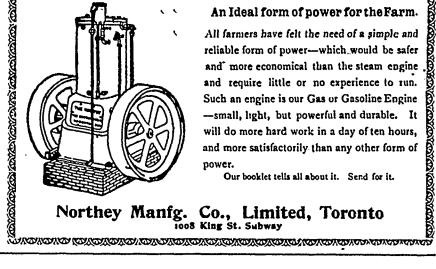
WM. ROLPH, Glen Rouge Farm, Markham, Ont.,
Brooder of Jersey Cattle. Herd nearly all pure
St. Lambert. Voring stock always for sale.

W.M. WILLIS, Pine Ridge Farm, Newmarket, Ont.,
W. breeder of St. Lambert Jersey Cattle, Cotswold

WALTER NICHOL, Plattsville, Ont., Breeder of Ayrabire Cattle and Leicester Sheep. Choice young stock for sale.

# Northey Gasoline Engine

0\@\@\\@\\ @\@\\@\\@\\



An Ideal form of power for the Farm.



# Cargill Herd Of ${f SHORTHORNS}.$

Sale

Good young cows, two years old; yearlings and heifer calves, out of Imported and Homebred cows, and the Imported bulls, Royal Member and Rantin Robin. Come and see them or write if you want something special. Station on the farm.

# H. CARGILL & SON.

CARGILL STATION AND P.O., ONT

# IMPORTED OXFORD DOWN

LAMBS—Canadian bred yearling and ram lambs. Yearling ewes and ewe lambs for sale, reasonable.

HENRY ARKELL, Arkell, Ont.

# MAPLE CLIFF STOCK AND DAIRY FARM

Ayrahire Cattle. Berkshire and Tamworth Pigs.

FOR SALE—Two young bulls fit for service, and five bull calves (calved in February).

One mile from Ottawa.)

R. REID & CO. Hintonburg, Out.

For Sale 3 First-class Shorthorn bulls, red roans. 40 good Yorkshire boars and sows, 6 weeks to 6 months. 20 Lengthy Large English Berkshire boars and sows, 5 months. 1 Shropshire ram lambs, from imported 5 months. 1 stock Write

Box 290.

H. J. DAVIS, Woodstock, Ont.

#### E. L. JAŘVIS PARIS, ONT. Breeder of Chester Whites

King George-717—, bred by R. H Harding & Son, at head of herd. Young boars and sows for sale. A choice lot of four fine young boar pigs, dam Snowball—818—, sire King George. Also a few excellent young sows. Prices right. Lovers of Chesters inspect my herd, or write, before purchasing. Visitors always welcome. P. L. JARVIS, Paris, Ont.

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



.. OFFERS FOR SALE..

# TEN CHOICE SHORTHORN BULLS

from six to eleven months

# TWENTY-FIVE COWS AND HEIFERS

Served by imported bull, Golden Fame =2005=; also a few cows with calver at foot. Farm 6 miles from Hamilton. Catalogue sent on application. Visitors met at G.T.R. or C.P.R. if notified.

# Shorthorns

# And Lincolns

The Champion Herd and Sweepstakes female at the three leading Exhibitions in Ontario, viz : Toronto, Ottawa, and London, and Sweepstakes Bull at Toronto and Ottawa in the year 1897; have for sale some grand young bulls and females.

Lincoln Sheep of all ages.

Apply to

T. E. ROBSON.

Ilderton, Ont.

# SHORTHORNS



SIX BULLS FOR SALE.

fit for service, at reasonable prices. Write for partic-

D. Alexander, Brigden, Ont.

# SHORTHORNS.

BONNIE BURN STOCK FARM, Stouffville sta-tion and P.O. D. H. Rumell, prop. Breeder purebred Shorthorn Cattle, Shropshire Sheep, and Berkshire Swine.

# DEVONS.

J. RUDD, Eden Mills, Ont., Breeder of Devon Cattle, Cotswold and Suffolk Sheep, Berkshire Pigs, Plymouth Rock Fowls. Young stock for sale.

# ABERDEEN ANGUS.

BUCHANAN, Napier, Unt., Breeder reg. Aber deen-Angus Cattle. Stock by Lord Forest for sale

# FARMING

Vol. XVI. OCTOBER 11th, 1898. No. 6.

# Agricultural News and Comments

A vast number of the farms in Belgium contain only about two acres, but somehow the owners manage to get a living and support large families. They raise fruit, vegetables and grain enough to live on, and have hogs and chickens and eggs to send to market.

No farm machine will pay a farmer so well as a good grinder or feed mill. It does not pay to give toll to get the coarse grains chopped or ground. With a grinder this can be done at odd times at very little cost. A good chopper will pay for itself in a comparatively short time if used to chop and grind grain for stock.

The Maine station finds a satisfactory ration for milch cows in the following: Two pounds each of cornmeal, cottonseed-meal, and gluten-meal, ten pounds corn ensilage and as much timothy hay as they want. This is fed twice a day. It is a rather concentrated ration, and many would like it better with shorts substituted for the cottonseed-meal.

A farm is like a book; you have to study it to know what is in it. It takes time to learn what crops to raise, and where and how to raise them. There are no two farms just alike. Some call themselves good farmers because they can plough or do other mechanical work well. These things are important, but unless each man carefully studies his own book the highest success cannot be gained.

A correspondent writes us from St. John, N.B., on date September 20th, as follows: "Crops of oats are fairly good in New Brunswick, no rust worth mentioning; wheat is much rusted, however. Potatoes, farmers tell me, are a good crop. Hay is an enormous crop, and farmers do not know what to do with it, having no cattle to feed it to. There is a lot of last year's hay in the farmers' hands."

According to reliable statistics the beef production per capita in the United States is decreasing. In 1892 it was estimated to be 981 pounds per head of the population and in 1898 it is estimated to be only 951 pounds per capita. In making this calculation three and a half years was estimated as the time when an animal was brought to ma turity in 1892, while in 1898 only two and a half years is allowed for maturing.

There is no portion of the globe in which fruit is more abundant or more extensively used than in Australia. The supply is so ample that during certain seasons of the year pineapples bring one and a half cents a piece, oranges one cent a dozen, and bananas two cents a dozen. Even the ignorant people believe that fruit eaten freely is an aid to health, and as a result the death rate is low, not only among the natives, but in the foreign population as well.

Among the rules of a New York livery stable where the animals of many wealthy men are kept are the following: "No man will be employed who drinks intoxicating liquors. No man shall speak loud to any of the horses, or in the stables where they are. Horses of good blood are nervous, and loud, excited conversation is felt by every horse who hears it, and keeps them all nervous and uneasy. No man shall use profane language in the hearing of horses."

English agriculturists have lost a strong advocate and a staunch friend in the death of the Earl of Winchilsea. He was associated with everything that was progressive in the agricultural line, and his place will not be easily filled. He was the founder of one of our most valued English exchanges, *The Cable*, and was president of the National Agricultural Union for many years. Like many others who have devoted their energies to the farmer and the farmer's cause, his influence will live after him.

A farmer sent some "fat" steers to market. His orders to the dealer were to sell the steers for beef and then buy for the fa.mer a lot of lean cattle and send to him to fatten. The alleged fat steers only brought \$3.75 a hundred. The lean steers the dealer bought for the farmer cost \$4 a hundred. When they were sent home, that ruralist found among the lean lot three of the very same alleged fat animals he had just sold at \$3.75 a hundred. That was what he got for sending cattle to market when they were only half fat.

Experience shows that wherever railways have been placed under government control the people have had better service and at a cheaper rate. In Belgium, where the government has assumed the control of the railways, fares and freight rates have been cut down one-half and the wages of employees doubled; but for all that the roads pay a yearly revenue of \$4,000,000. In Hungary, where the roads are state owned, one can ride six miles for a cent. In Australia one can ride 1000 miles across the country for \$5.50 or six miles for two cents. Sixty-eight governments own their telegraph lines. Forty-four governments own their railroads in whole or in part, while only nineteen do not.

The Manitoba Anti-elevator Monopoly Association have issued instructions to the farmers of Manitoba and the Northwest Territories as to the best methods of disposing of this year's wheat crop and how to overcome and avoid the unjust exactions of the elevator monopoly combine, which is said to exist in the West. Included in these instructions is definite advice as to how to proceed when ordering and loading cars, selling, and financing, and shipping through the elevators. The farmers are urged to act independently of the combine and to erect grain warehouses at railway points for receiving and shipping. Such concerted action will doubtless have some effect in remedying grievances.

#### $\sim$

# Does Environment Influence Type in Live Stock?

It is pretty generally admitted that if pure-bred stock be taken from their original home and transferred to a new one where the conditions are quite dissimilar and bred for a number of years their appearance and outward characteristics will undergo a change. This is perhaps more noticeable in cattle than in any other animal. The London Live Stock Journal, in a recent issue, gives a couple of striking instances of where the outward characteristics of breeds have been changed by continued breeding amid new surroundings and new conditions. One of these is that of a breeder of Shorthorns in North Wales, who gives this experience: "In the course of many generations, however, he came to the conclusion that locality had much to do with fixing the type or outward characteristics of a cow, and he found that, however purely inbred, at last his

herd began to show the outward conformation or build of the native I lack kine on the surrounding hills." When this was noticed the breeder went regularly to Mr. Bates and some other eminent breeders for a cross of fresh Shorthorn blood to restore the diminished character in his own herd.

The other instance given relates to Jerseys, and points out that when these are bred several generations deep in England, and especially if the parents on both sides be so bred, they vary from the island type. Besides, it is claimed that these variations differ according to quality. On the richer grazing lands they lose the light-flesh character, and, while continuing to yield, under suitable management, milk rich in butter, they have, even when milking, a fair covering of beef upon their frames, and, when not milking, an evident tendency to fatten beyond that of the breed when brought over from the island. A case in point is given of a dairy farmer in the north of England, where, doubtless, conditions are not favorable to the prosperity of Jerseys, whose herd of Jerseys had developed coats of thick, wavy hair. These had been bred on the farm for considerable time, and gradually accustomed themselves to a climate in which warm winter coats were needed.

A writer in the above journal, who is very strong on the question of environment, states that the true-built Shorthorn prospers best where it was first brought out, in the vicinity of Durham. But such a statement is not borne out by facts, as fine Shorthorn herds of the true type have prospered as well in Scotland and in other parts of England as in the northern counties. In this connection The Live Stock Journal points out that, while environment may have something to do with variations in the outward characteristics of animals, to a large extent such variations depend upon the treatment accorded by the breeder, or in other words the breeder in a large measure has it within his power to overcome the effects of environment. While this is true, and while improper stabling and improper feeding will work great changes in the outward characteristics of animals, there are good grounds for believing that a change of environment dissimilar to that of the original home of the breed will, if no fresh blood is brought in, materially change the type.



Filligrees Clothilde Lincoln -617- A. H. F. A. Weight, 2,100. Won 6 flists as a yearling, and 7 firsts as a two-year-old in Ohio; 2nd at Toronto, London and Ottawa, 1898. Owned by A. & G. Rice, Curries, Ont.

If this be true what lesson is there in it for the Canadian breeder? Simply this, if he wishes to maintain the characteristics of his herd he must make frequent importations of animals from the original stock. If the change of en vironment in going from one locality in Great Britain to another or from the Island of Jersey to England brings about such changes as have been instanced above, surely there is ground for believing that the change of environment in bringing animals from Great Britain to Canada would have still greater effect. It may be that in Canada we have conditions quite similiar to those prevalent in the northern counties of England where Shorthorns were first brought

out, but it is very doubtful, as we have a more rigorous climate and are very far separated from them. It then be comes incumbent upon our breeders, if they wish to keep their herds up to the original type of the Shorthorns, to import regularly new blood. This also applies to other breeds.

# Are our Horse-Breeding Methods Improving?

In another column we publish an article by Alex. Galbraith, secretary of the American Clydesdale Association, reviewing the horse-breeding season of 1898 in the Western States. We wonder if what he says applies to Canada? His statement that, not during the last fifteen years has breeding been conducted in a more haphazard, indiscriminate manner than this season, is really a startling one, and we sincerely hope that it does not apply to the horse-breeding season of 1898 in Canada. The increased interest in the horse trade and the experience that our farmers have had with scrub horses during the past ten or fifteen years would lead us to expect that more system and intelligence have been applied to horse breeding in this country during the past season than for several years Whether there has been a definite improvement in methods or not it is hard to say. We are quite safe, however, in saying that perfection has not been reached yet. After the slip-shod methods that have been practised in this country during the past decade it is very unlikely that anything in the way of perfection has been attained to. Therefore our farmers and breeders should read very carefully the article referred to and endeavor to profit by it in their methods of horse-breeding.

One of the remedies which Mr. Galbraith suggests, that of co operation on the part of farmers in securing the services of good horses, could be very well adopted by farmers in this country. The value of such a plan cannot be ers in this country. The value of such a plan cannot be coverage as the former, and why could they not be utilized for this purpose? This would seem to be a very useful line of work for our farmers' institutes to take up. The institutes now cover nearly every portion of the Province, and, if each one would select good stallions of the various types of horses likely to be in demand by the members, a great improvement in the horsebreeding methods of this country could be obtained. For example, the directors of each institute, on the recommendation of some recognized authority, might select a stallion from among the Clydesdales, Shires, Hackneys, standard-breds, and other types of horses, for use by its members, and make arrangements with the owners for a fee to be charged according to the number of mares supplied. Such a plan would serve to place the horse-breeding methods of this country on a proper basis, and to show our farmers what a really good type of horse was like. We would like to have the opinion of some of our institute workers and others with regard to this plan.

7

# A Rational View of the Tuberculosis Question

At the meeting of the American Health Association, held recently in Ottawa, Dr. Irving A. Watson, President of the New Hampshire State Board of Cattle Commissioners and Secretary of the State Board of Health, made the following statement in regard to bovine tuberculosis:

"That it is impossible to eradicate bovine tuberculosis, but it may, without inflicting too great a burden on the State, be reduced to a degree that will subserve the interests of the stock-raisers and likewise protect the public health; that but a very small percentage of the animals infected with tuberculosis in any way endanger the public health, and that an indiscriminate slaughter of the cattle reacting to the tuberculine test is wholly unnecessary, inasmuch as many of them either recover, or the disease is perman-

ently arrested; that a proper sanitary condition of stables and stable enclosures would do more toward preventing the spread of bovine tuberculosis than any other measure that could be adopted; that the danger of infection from bovine tuberculosis may be reduced to very small proportions, if not wholly eradicated, by sanitary measures, inspections and physical examinations by the State, in co-operation with local authorities, and that such inspections, once inaugurated, could be maintained without an expense that would be burdensome to the State."

This candid statement, coming from such a source, should serve to dispel the fears of those who are unduly alarmed in regard to the spread of tuberculosis in cattle. In dealing with this question both the interests of the stockraiser and the public health must be considered. Very often these interests clash, because each one takes an extreme view of the question, and do not deal with it in moderation. The above reasonable and common-sense view of the question, therefore, coming from an officer whose duty it is to look after the public health of the community in which he resides, will be welcomed by stock-raisers and others who are desirous of having rational methods adopted.

The statement that the indiscriminate slaughter of the cattle reacting to the tuberculine test is unnecessary is quite in keeping with the views maintained by those who have investigated the question in Great Britain. In Belgium this method was tried, but was found to be impracticable, while the cost was enormous. Though it may be necessary in extreme cases to slaughter affected animals, authorities are now pretty well agreed that to slaughter every animal reacting to the test is both useless and impracticable, in so far as preventing the spread of the disease. A separation of the sound from the affected animals is the better way, and, by giving the latter proper care and treatment, many of them may recover.

The important points upon which all authorities lay special stress are sanitation in the cow-stables, a plentiful supply of fresh air, and an abundance of sunlight. Where strict attention has been paid to these good results have been obtained in preventing the spreading of the disease, and in curing affected cases. The sanitary and other conditions connected with the keeping of cattle are under the control of the stockmen and farmers, and it is their duty to do everything in their power to make these conditions the best possible. This, together with the adoption of rational methods in dealing with affected animals on the part of those in authority, will be effective in preventing the spreading of tuberculosis in cattle, and at the same time afford ample security in regard to the public health.

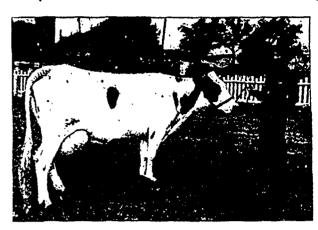
# Farmers and the Lumber Question

The question of whether, or on what terms, American lumbermen should be permitted to cut and saw logs on the public lands of Ontario, to be manufactured into lumber in the United States is exciting a good deal of interest just now, in view of the proceedings at the Quebec Conference. It will be remembered that they enjoyed the privilege until last spring, when it was abrogated by the Ontario Government in consequence of the unfriendly action of the American Government-directly instigated by those who were getting the raw material for their mills in this country-in imposing a tariff of \$2 per thousand upon Canadian lumber entering the United States. Now the Americans, who, in consequence of the exhaustion of their own timber supplies, want the run of our forests, are anxious to have this prohibition removed, and, while not willing to open their ports to our lumber, are reported to favor some modification of their existing tariff laws in order to obtain our saw·logs.

The issue involved is one which affects not only the lumber interests but all classes of Canadian producers, including the farmers, and it ought to be thoroughly weighed and discussed, not merely from the standpoint of trade or class interests, but from that of the general welfare. It is much more important than appears at first sight, inas-

much as it vitally concerns the prosperity of the whole country. If the prohibition is removed, while the duty on Canadian lumber is retained, it means that the saw-mill owners of the United States in increasing numbers will seek their supplies of logs on this side of the line. They will keep their home market to themselves—shut out our lumber manufacturers—and, while our saw-mills are closed or running on short time, the Michigan lumbering towns will be reaping the prosperity that would have fallen to us had we retained our raw material at home.

It is not necessary to point out to any one familiar with the conditions of life in this northern section of Ontario how important a factor in business and industrial develop-



Winnie R -20296- H.F.H.B., 1305, Advanced Registry Number. 10 months' milking production, 15,472 lbs.; full year's production, 17,502 lbs. Weighed 1,656 when in good condition. Bred by M. R. Seeley, Farmington, Mich., 1st prize at London, 1898. Owned by A. & G. Rice, Curries, Ont.

ment the lumber manufacture is. The mere taking out and shipping of saw-logs employ comparatively few men—and that only during a portion of the year—while the saw-mill and other industries dependent upon it gives continuous well-paid labor and remunerative investment to capital. It builds up settlements, which grow into villages and towns, affording a steady home-market for farm produce, besides frequently furnishing work to men who are only partly dependent on agriculture for employment. Our saw-mill industries cannot be ruined or seriously injured without much loss to the farmers of the lumbering districts. There is no class who suffer more from the effects of general stagnation and the withdrawal of money from circulation than do the farming population.

The Ontario Government has latterly felt the need of conserving the timber more carefully and taking measures to provide for preserving the forests upon non agricultural lands as a permanent source of supply. To permit the free exportation of saw-logs would be a reversal of this wise and economical policy, because the American demand is likely to be enormously increased in the near future, as they have only pine timber enough in the North-Western States to last them a very few years longer. The drain upon our forests to supply lumber at the present rate of requirement is quite heavy enough to make thoughtful Canadians anxious about the future, but if they are also to be drawn on to make good the deficiency across the lineand exploited with the same recklessness with which Michigan has been devastated—one great source of our national wealth will soon be extinguished. And, instead of our mechanics, farmers and business men having received the benefit resulting from its conversion here into lumber and the various manufactured products of which woodforms the main raw material, we shall have parted with it for a very trifling return, and our rivals will have reaped the advantage. National interests demand that we should avoid any such short-sighted and suicidal course.

The policy of the Ontario Government in putting an embargo upon the exportation of saw-logs was heartily approved by all independent of party, the only criticism of their action being that it ought to have been taken before. It is a matter that ought not to be settled by a struggle be-

tween the lumbermen who want to manufacture in Ontario and the other class who desire only to cut logs and ship them to be worked up abroad from the standpoint of selfish interest, but should be decided from a broad, patriotic and national point of view. It is earnestly to be hoped that public opinion will be so strongly voiced in favor of maintaining the existing enactment which probibits the exportation of saw logs that no body of Canadian legislators will entertain the notion of abandoning the position taken last year by the local Legislature on the subject. There will be no danger of such a surrender, if the issues involved are thoroughly understood by the people whose rights and interests are affected, in time to allow them to be heard from.

# The Farmer Becoming More Independent

There can be no doubt that the condition of the farmer has improved very much during the past year or two. Not only is this so in regard to the Canadian farmer, but also in regard to the farmer of the Western States. years ago the farm rs of the States west of the Mississippi were in a much worse position than they are to-day, and were practically in the power of the men who manipulate the prices on the Chicago wheat exchange. But this condition of things has changed, and to day the farmers of the Western States, instead of being at the mercy of the wheat manipulators, are to a very great extent in control of the wheat market. Especially is this so in the State of Kansas, where it is reported that one hundred flouring mills have been compelled to shut down because the farmers of that State are holding their grain for better prices. It is claimed that the farmers of that State alone are holding 70,000,000 bushels of good wheat, and that to a large extent the same condition of things prevails elsewhere.

Whether the policy of the farmer holding his which is a wise one or not, it is gratifying to know that he win a position to do so if he wishes. The very fact that he is able to hold his wheat, and is independent of those who at this season of the year make every effort to get the prices down as low as possible, will have a tremendous effect upon the market. When the farmer is compelled, owing to a mortgage or floating debts, to dispose of his wheat as soon as it is threshed, he is sometimes taken unfair advantage of by the speculators, who very often manipulate the markets to suit such circumstances. But, if he is independent and can say to the dealer that he does not have to sell at his prices, the speculator and manipulator of the wheat ring will not have things so much his own way, and will have to come to the farmer's terms if he wishes to get his product.

Though the conditions in Canada outside of Manitoba are somewhat different from what they are in the Western States, there is every reason to believe that the farmer here is in a more independent position than he was a year or two ago. In this fact everyone should rejoice, for if the farmer is in a more independent position it means that he is more prosperous, and that others will enjoy the same blessing. Whether it is a wise policy on the part of farmers to hold their wheat, though they are in a position to do so if they wish, is something that they will have to decide for themselves after sizing up the situation as best they can. Statistics show that this year's wheat crop is a large one, and that there is likely to be a big surplus when next season's crop is ready. True, stocks were run pretty low before the new crop was ready, but whether this is sufficient to counteract the effect of a big crop remains to be seen.

Attention has been more than once directed to the ments of FARMING, published by The Bryant Press, Toronto. The publication has been recently enlarged and greatly improved, and it is now a twenty-page weekly. A special number, issued Sept. 6th for the Toronto Exhibition, covered over fifty pages of most useful up-to-date reading for cultivators of the soil, cattle and horse breeders, fruit growers and the like. — The Globe, St. John, N.B.

# Soil Fertility

# Some Interesting Data on the Subject Gathered from English Journals

In this age of low prices for farm products the question of increasing and maintaining the fertility of the soil takes on added importance. If prices are to continue low, then the farmer must aim to produce larger crops and thereby reduce the cost of production. This cannot be done except by maintaining and increasing the amount of plant food in the soil. For this reason considerable attention has been given in our columns during the past year or two to the question of tertilizers, and more particularly to the use of phosphates. This question is also receiving special attention in Great Britain, where a large number of the country journals, as well as others of a wider scope, have been discussing the merits of Thomas-Phosphate Powder, which is now being introduced into Canada. Some extracts from a few of these English exchanges will, therefore, be of interest:

W. Godwin, of Market Drayton, writes to The Lincolnshire Chronicle, April 2nd, 1898, from which we quote: "As the phosphoric acid in Thomas-Phosphate Powder is, presumably from its admixture with free lime, in an insoluble condition, and as it was a generally accepted theory that plants can only absorb soluble substances by their roots, I had some hesitation in accepting it as a reliable manure, and I spent a day last autumn amongst a number of farms in North Staffordshire and another in South Shropshire. I am bound, and indeed pleased, to confess that I was never more astonished in my life than when noting its effect upon pastures, clover roots, and corn fields, especially upon the harsh, cold, and almost intractable clay lands. The effect in numerous cases was simply marvellous; poor pastures, after being dressed with it, were redolent in clovers and wild vetch, and similar fodder plants. One field especially, of some thirty acres, apparently poverty-stricken to a last degree, had been dressed as to five acres with a ton of Alberts' Thomas-Phosphate Powder, which was one sheet of beautiful white clover in flower fit to mow, while the remainder of the field afforded scarcely a bite of wiry, coarse grass." Mr. Godwin further, at considerable length, described root and wheat fields dressed with this manure as having withstood the drought and yielding splendidly He concludes that genuine Thomas-Phosphate Powder comes as a decided boon, especially as its effects seem very lasting.

In the same issue of this paper Mr. Wooley, of Salop, attested to its wonderful value in bringing up an old, wornout farm, which he had taken, and which is now in capital condition. Still another letter appears in this paper from Robert Eardley, of Newark, who says it seems to carry the roots through the frost better, and he noticed the good effects on the following crops, the third year being the most surprising, the wheat crops being greener and

stronger all through the season where it was used.

The Leamington Courier, in an agricultural article in the issue of 27th August, this year, headed "The Wheat Yield and the Phosphate Base," after discussing at considerable length the necessity of bone strength in the straw as well as in the grain, to give the crop stamina to withstand boisterous weather, says. "We have repeatedly called attention to this, and laid down the law that a good phosphatic heart is the foundation of all agriculture. We have had the opportunity of examining very many fields, and have in every instance found that the lodged crops were defective." Then they refer to a noticeable corroboration of their theory in the Plestow Farm, Barford, where Mr. E. L. Ireland Blythe had phosphated many of the fields with Alberts' Thomas Phosphate Powder, with the result that the wheat was of most excellent quality, and: "This crop is five feet high, not a single patch having been beaten down by the terrific storms it has lately been subjected to." "Mr. Blythe has so convinced himself of the merits of this manure that he is increasing his applications of it all over his farm, both on grass land and arable." "On Monday we were at Bearley, and Mr. Joseph Hawkes informed us

that he was going to use it on his grass this autumn, and one always concludes that when we have him on our side we are not very far wrong."

# The Pure-Bred Stock Interests of the West

At the last session of the Legislative Assembly of the Northwest Territories an appropriation of \$2,000 was made tor the purpose of encouraging the importation of purebred live stock into the Territories. The plan seems to be to co-operate with the Dominion Cattle Breeders' Association, which for the past two years has taken charge of live stock destined for the West with the very best results, and by paying a share of the cost of transportation of purebred stock designed for the Territories induce more breeders in the West to make importations. It is the intention of the Government of the Territories to undertake the delivery of the stock in the West and to collect orders and arrange, if possible, carload shipments of stock to central points. Parties in the West availing themselves of these privileges will, as heretofore, have to make their own arrangements in Ontario, where the bulk of the purebred stock is obtained, regarding the purchase of animals. the intention of the Government to pay a sufficient bonus to importers of purebred stock as will reduce the cost of transportation to any point in the Territories to a uniform rate of \$5 per head. This will involve an average grant of probably \$10 or \$12 on each head of stock imported under Government supervision.

Though not in position to give full particulars of this scheme, as we will be able to do in a few weeks, it is safe to state that the action of the Northwest Legislature will meet with the hearty approval of eastern stockmen if it will induce large purchases of stock by the breeders of the West. Heretofore all efforts to develop inter-provincial trade in purebred stock have been confined to this end or those who have the stock to sell. If there is likewise a concerted effort on the part of those who wish to purchase stock the two combined cannot help but result in largely increased trade.

icasca tiaac.

# Cold Storage on Steamships for Apples Extract from Report of Commissioner of Agriculture

Early ripening and soft varieties of apples should be packed in ventilated barrels or boxes, and sent in cold storage. Otherwise, a large proportion of them are likely to arrive in a slack and wet condition and to be sold for a price which can entail only loss.

A report was made to me by Mr. Arthur R. Fowler, of Montreal, agent for Messrs. Garcia, Jacobs & Co., and Messrs. Simons, Shuttleworth Co., on two shipments of early apples sent by him in August. The two shipments were from one lot of apples from the same section in Western Ontario. So far as Mr. Fowler knew, the apples in each of the two shipments were similar as to variety, condition when packed, and manner of packing. That is to say, the one lot of apples, received from a place in Western Ontario, was divided into two shipments, without particular selection. One of these shipments, containing 267 barrels, was shipped on the steamship Kastalia to Glasgow in cold storage on 26th August. The apples of this shipment were reported as being delivered all in good condition, and were sold at an average price of 18s. per barrel, which netted \$2.45 per barrel in Western Ontario. The other shipment, consisting of 325 barrels, was sent forward as ordinary cargo to Liverpool. The apples of this shipment were reported as being delivered in an unsatisfactory condition: 124 barrels were reported as "wet" or "slightly wet," and 81 barrels as "slack." Thus 63 per cent. of the shipment, sent as ordinary cargo, were landed in a damaged condition. The whole shipment was sold at an average price of 8s. per barrel, which netted 75 cents per barrel in Western Ontario. Evidently the wet and slack condition of the apples, when delivered from the steamship, was due, not to the kind of fruit or the manner of packing, but to the fact that they had been heated during transit, and were greatly damaged in consequence.

It is therefore evident that, for the carriage of early and soft apples, cold storage is necessary to ensure good condition and reasonably good returns to the shippers.

The later and firmer varieties of apples can be shipped safely if cooled below 50° lahr., packed in ventilated barrels, and carried in the holds of steamships provided with air ducts for causing thorough ventilation. The cold air should be conveyed to the bottoms of the holds, perhaps in a manner similar to air shafts for carrying cold air to the stokers; and fans should be used for sucking the warm air out. If these were used mainly during the night only, the holds could be kept sufficiently cold to land apples entirely undamaged by their transit across the ocean.

# Prince Edward Island Column

(By Our Regular Correspondent.)

The Co-Operative Farmer and Dairyman says: "We are sorry to learn that considerable maritime cheese made early in June has been rejected by buyers, and must be sold at a heavy loss to the patrons of the cheese factories. This should not be. In some cases it has been the fault of the cheesemaker, in others the fault of the business managers of the factory and in every case it has also been the fault of the patrons.

"Sour milk, tainted milk and partly churned milk are all unfit for cheese making, and no good cheesemaker will allow them into his factory. Unfortunately when milk comes to the factory well cooled down it is pretty hard to detect many of the taints, only upon heating do they become noticeable. To do really good detective work a quart sample of each patron's milk should be heated in a hot water bath every few days and the flavors carefully noted, all bad-flavored milk should be rejected, and the cheese. Laker and the dairy superintendent of the district should make a careful examination of the premises from which this bad-flavored milk came, with a view of having the trouble corrected."

This is very true, and the directors of the cheese factories, especially in this province, are most to blame because they are all following the plan of hiring Island men, who are desirous of getting control of a factory when they are not capable of undertaking the work, but being possessed with big ideas and contracting at a low figure they are driving the Ontario men out of the province. Such practices are going to prove the ruin of the cheese business in this Island, as such was never the case any other year. The directors should receive a severe reprimanding from the patrons at the next meeting of the different factories, and be instructed to hire help which comes well recommended, and who have had at least four years' experience as an assistant under some competent cheesemaker.

# The Breeding Season of 1898

By Alex. Galbraith, in "The Western Agriculturist."

That theory often differs materially from practice has never been more conspicuously visible than during the present breeding season. If a man read any of the stock journals last winter or spring, or conversed with any intelligent farmer or breeder on the subject, ten chances to one the idea was conveyed that the breeding season of '98 would stand out prominently as one in which the merit of the animals bred and their suitability for reproduction would be the first considerations. That, with the experience of the past, so dearly bought, few unsound or inferior mares would again be bred from, and no grade or crossroads stallion would be patronized. That, in short, it was a case of breeding the best to the best and that alone. Now, what are the actual facts? We are practically at the end of the breeding season, and, from a somewhat extended

observation, I have come to the conclusion that, not during the last fifteen years, has breeding been conducted in a more haphazard, indiscriminate manner than this season. The volume of breeding done throughout the central and western states has been quite large, equalling, probably, the seasons of 1894, '95 and '96 combined. All sorts of mares have been bred; all kinds and grades of stallions have been liberally patronized, especially those whose owners were accommodating, and whose service fees were low. In hardly any instance within my observation has it been a case of choosing the best stallions in the district. If the terms of such a horse happened to be a few dollars higher than some other horse, no matter how inferior, the cheaper stallion generally got the business. In like manner if the better horse stood for the season at home, or at some central point, and the poorer horses called at the farm houses, the latter was almost invariably the one patronized. In other words, the farmer has not been anxious to secure the best, but rather to get his mares in foal to whatever horse stood at the lowest terms and was most accommodating.

Now, I submit that so long as our farmers pursue this penny-wise policy we never can, as a nation, advance in the science of horse-breeding. The most cursory examination of the Chicago market any day in the year will reveal the fact that a large proportion of the horses sold—perhaps 75 per cent.—are leaving no profit to the breeder, while the remaining 25 per cent.—the cream of the market—are leaving a substantial profit. And how can we obtain this "cream" unless we breed for it? There is no royal road to the production of prize winners except through the avenues of experience, intelligence and determination. We must abandon forever the antiquated notion that one kind of a colt is about as good as another, and take a leaf out of the Old World breeders' book, whose theory and practice unite in declaring that nothing but the best sires will be accepted, let the service fee be what it may.

But I think I hear some of our farmers reply to this that the breeding months are the busiest time on the farm, and that they cannot afford the time to take the mares away any distance to be bred, and that, furthermore, if they raised an extra good colt some horse buyer would come along and pick it up at a low price, and this dealer or some other middleman would reap the benefit, and not the farmers at all. Now there is considerable truth in this, of course, but how is the difficulty to be obviated?

First of all I would suggest co-operation on the part of the farmers. Let a number of them combine to purchase, hire or patronize a certain horse selected by a committee chosen from among themselves, and then arrange that the horse stand in their midst or make a circuit among them. By so doing they have an opportunity to secure the service of a good horse at a minimum waste of time and money, provided they make a judicious selection and hang well together. The co-operative system of hiring stallions, which has been practised in Scotland for over thirty years, has been attended with the most satisfactory results, and has been largely the means whereby the Clydesdale breed has attained its present state of perfection as a draught horse while the Scotch farmers have made money in raising them and maintaining the quality to the highest notch.

The other objection about the dealer or middleman securing the farmer's legitimate profit is a matter which only the farmer himself can remedy. Let each farmer be educated up to the point of being able to determine accurately the merits or true value of his horse, and then he can protect himself. My observation, however, has led me to believe that as a general rule the farmer is not at all liable to sell too cheaply, but on the other hand he frequently overestimates the value of his horses and cannot readily see the inherent defects they possess. He should criticize his own stock as freely as he does that of his neighbor's, and strive constantly in his breeding operations to attain a higher level. Only by so doing can he improve his stock or make horse-breeding pay.

The Exhibition number of FARMING is full of good things. This most allent farm weekly should be in every farm house in Ontario.

—Simcoe Reformer.

# CORRESPONDENCE

# Profitable Farming

Pork Production. A Reply to Mr. Heggie's Letter in Sept. 27th Issue

To the Editor of FARMING:

I notice an enquiry from Mr. Geo. Heggie, of British Columbia, in your last issue of FARMING, to which an answer is requested from me.

I beg to state, in reply to same, that I take much pleasure in complying with Mr. Heggie's request, and desire to draw his attention to the fact that the main question is answered in the article referred to, and given in tull detail, and which clearly states that the net amount of pork produced on an acre of heavy clover could be made up to 9,000 lbs. The facts given were these, that the pigs weighed 40 lbs. when put on the clover, and came off at 220 lbs., leaving 180 lbs. net for the increased growth of each pig, and there being fifty pigs, thereby making the amount as above stated.

In my previous letter I was endeavoring to demonstrate the comparative results from two acres of clover, treated in different methods, so as to attain the highest possible financial results from each method, and to, if possible, show the cost and value of pork production. After a weight of 40 lbs. is attained in the pig or pigs so treated, my purpose was not to show the cost of the pigs at eight weeks old weighing 40 lbs. This is another problem by itself that has to be solved on the same scientific business principle as the minimum cost and maximum value of pork produced from an acre of clover.

Mr. Heggie throws out the insinuation in his letter as well as attempts to answer his own questions by stating that, while he gets four dollars per head for his pigs at 25 to 30 pound's weight, perhaps mine come to me for nothing, and therefore infers that by my having liberal neighbors I am inclined to give credit to the acre of clover, rather than to my liberal neighbors. This kind of business logic and inference may do in British Columbia but not in Eastern Ontario.

For the information of the readers of FARMING, as well as Mr. H., I beg to say, as I stated in a previous letter, that the cost of a 40-lb. pig at 60 days old is from 50c. to 75c when purchased by my own capital and labor; but it would cost me from \$2 to \$3 when purchased from my neighbors, which, by the way, is more liberal than Mr. Heggie is to his neighbors as far as the pork question goes.

Mr. Heggie also in his letter makes a personal statement that he sold forty pigs weighing 25 lbs. to 30 lbs. each for \$4 a head, and then observes "that mine must be worth \$5." This seems to me to be a remarkable conclusion, when there is a distance of three thousand miles between us, with entirely different conditions, affecting cost of production, and value of product, etc.

For the sake of making this discussion interesting and instructive, I will ask Mr. Heggie a question or two. Will he kindly give through the columns of Farming the minute details of the actual cost of his pigs when weighing 25 lbs., and also the cost of production and market value at his farm of the different weights as follows: 100 lbs., 150 lbs., 200 lbs., and 300 lbs.? I would like to have the kind and cost of feed per lb. or ton, labor, capital, care (winter and summer), etc., etc.

Full particulars will be much appreciated.

D. M. MACPHERSON.

Lancaster, Oct. 3, 1898.

**~** 

That excellent agricultural weekly, FARMING, is resplendent in a new fall jacket—or cover. The Exhibition issue was a grand number.

—Lindsay Post.

The special Exhibition number of FARMING has been received. It is beautifully illustrated, printed on good paper, and full of interesting reading matter for farmers and all who follow agricultural or horticultural pursuits.—Essex Free Press.

# PACKING APPLES.

A convention of shippers of apples was held recently at Buffalo, N.Y., at which a paper on the proper way of shipping apples was read by L. K. Sutton, of Ohio, in which he said:

"We will take the barrel as the standard package for use in storing apples, but the writer firmly believes that in the near future the bushel box will be used quite extensively for storing the better grades of apples for late The barrel should be made keeping. of No. 1 staves, heads and hoops, the face and head lined, top and quarter hoops nailed with three quarter-inch nails before going to the orchard; never use a wire nail. Our experience has been that apples hand picked from the tree and carefully placed in the barrel show best results. Apples thus packed show their bloom better and show a life of freshness that apples which are run over a table or laid on the ground for a time before going into the barrel do not have. When you please a buyer's eye the sale is half made.

"We believe in double facing, using apples as nearly one size and color as possible, and to have the face apples represent the remainder of the barrel in size as near as practicable. Shake the barrel gently after each basket is emptied until the barrel is filled. Some varieties will stand filling three inches above the chime, others not so much; right at this point is where great care is needed. Apples properly filled in the barrel, and an experienced man with a press, can add very much to the keeping and selling quality of the apples. We often find from eight to twenty or more apples badly bruised at the bottom, caused by too much pressing; simply a waste and loss, and frequently a barrel will shake, and the dealer must use a like quantity to plug or fill the barrel before sending it out to a customer. With proper care in barrelling and heading, all this extra work and waste of apples would be avoided. Shake well and level off the face before putting in the head, then nail and head line carefully. It takes a little time, but one barrel bursting in a car will cause more loss than the extra labor spent in securely nailing the bottom. A careful packer will put a private or distinguishing mark on an extra fine colored barrel that will frequently bring his employer an additional 50 cents or \$1 from stand buyers who want quality, and the same plan followed by marking an off barrel will assist the salesman materially in satisfying a customer who wants a lowerpriced apple.

"It is preferable to load apples on the car the same day as picked, and apples placed in storage as soon as possible after packing keep better than when lying on the ground or stacked up in piles under trees or alongside. the station and exposed to rain and sun. The question on what day to begin barrelling for storage is frequently asked; our rule is when the seeds

are black, apples pull fairly free from the limb, with the short stem remaining in the apples, even if the proper color is lacking. Above all, use only a standard-sized barrel, the package recommended by this association; and make three grades of apples: firsts, seconds, and drops. The apples that drop while picking are often the largest and best colored, but should not be put in with the fruit for storage, even if they fall on soft ground or grass: the fall injures them, even if the skin is unbroken; they will show dead color in a few weeks and injure the sale. The header should use care in marking plainly the variety and the face end of each barrel to save the salesman much annoyance and labor."

### POULTRY ON FARMS.

There are scores of farmers at this moment keeping 100 hens who will tell you that they do not produce more than 7,000 eggs per annum, and that their chickens do not fetch, on an average, more than 3s. 6d. per couple, and, even with what fowls can pick up for themselves, they scarcely repay the trouble of keeping.

Allowing this to be true, so far as they are concerned, does it prove that poultry on farms cannot be made a source of profit, or that there is a "screw loose somewhere"? I am inclined to think it points to the latter solution-in fact, that there are several screws loose.

The average farmer is satisfied with a very indifferent specimen of barndoor fowl, often in-bred, more often mated up with less than no care, he being quite content, when he considers fresh blood necessary, to introduce into his yard males bought for an old song from a peddler, birds whose stamina, egg and flesh-producing quali-ties may be of the meanest order, resulting in a progeny of poor layers and indifferent table fowls.

The same farmer may be noted for the quality of his other live stock, and make it a profitable branch of business, and the difference in results may be attributed to the same care and discrimination which he affords to his cattle being withheld from his feathered friends-he neglecting to breed them with care, to feed them with care, and to house them with care, his chickens taking their chance with the adults, and, in consequence, stunted in their growth, by reason of insufficient feeding, and crooked-breasted by being allowed to perch too early. Is there any wonder at his yard being filled with indifferent layers and poor table birds?

If better results be desired, the few hints that follow may be taken with advantage. Hens, to be profitable, should produce 120 eggs per annum; a fair proportion of these must be laid in the winter months, and chickens for table purposes should weigh five pounds and upwards. In order to at-

tain these ends from an indifferent lot of barn-door fowls, there is no call for a great revolution nor a great out-The first matter requiring attention is the fowl-house; we that this is wind and water-tight, and at the same time well-ventilated; also determine how many fowls can be accommodated therein with due regard to their health. As the breeding season approaches, select the best of the laying hens by means of observation at the nest boxes, and of the activity and intelligent appearance of the birds-a bright-looking comb, large in proportion to the breed kept, is also a good sign of a prolific layer. From this selection pick out the largest birds, separate and mate them up, according to number, with one or more pure bred cocks of a good laying and table fowl strain; a Langshan, from its hardiness. winter laying qualities, its size and beautiful white, juicy flesh, would be a most suitable breed, even though it is so often stated that black-legged fowls are not in favor for the table. This may be true as regards the London market, but country experience goes to prove that the careful housewife pays more attention to the quality of flesh and size of a fowl than to the leg color, when on marketing intent.

Pay a little more attention to the setting hens by giving them one good meal a day, and making them come off the nest for it, and their dust bath. Vermin causes more hens to desert their eggs than anything, and attention to these two items will result in bringing off a larger proportion of chicks.

Coming to the chickens, keep them growing and separated from the old stock for the first three months of their life, and they will develop into fine, healthy birds.

Now the question comes as to getting the greatest possible number of eggs during the winter months. The royal road to this end is to keep the birds warm at night, and, as far as possible, out of damp slushy yards during the day; to feed them with warm food in the morning, to change their diet as much as possible, and to remember that fowls cannot find many grubs or insects in cold weather, so that they need an occasional meal made with broth, or containing well-boiled flesh, to make up for the loss of this portion of their natural food. It may be here mentioned that the too frequent use of Indian corn tends to produce internal fat, and causes diseases of the liver and egg organs.

Space permits little further to be said, beyond advising that the hens be got rid of before their second moult, and that all eggs sent to market should be collected from cleanly-kept nest boxes only, by which means a reputation will be secured for selling perfectly reliable, tempting-looking eggs; also that a poultry account be kept, and a practical manual on the subject be added to the farmhouse bookshelf.

-H. Franklin, in The Cable.

# ENCOURAGING REPORTS OF THE RESULTS OF THE THRESHING OF GRAIN CROPS IN THE NORTH-WEST

The Director of the Experimental Farms has very encouraging news from the superintendents of the branch experimental farms in Manitoba and the North-west Territories, where, notwithstanding the unfavorable weather during harvest, the grain both in quantity and quality is turning out remark-

ably well.

Under date of September 26th, Mr. Angus MacKay, superintendent of the farm at Indian Head, says: "From all parts of this district wheat is turning out even better than expected, both in yield and quality. The lowest yet reported is 28 bushels per acre on stubble land, while many have over 30 bushels with same sort of farming. The crops on summer fallowed land are going from 30 to 45 bushels, so that taking the whole district there will be an average of from 20 to 35 bushels per acre."

Mr. S. A. Bedford, superintendent of the Brandon Farm, writes in a similar encouraging strain, stating that the wheat crop in the brandon district is proving a much better one than was

anticipated.

### A LUCKY DAIRYMAN.

Here is a cow that is worth owning. Her owner boards at the Columbia Hotel, paying \$3.00 a week or \$12.00 a month for meals. He milks his cow, getting four gallons of milk a day, which he sells at 20 cents a gallon. This brings him \$24.00 a month. After paying \$1.50 for pasturage he has his living and \$10.50 in cold cash. This man works ten hours a day. If he lives long enough, and the cow keeps up her record as a milker, this man will be rolling in wealth some day. —Columbia (Mo.) Statesman.

# NOVA SCOTIA PROVINCIAL EXHIBITION.

(Reported by J. A. M.)

The Nova Scotia Provincial Exhibition opened in Halifax on Thursday, 22nd. Speeches from President Longley, Lieut.-Gov. Daley, Premier Murray, and Mayor Stephens comprised the opening programme. The exhibition was away ahead of any previous year, both in live stock entries and special attractions.

In horses the exhibit was very fine, and included some fine equine specimens of the different breeds from the three Maritime Provinces of Nova Scotia, New Brunswick, and Prince Edward Island, and besides there were four days of racing, 26th to 20th.

and Prince Edward Island, and besides there were four days of racing, 26th to 29th.

The display of cattle was the best in quality and arrangement of breeds ever seen in the Maritime Provinces. In Shorthorns the exhibitors and principal winners were: E. & O. Chase, Port Williams, N.S., with 9 head; C. A. Archibald, Truro, 10 head; Vernon Young, Kentville, 15 head; Fred G. Bowyer, Georgetown, P.E.I., 10 head; and Dunlop Bros., H. & C. Harris, William Sharp, A. N. Griffin, P. Innes. In Ayrshires, W. F. Bergeman showed 17 splendid animals, C. A. Archibald, Truro, 15; P. Innes, 9; M. F. Parlee, Sussex, N.B., 9; F. S. Black, Amherst, 10. Jerseys.—E. B. Elderkin & Sons,

Amherst, N.S., 17 head; J. R. Starr, Port Williams, N.S., 10; J. H. Reid, Fredericton, N.B., 7. Guernseys.—E. R. Brown, Charlottetown, P.E.I., 17 head of beautiful animals, including the two-year-old heifer imported for him last spring; G. M. F. S. Peer (who acted as judge of the dairy cattle); F. R. Parker, 3; W. J. Beith, F. J. Moore, J. B. Rutherford, and Donald McMillan, from one to three head each. Frenh Canadian cattle were shown by Edward Buker, Amherst, with a herd of 9 head. Helsteins were strongly represented. J. F. Page & Son, Amherst, N.S., showed 19 head, and won most of the prizes; S. Dickie, 11 head; and D. A. McKenzie, 16 head. Herefords were shown by W. W. Black, Amherst, with a find herd of 7 head; Frank F. Dickie, the second prize three-year-old bull, and J. E. Page & Son the 3rd prize aged cow. Mr. Black carried off all of the other prizes. Galloways, by Senator Ferguson, Charlottetown, 9 head, and Wallace Wood, Charlottetown, one. Devons were shown by C. A. Archibald, Truro, with a herd of 4 of them, pretty general purpose cattle.

The sheep pens were almost full with a fine class of animals Unfortunately, Nova Scotia had to give way to Prince Edward Island when it came to the question of puzes. The judges had a difficult task to perform, and the peninsula province did not show up very well in the matter of awards. Many of the provincial farmers had animals on exhibition, but they were, as a rule, a poor lot. In Leitesters, Bowswell Bros., Pownal, P.E.I., easily led. William Clark, Wiltshire, P.E.I., was a good second. The animals were pronounced to be very fine specimens of the breed. In Cotsvolds, John Lundy, Cherry Valley, P.E.I., carried off every prize with a grand lot of animals. The competition in Horned Dorsets was quite keen. The display was excellent, Nova Scotia coming in for all of the prizes. William McDonald, Hope, N.S., carried off most of the prize money, but T. R. Lyons, Waterville, was a good second. The class of Lincolns was very fine. F. G. Bowyer, Georgetown, P.E.I., and F. Bowyer, Southport, divided the prizes. Shropthires were there in good force, and the prizes were awarded about equally between Senator Ferguson and Albert Bowswell, P.E.I., as at St. John. In Southdowns the only exhibitor was D. R. McKay, Hopewell. Oxford Downs were shown by F. G. Bowyer, Georgetown; E. Edwards, Wiltshire, and J. Dunlop, Truro. A fine pen of border Leicesters were shown by T. B. Jacques, Waterville. The Merino and Hampshire Down pens did not fill. There was also a large and very fine exhibit of unregistered sheep of the several breeds.

Special prizes: \$25, offered by the American Shropshire Breeders' Association for best flocks of registered Shrops. One year old and over (one ram and three ewes), Legan & Harris, second prize; best flock four registered lambs (one ram lamb and three ewe lambs), Albert Bowswell. Panal, P.E.I. The Dominion Shorthorn Breeders Association prizes for best and second best young herds of Shorthorns, herd to consist of one bull and four females under two years—1st, W. Young; and, E. & O. Chase. Sweepstaker: bull, any age, F. G. Bowyer, Georgeown; female, F. G. Bowyer, Georgeown; female, F. G. Bowyer, Georgeown; female, F. G. Bowyer, Georgeown; Special prize offered by Dominion Ayrshire Breeders' Association for young herd, awarded to F. S. Black, Amherst, N.S.

The exhibit of swine was very fair, nearly

The exhibit of swine was very fair, nearly all of the herds being represented, including some fine specimens. The poultry show was not quite so good as at St. John, but the several coops contained some fine birds. The display of cheese, butter, and dairy utensils was very creditable, and attracted much attention.

The horticultural display was what might be expected of the great fruit province of Nova Scotia. Some 2,000 plates of fruit were on exhibition, and were pronounced by Judge Knowlton to be superior to any like exhibit ever shown anywhere. The exhibits of plums consisted of some 20 varieties. A special fruit exhibit from Prince Edward Island, in charge

of Senator Ferguson, attracted much attention, and testified in strong terms the fruitgrowing possibilities of the little sea-girt isle. J. W. Bigelow, president of the Nova Scotia Fruit Growers' Association, superintended this department.

The whirr of the machinery hall and the throngs of sightseers made an interesting spectacle. Few of the visitors omitted to see the machinery hall and the fine spectacle it presented. A regrettable feature of the fair was the terrible weather. On Friday, the first regular day, the downpour of rain never abated, and Tuesday was even a much worse day. Few people attended on those days, and the association must have lost some \$5,000 in gate money on these two days, and on Wednesday, too, which, though dry, was blowing a storm and very cold. It was a great pity; the fair managers deserved better success, and it was the loose state of the weather alone that prevented this fair from being one of the best ever held in Canada.

Ask for

Eddy's

when you order matches. Then you will be sure of having the best.



# For Dairy or Table Use

IT IS UNEQUALLED.

## Salt on the Farm

for wire worm, joint worm, army worm and all insects that destroy crops. Salt is the best insecticide. It is also a fertilizer.

TRX IT.

R. & J. Ransford,

# NOTES FROM THE OTTAWA FAIR.

By E. E. S.

Messrs. Joseph Yuill & Sons, of Carleton Place, had a good herd of Ayrshires on exhibition. Their young herd, comprising a bull bred from Lady Hay, two yearling heifers and two calves, was awarded first prize. They also took 1st on yearling bull, 2nd on bull calf under six months, 3rd on dairy cow, 3rd on yearling heifers over six months, and 2nd on heifer calf under six months. Considering the strong competition, this is a very good record indeed, especially as the prize-winners were bred and fitted by the firm on their own farm.

Hon. G. A. Drummond, of Point Claire, Que., had an exceedingly interesting exhibit of Dexter-Kerry cattle. The herd was headed by a beautiful little animal, Bantam, a cut of which appeared in our last week's issue, bred by His Royal Highness the Prince of Wales. The small size, the character and the color of these cartle were universally admired. It is claimed that they represent the original Kerry cattle, which have existed in the neighborhood of the Kerry mountains, in the west of Ireland, from time immemorial, and the fact of their ancient origin increases the interest in them which their attractive and unique appearance calls forth. It is said that the cows give unusually rich milk, and the quantity they give combined with the ease with which they are kept and their hardy character should render them great favorites not only as "fancy" cattle but for their adaptability to the uses of people having small holdings or residents of towns, villages and cities. Kerry cattle are great favorites in the royal dairies. The Prince of Wales is said to be an enthusiast regarding their merits. Lord Rosebery, the ex-Premier of England, introduced them as dairy stock on his estate. They have become very popular in England, not only for their beauty but for their many excellent qualities. It is said that their ready adaptability to the climatic conditions of the country is also a point very greatly in their favor.

# Publishers' Desk.

A Good Subsoller.—This is an absolute necessity to every farmer, and will save its price many times over. The implement advertised by Messrs. S. Vessot & Co., of Joliette, Que., in this issue will fill all the requirements of such a tool at a very moderate cost.

The Bell Organ and Plano Company, of Guelph, appear to be more than holding their own in the competition for the world's trade in high-class pianos and organs. Last month this old and reliable firm turned out over 600 instruments, which is the largest number in the past eleven years.

A Satisfactory Windmill. — Exeter, April 6th, 1898. The Leader Windmill, Ridgetown, Ont.: The steel windmill purchased from you last fall has given good satisfaction; it does its work easy and well as any mill could do. Yours, COATES BROS. "The Leader" has won for itself a famous reputation; and is now being placed in Goderich, Huron Co.; Calgary, N.W.T., and throughout the entire Dominion, which speaks for its reputation.

People's Wholesale Supply Co.—We are pleased to welcome to our columns again the advertisement of the above-named business firm. Mr. R. Y. Manning, so well and favorably known to the majority of our readers, is still the manager, active, energetic and genial as of yore. Mr. Manning has always made it a practice during his long business career to cater chiefly to the farming classes, and his name is now a household word in thousands of homes throughout the country district. The People's Wholesale Supply Co. is practically the only house in Toronto making a specialty of farmers' trade, and it solicits the co-operation of every in-

telligent farmer. You can send them your butter, eggs, poultry, wool, honey, pork, or any product of the farm, and can rest assured that the highest prices will be secured and prompt returns made either in cash or goods, as may be desired. They sell anything the farmer needs, pay freight on all goods to the amount of \$10 and over, charge nothing for packing or putting goods on cars here. A farmer can send them products at any time. They are always ready to receive what the farmer has to sell, and there is no necessity to write for prices. Simply send on your products and you will be honestly dealt with. No matter what you want, there is no occasion to go any place else for it. You get all your wants supplied at the store, and as the firm buy strictly for cish they are enabled to quote prices for goods which would be impossible at the ordinary country store. Farmers who desire clothing, boots and shoes, groceries, hardware, dry goods, oils, etc., should send for the firm's fall catalogue, which is now ready, and will be sent free on application. Mention FARMING when you write, and remember the address, 144 King street east, Toronto.

#### "FARMING" TO THE FRONT.

The Exhibition Number of FARMING (Toronts) is to hand, and is a creditable publication of sixty large double-column pages, well illustrated and covering a variety of farm topics. The agriculturist of the present day who does not keep informed of the daily progress in discovery and methods is not in the competition, and FARMING is published for go-ahead farmers.—Hamilton Times.

FARMING for September 6th is a beautiful Exhibition Number of 64 pages, including the cover. The publishers announce that hereafter the regular issue of this valuable paper will contain twenty pages. This is highly creditable, and speaks volumes for the enterprise of the publishers.—Clarksburg Reflector.

FARMING, the only weekly agricultural paper published in Canada, published by The Bryant Press, Toronto, issued a special Exhibition Number last week. It contains sixty pages, and is full of information of interest to farmers. FARMING will henceforth be issued in an enlarged form, more than doubling in size. It is a first-class agricultural paper.—
\*\*Renfrew Mercury.\*\*

# READ THIS

We want all the choice Dairy Butter and New-laid Eggs that the best farmers can send us, in exchange for farmers' supplies. Order what goods you may want, and we will remit balance in cash. For special prices watch our ads in this paper. For general prices send for our illustrated catalogue. Without doubt we have the best farmers' store in Canada.

The People's Wholesale Supply Co.

R. Y. MANNING,

Manager

144, 146 King St. East, TORONTO

# GRIFFITHS VETERINARY LINKENT



# **CURES**

Sprains, Curb,
Founder, Strained
Tendons, Spavin,
Founder, Swellings,
Soreness, Inflammation, Chapped
Hocks, Splints,
Wind Galls,
Coughs, Colds,
and Sore Throats.
A wonderfully healing application, and

# IT NEVER BLISTERS

12 Havings St. W., Vancouver, R.C., Dec. 17, 1897.

Messrs, Griffiths & Macpherson Co.,—Geutlemen,—I consider your Menthol Liniment unequalled for horses. One of mine had a laid sprain on the left leg, which was avoilen to an immene size. Griffiths Liniment was applied two days and the swelling and soreness left it. I have tried many different liniments, but never found anything to equal you s Yours truly, R. R. Rt. Chig, General Trader and Commission Merchant.

Veterlands Size and content Ac Cit Demonstrate.

Veterinary Size, 75 cents.—At all Druggists, or upon receipt of price.
The tiriffiths & Macpherson Co., Toronto.

Messrs, A. & G. Rice, of Curries, Ont., maintained their reputation this year at all the shows. At Toronto they secured ten prizes. At London they divided up the awards with Mr. G. W. Clemons, and at Ottawa obtained a large proportion of the prizes, including first for aged cow with their noted prize-winner, Calamity Jane.

Messrs C. J. Gilroy & Son have made what Massis C. I. Giffey & Son have made what may be considered a good record this year. At Toronto they were awarded nine prizes, including five firsts, three seconds, and one third. At London they had no exhibit, but at Quebec they secured no less than nineteen awards, viz., ten firsts and the sweepstake for best female of any age, seven seconds, and two thirds, while at Ottawa they held their own very much as they did in Toronto.

# Stock Notes.

MR E. A. GARNHAM, of Straffordsille, Ont., is adventising his farm for sale. It is well adapted for dairying purposes, within reach of four cheese factories and convenient to railway tachities. It is all inclosed, well tenced. Has beinged to the family for fifty years, and has never been rented. It is, therefore, in an excellent state of cultivation.

tore, in an excellent state of cultivation.

MR. Nerman Blair, of St. George is another breeder who is coming to the front. His specially it Tamworths. His first purchases were made from Juhi Bell, Amber, Ont., and from the Omario Agricultural College. His herd at present consists of thirty-five head, each one showing the true Tamworth type. A great demand is reported to have sprung up in the vicinity of St. George for Tamworths to cross with the Berkshires and Vorkshires for bacompurposes. Mr. Blain made his first exhibit at Torento this year, when he was successful in carying off a large number of the best prizes.

best prires.

Messes, A. M. & R. Susw, Brantford, Ont., are among the leading breeders of Galloway cattle in Canada. Their herd now consists of only twenty-five head. This is less than the usual number kept owing to some notable sales made recently. Among these were eight bulls sold to Robert Miller togo to the West to be used on the ranches. The herd, however, is a very select one and of the best blood obtainable. They have been exhibitors at the leading fairs for several years, and, as the reports will show, have carried off a large share of the prires. They have always been able to dispose of their surplus stock at remunerative prices. There is an excellent demand in their own locality for heifers. The members of this firm having been born in the home of the Galloways in Scotland are in a position to make a great success of this breed.

THREE and one-half miles north of Brantford, Ont., is the home of Mr. T. A. Cox, one of our 'leading breeders and exhibitors of Berkshire swine. Mr. Cox has only been an exhibitor fo. six years, and yet by perseverance and sound judgment in breeding has become a leader in his line. In addition to exhibiting himself he has had the privilege of filling orders for exhibitors in nearly every province in the Dominion for 18%. His principal sales in this regard have been in Manitoba. The grand boar, Perfection, with an unbroken record for 1877, went to Mr. Kennie and was the winner of the red ticket at the Winnipeg fair for 1898. Mr. Cox is also a large exhibitor and successful breeder of poultry. He keeps no less than fourteen different varieties, including b. and G. Wyandottes, B.P.R.'s, Dorkins, B. Legh-ins, B. Games, Langhans, B. Minoreas, Buff Cochins, B. B. R. Games, B.B. Bantams, Byle Hantams, Andalusian Geese and Bronze Turkeys. He has been successful in winning prizes at all the leading poultry fairs, among thes being the silver cup at the Galt Poultry Show for the best collection of list scoring the highest number of points.

Anerusenshure Shorthorns for Canada,—A

ARREMENSITIES SHORTHORNS FOR CANADA.—A valuable consignment of Shorthorns left Aberdeenshire for Canada last week. They comprised one f-year-old cow, two 3-year-old cows, eight 2-year-old beliers, six l-year-old heifers, two heifer calves, and eleven bull calves—thirty in all, and were purchased by Mr. George Campbell, Kunnellar. From Mr. Anderson, Sathock, Mr. Campbell purchased the f-year-old Floretta 3rd, by Mr. Duthie's Lord of the Meadow; the 2-year-old Fortuna 2nd, by Mr. Duthie's

# **GHEAP FARMS FOR SALE**

\$2600 N<sup>2</sup>, Lot 11, sixth concession, Township of Murray, County Northumberland. 100 acres. Good buildings.

\$450 Lot 23 and south-half lot 21 in 2nd con., \$450 Lot 23 and south-half lot 21 in 2nd con., \$450 Lot 23 and south-half lot 21 in 2nd con., \$450 Lot 23 and south-half lot 21 in 2nd con., \$450 Lot 23 and south-half lot 21 in 2nd con., Township Dirby, County Victoria. 156 acres. Buildings. \$700 Innisfi, County of Simoce. 50 acres. Buildings. Three miles from Barrie.

\$4200 North part lot 2, in broken con. A., Tp. North part lot 2, in broken con. A., Tp. acres. Good buildings.

\$1400 Lot 25, 20, 27, in 11th con., Township Stisted, Muskoka. 220 acres. Excellent farm. Good buildings. Near church, school and P.O. \$2800 Part lot 25 in 3rd con., Uxbridge, Co. Ontario, 75 acres. Excellent farm. Good buildings.

\*\*Oacres good pasture land in Town of Cobours. Very cheap.

\$1775 Lot No. 6 in 12 and 5!5 Lot 7 in 12th Con. of Brudenell, County of Renfrew. 211% acros. Good buildings. Three miles from Killaloe Station. Apply,

J. L. SCARTH, 11 Toronto St., Toronto.

J. L. SCARTH, 11 Toronto St., Toronto.

Superb, and her calf by Royal Mail; the yearling Clara 33rd, champion at Fyvie this year; and a relibult calf by Royal Mail. From Mr. Anderson, Wardes, Mr. Campbell Lought the 3-year-old Miss Mary, which was first at the Blackburn Show this year, and the yearling, Mikmaid by Star of Lancaster. From Mr. Green, C sllyhill there was bought the 2 year-old Alice. The 3-year old Lady Jane, by the Sittyton sire Coldstream, and a bull calf by Cratewitch, were purchased from Mr. Cromber, Woodend, and in the Tdlygreig herd were found two 2 year-ald heifers by Emancipator, both from old Kinnellar blood, first and second prize winners at Udny this summer, a heifer calf by Capa-Pie, and the yearling Lady Pride. The censignment includes also small individual drafts from the herds of Mr. Black, Barthol Chapel; Mr. Reid, Cromblytank; Mr. Ross, Upper Park; and Mr. A. Campbell, Deystone - Verta British Agriculturist

#### THAT WONDERFUL CHURN.

H. T. Marshall writes us as follows. "I want to add my testimony to the list of those who have used the lightning churn. It does all that they claim for it. You can churn easily in one minute, and get a larger percentage of butter than with ordinary churn. It never took the agency for anything betore, but so many of my neighbors wanted churns that I ordered thirty and they are all sold." Other farmers can do as well as Mr Marshall. No farner can afford to be without one of cur churns. By using it he can make 25 per cent, more butter than with his old churn. Any intelligent farmer can easily sell four of five churns every week in his own township. Every one who sees his churn will want one like it. We will mait citulars and full particulars on demand. Mound City Churn Co., Ozark Bldg., St. Louis, Mo.

### ... 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, Farley Ave. Toronto, Ont.



#### CHENTRA W

A middle-aged man of experience in stock-raising and general farming, to take charge of and manage a farm. Must be a careful, steady and reliable man, of strictly temperate habits, one who can handle men and keep accounts. To such, steady employment and a fair salary will be given with free house and garden. Apply to
Box 51, MARKDALE P.O., Ont.

Stating references or testimonials.



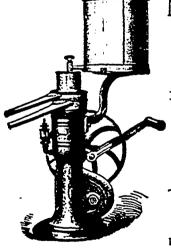
want to make your churning sure, safe, profitable? And easy, too? Do you want to find a quick market

Then try WINDSOR SALT—the salt that is pure and dissolves so easily. It has no bitter taste—successful buttermakers recommend it, and they ought to know.

Progressive Grocers Sell

# Windsor Salt

The Windsor Salt Co. Limited, Windsor, Ont.



# **National** Cream Separators

No. 1-330 lbs. \$75 No. 2-600 "

\$125 HAND or POWER

Perfect Skimmers

Easy to Run and Clean.

Saves Labor-Makes Money

The Best and Cheapest in the Market.

SOLD BY

The CREAMERY SUPPLY COMPANY Guelph, Ontario.

N.B .- We furnish all kinds of Creamery and Dairy Supplies. Send for Catalogue.

# ND For Everybody

Free Grants of Government Lands Cheap Railway Lands for Sale on Easy Terms

# **GOOD SOIL**

# **PURE WATER**

# **AMPLE FUEL**

MOST desirable lands suitable for mixed farming can be obtained in the Old District along the line of the Calgary and Edmonton Railway, about filty miles North of Calgary. Most desirable lands can be obtained in Southern Alberta in close proximity to the Calgary and Edmonton Railway and the Crow's Nest Pass Railway, suitable for mixed farming and ranching on both a large and small scale. North Saskatchewan also allords a splendid opening for intending settlers in the Prince Albert, Dack Lake and Rosthern Districts, on the line of the Qu'Appelle, Long Lake and Saskatchewan Railway.

For full information concerning these districts, maps, pamphlets, etc., Apply to OSLER, HAMMOND & NANTON,

Land Office, 381 Main St., WINNIPEG

# List of Premiums

For Three New Yearly Subscriptions at \$1 each we will send you any one of the following articles:

A Splendid Bagster Teacher's Bible, self-pronouncing, long primer type, fine Morocco divinity circuit binding. Publisher's price \$3.

An Up-to-Date Watch, solid nickel, open face case, stem wind, pendant set, and an excellent time-keeper. Price \$3 50.

A Combination Repair Outfit, comprising a full set of tools for boot, shoe, rubber and tinware repairing, same as advertised for \$1.75.

Feeds and Feeding, by Prof. W. A. Henry, Dean of the College of Agriculture of Wisconsin. The best book for stockmen published this year. Price \$2.

Wolls' Handbook for Farmers and Dairymen. Every farmer and dairyman should have it. Price \$1.50.

The Alexanderwerk Meat Chopper, Indispensable in every house-hold. Price \$2.

A Nickel Alarm Clock, guaranteed movement. Price \$1.50.

A Carving Set, comprising knife and fork of best steel. Price \$2.

For Two New Yearly Subscribers at \$1 each we will send you any one of the following articles:

32 Ear Labels for theep or swine, with name and number. Price \$1.

Dr. Carlin's Receipt Book and Household Physician, containing more than 6.000 valuable receipts, treatises on the care and management of cattle, sheep, swine, poultry, bees, etc., and on the treat-ment of nearly every known disease. Regular price \$1.50.

A Curry Comb and Brush, best quality. Price \$1.

Your Own Subscription Free for one year.

For One New Yearly Subscription at \$1 we will send you your choice of one of the following articles:

Two Milking Tubes. Every dairyman should have them. Price, each, 25c.

A Two-Bladed Pocket-Knife, brass lined, horn or ivory handle, best steel. Price 50c.

16 Ear Labels for sheep or swine, with name and number. Price 50c.

A Curry Comb and Brush. Price 50c.

Your Own Subscription Free for six menths.

Five New Trial Subscriptions at 20c. will count as one new yearly subscription.

Blanks, envelopes, and any number of sample copies desired, will be sent to you on application.

All Premiums are sent the same day as order is received. Send your orders early, as Premiums can only be furnished while the supply lasts.

If none of the premiums are wanted, we will allow a cash commission of 40c. for each new yearly subscription, or 10c. for each new trial subscription at 200.

Address-

FARMING, 41-16 Richmond St. West, Toronto, Ont.

# DENTONIA PARK FARM

EAST TORONTO (Coleman P.O.)

W. E. H. MASSEY, Proprietor.

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

Dentenia Poultry Yards S. C. Brown Leghorn and Light Brahma Cockerels for sale.

Dentonia Trout P. nds 100.000 healthy fry ready for delivery this fall. Price reasonable. Trout Eggs in season. Market Trout supplied on

# W. C. EDWARDS & CO. Breeders and ..... Importers

#### PINE GROVE STOCK FARM.

Rockland, Ont. On the C.P.R. and G.T.R. Railways.

Special bargains on young bulls of superior merit and select Scotch breed-ing. Also thick young heifers at the right prices.

Ayrshires, Jerseys, Shropshire Sheep, and Clydesdale Horses.

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

JOS. W.BARNETT, Manager.



Ayrahires, imported and homebred here headed by imported Taim Glen 2nd, No. 1310 D. A. H. B. Jerseys all of the celebrated St. Lambert family; herd headed by Lisgar Pogis of St. Anne's 23704 A.J.C.C. Berkshire Pigs. Young stock of all the above breeds for sale.

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

A. E. SCHRYER.

A. E. SCHRYER, Manager.



# IMPORTANT TO FARMERS

R. KENNETH & CO., 5 JEFFERSON SQUARE - LONDON, ENG.

5 JEFFERSON SQUARE - LONDON, ENG. are prepared to make advances as high as 70 per cent. of London, England, value, on all consignments of Apples. Poultry, Gamo, Eegs, Cheese, Butter, etc., shipped to them.

This firm has special facilities for handling all kinds of Canadian farm products in the English market, and offer special advantages to those having produce to dispose cf.

Their representative is at present in Canada arranging for consignments, and is prepared to make direct connection with the farmers for their produce. Agents wanted in all business centres in Canada.

Address R. H. ASHTON, 159 Sherbourne Street, Toronto, Ontario,

Best of reference furnished.

# A VERY DESIRABLE IMPROVED

# FARM FOR

Being parts of Lots 125 and 126 South Talbot Road, Township of Bayham, County of Elgin. 185 acres—about 115 cleared and in a good state of cultivation. Good orchard and small fruits. Frame barn, 40x 100. Good stabling and accommodation for cattle and borses, sheep and swine. A 150-ton silo. Vegetable and milk cellars. Outbuildings and fences in first-class condition. Good water, and all conditions requisite for success in farming or cattle raising. Price moderate and terms to suit.

E. A. GARNHAM, STRAFFORDVILLE, ONT.

# Dr. Leavitt's DRHORNING **CLIPPERS**

Are the BEST in use.



More of them in use than all other kinds combined.

For list, giving full particulars, address the owner of the Canadian Patent.

S. S. KIMBALL

577 Craig Street

MONTREAL, P.Q.

# Certain Death

to all parasites, germs, bacteria, etc. Healing to the skin and beautifying the coat.

# SPRATTS PATENT'S ANTISEPTIC SOAP

Order through your dealer and send for catalogue to Spratts Patent Limited, Manusacturers of all kinds of Dog and Poultry Foods and Supplies, 245 East 56th St., N.Y. San Francisco Branch, 1320 Valencia St.

# TOLTON'S **Double Root Cutter** No.

# DN BRES

# POINTS OF MERIT

- 1. To change from pulping to slicing is but the work of a moment.
- 2. There are two separate wheels, one for pulping and the other for slicing.
- The united force of both wheels is always used in doing the work in either capacity.
- 4. The hopper is between the wheels, and does not choke.

# The Only Double Root Cutter Manufactured

Fitted with Roller Bearings. Steel Shafting and all that is latest and best in principle, material and construction.

TOLTON BROS

Guelph



# "PUBLICK OCCURRENCES" THAT ARE MAKING HISTORY

An important department in The Saturday Evening Post, a weekly magazine founded by Benjamin Franklin in 1728.

It will give the story of important current events the world over in a condensed form. It will explain and interpret; it will throw light on many puzzling questions, on the meaning and relations of events that come to the general reader. The newspapers do not usually tell the beginnings of national and international troubles—there are usually "missing links" in their story. These lapses the Post will fill out.

"SPIRITED A strong editorial page.

REMARKS" There are not many of them in the country—clever, vigorous, striking editorials from an individual point of view. The best writers have been secured to write regularly for the Post editorial page, which will be made one of its strongest features.

**بر** بی بر

SHORT STORIES Nearly one-half of each issue of the *Post* will be given to fiction. The stories will be selected wholly for their interest, variety and literary value, and not because of the name or fame of the author. Every story will be fully illustrated by the *Post's* artists.

عن عن عن

# THE SATURDAY EVENING POST as it is To-day

A good magazine is a good newspaper in a dress suit. It should have all the brightness, interest, enterprise and variety of the newspaper, with the dignity, refinement and poise of the magazine. The Saturday Exening Post, the oldest periodical in America, is a high-grade illustrated weekly magazine, equal in tone and character to the best of the monthlies.

IT WILL BE MAILED TO ANY ADDRESS ON TRIAL, FROM NOW TO JANUARY 1, 1899, ON RECEIPT OF ONLY TEN CENTS (THE REGULAR SUBSCRIPTION PRICE IS \$2.50 PER YEAR)

THE CURTIS PUBLISHING COMPANY, PHILADELPHIA

# APPLES!!

All desirous of exporting applies to the home market will be furnished with reliable information by writing

EBEN JAMES, Bd. Trade Bidg. Terente.

Canadian Agent for-Woodall & Co., Liverpool; L. & H. Williams & Co., Glasgow; M. Isaacs & Sons, Ltd., London. Reference, Mr. W. H. Dempsey, Bay of Quinte Apple Experimental Station, Trenton.

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

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

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

# ONTARIO YETERINARY COLLEGE, Limited

Temperance St., Toronto, Can.

Affiliated with the University of Toronto.

Affiliated with the University of Toronto.

Patrons: Governor-General of Canada and Lieutenant-Governor of Ontario. The most successful Veterinary Institution in America. Experienced Veterinary Institution in America (Veterinary Institution Institu

# The Ontario Agricultural Gazette

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

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

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

BENEFITS OF MEMBERSHIP.

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

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

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

The name and address of each member, and the stock he has for sale, are published once a month. Over 20,000 copies of this directory are mailed monthly. Copies are sent to each Agricultural College 2nd each Experiment Station in Canada and the United States, also to prominent breeders and probable buyers resident n 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 Cazette, 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 for

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

#### LIVE STOCK FOR THE WEST.

Space is already allotted for a portion of another car, which, it is expected, will leave the latter end of October. Any person having stock they wish sent in this car will communicate with F. W. Hodson, Secretary Live Stock Association, Parliament Buildings, Toronto.

#### AN ABRIDGED REPORT OF ENGLISH AND EUROPEAN EXPERIMENTS WHICH ARE OF VALUE TO CANADIAN FARMERS.

HORSES POISONED BY BEING FED SPOILED POTATOES.

The Journal of the Royal Agricultural Society of England records an instance of no less than eleven farm horses dying within the space of three days from the effects of being fed spoiled potatoes.

The first animal, a Clydesdale stallion, was taken ill while ploughing. In the morning it appeared very lively, but about ten o'clock it fell down, as in a fit. It was able to get near home, although it fell down twice, but just outside the yard gate it fell again and could not rise, death taking place about one o'clock. The same afternoon a gelding showed the same symptoms, and died within two hours. On the following morning an aged mare died and two other young horses showed symptoms. A fourth animal was shortly afterwards taken ill, and all these four died within four hours. The others died the next day and the day after, the last one to die having been ill for twenty four hours.

Except in the Clydesdale stallion, which fell down in a fit, the first symptom noticed in all the animals was weakness and loss of power over the

limbs. The animals lay or fell down, and were unable to get up; while lying down some attempted to eat a few mouthfuls, and there was no strugging or evidence of pain. Towards the last there appeared to be a difficulty in the swallowing, and a "fluttering" was noticed in the chest.

A post-mortem examination showed that all the organs were healthy, except the large intestine, the mucous membrane of which was slightly irritated.

The diet of the horses consisted of steamed potatoes, boiled barley, beans, and wheat chaff. The quality of the barley, beans, and wheat chaff was excellent, but the potatoes were old and many of them mouldy and much decayed. They had been stored in sacks, but were not sprouted to any extent. Some of the horses had been fed on them for ten or twelve days, and others for only three or four

days.

The horses were kept in two stables some distance apart. In one stable all the horses died; in the other five out of the nine horses died, while four were unaffected. Three of these latter got no potatoes, while the fourth, through remaining in the yard with three of those who died, was "bossed" by them, and kept away from the manger containing the potatoes.

In order to ascertain whether the potatoes were the real cause of death, a quantity of them were sent to the Royal Veterinary College, and fed to an old cab horse. Great difficulty was found in getting him to eat them. but, by keeping him short of other food, he was induced to eat nearly two bushels in nine days. On the ninth day he was found down in his box and unable to get up without assistance. On the same day he fell again and

could not get up. Death took place quietly thirty-six hours later.

An examination showed that the stomach was healthy, but there were patches of inflammation in the small intestine and one of the large intestines (double colon) was inflamed almost throughout and of a livid tint. A small patch of pneumonia was present in the left lung.

A second experiment at the farm with a cart horse resulted in the same manner, the animal on the tenth day being unable to rise and dying quietly on the following day. The post-mortem examination revealed inflammation of the lining membrane of the large intestine

A chemical analysis proved the absence of any mineral poison, and the steaming of the potatoes precluded all risk of infection from organisms. It is, therefore, probable that the poison was some organic substance generated by the bacteria which were growing in the decaying potatoes.

It should be stated that the quantity of potatoes consumed by each of the horses that died varied considerably. Some had two buckets a day for ten or twelve days, others only half a gallon a day for three or four days. This would appear to show that the poisonous substance was not equally distributed throughout the mass, and was probably confined to one or two sacks.

PARASITES OF THE LUNCS OF SHEEP.

In an article on parasites of the lungs of sheep by G. T. Brown, in the journal of the R. A. S. E., the writer sums up the points, in the, as yet, obscure life history of the thread worm, Strongylus filaria, as far as the latest investigations have brought them to light.

It appears that eggs containing living embryos, and embryos which have got free from the eggs, are expelled from the bronchial tubes of infested sheep in enormous numbers. It is also established that the adult worms have only a temporary residence in the lungs, but whether they are expelled living or dead has not been ascertained with certainty; nor is it known what becomes of them when they quit the lung-tubes. The embryos, it has been proved, live for months in wet earth; they may be dried by the heat of the sun without being destroyed; nor does the frost do them any serious damage. In common with the other form of strongyles, they are swallowed by earth worms and again ejected after having gone through certain changes, but, with the evidence obtained from the examination of many hundreds of earth worms, it is impossible to believe that even a considerable portion of the embryos which are expelled from the sheep's lungs are disposed of in this way. It is not unlikely, however, that a large number become parasitic to certain plants, and in that position acquire a sufficient development to fit them for residence in a warm blooded

OUR...

# Clubbing List

We are pleased to be able to offer FARMING with other publications at the following low rates:

	Regular Price	With Farming
Canadian Magazine	\$2.50	\$2.50
Toronto Weekly Globe	1 00	1 45
Toronto Weekly Mail and Empire	1 00	1 40
Farm and Fireside	1 00	1.40
Montreal Daily Witness	3 00	3 00
Toronto Morning World	3 00	3 00
Montreal Weekly Witness	. 1 00	1 60
Family Herald and Weekly Star	1 00	1 75
London Weekly Free Press .	1 00	1.75
London Weekly Advertiser	1 00	1 10
Ottawa Semi Weekly Free Press	1 00	1 60

UNDER instructions from the Minister of Agriculture, the

# TWENTIETH ANNUAL SALE OF PURE-BRED STOCK

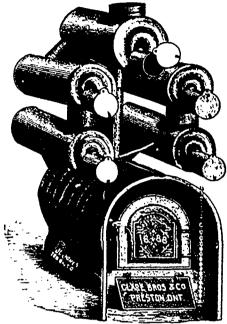
including Poultry, the property of the Ontario Government, will be held at the Ontario Agricultural College, Guelph, on Wedteenthay, 19 h October, 1898, commencing at one o'clock, sharp For further information, apply to WM. RENNIE, Farm Superintendent.

JAMES MILLS, President.

# EXPERT BUTTER MAKERS

Endorse the "Maple Leaf Churn." Works easiest and best. Ask your dealer to show it. Circulars sent free by the manufacturers,

WILSON BROS., Collingwood, Ont



The Hilborn Wood-Burning Furnace. Our Catalogue explains.

# WE MAKE A Specialty of Heating\_

And have placed many thousands of our "Hilborn" Wood Furnaces in country homes. Farmers use only rough and unsaleable wood, and in this way soon save cost of a furnace, to say nothing of the comfort.

We can also give you furnaces suitable for coal or coal and wood, or if you want to heat with hot water we refer you to the

# PRESTON HOT WATER BOILER AND STEEL RADIATOR

We guarantee every furnace to work satisfactorily. Would you like to see a first of the homes that we are heating?

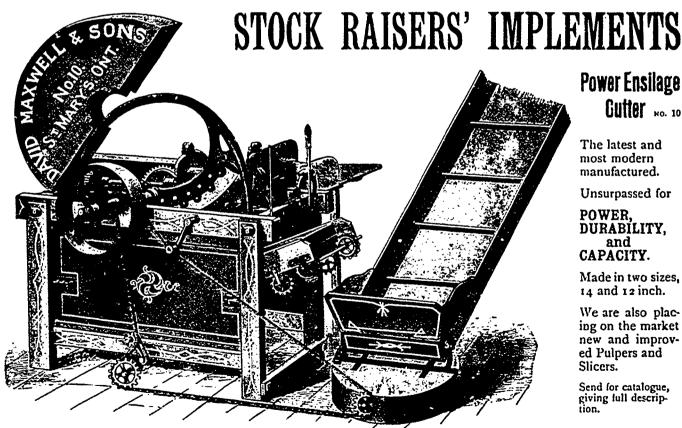
We prepare free estimates, send catalogues and full information upon application, and invite corres-

•:5:•

# CLARE BROS. & CO.

PRESTON, ONT.

Branch at WINNIPEG, MAN.



# **Power Ensilage** Cutter NO. 10

The latest and most modern manufactured.

Unsurpassed for

## POWER. DURABILITY. and CAPACITY.

Made in two sizes, 14 and 12 inch.

We are also placing on the market new and improved Pulpers and Slicers.

Send for catalogue, giving full description.

# DAVID MAXWELL & SONS

St. Marys, Ontario, Canada

#### MARKET REVIEW AND FORECAST.

#### Office of FARMING,

44 and 46 Richmond street W., Toronto.

Oct. 10th, 1898.

The hot weather early in the week rather put a damper on trade in wholesale circles, and consequently things were a little quieter. Money, however, keeps steady. Trade throughout the country is healthy and failures are fewer. This is said to be due to the fact that more business is being done in a cash basis. Reports from the United States show trade to be in a healthy condition, with the volume of business good.

The London market for spot wheat is reported firmer and higher. Business done early in the week was at 9d. to 1s. per quarter in advance. But the easier feeling on this side will likely affect the market there. Though Great Britain will need large quantities of wheat for some time yet, it is re-ported that the English farmers are marketported that the English farmers are marketing their wheat very freely, and that large supplies are coming in from Russia, where it was thought there would be a shortage. However, the world's available wheat supply is only 33,183,000, or 13,699,000 bushels less than last year at this time. This, together with a big export demand and the prevailing tendency of the farmers in both the United States and Canada to hold their wheat, would States and Canada to hold their wheat, would lead one to believe that a firmer feeling would prevail; but such is not the case, and the market was easier, and it was with difficulty that the prices of the previous week were sustained. tained.

Towards the end of the week, however, a firmer feeling prevailed, and there were advances at both Chicago and Liverpool. How permanent these are remains to be seen. permanent these are remains to be seen. The market here is somewhat quiet, with quotations at 62½c. to 63c. for red and white winter west and 60c. for goose. It is reported that some lots of Manitoba No. I hard have been sold affoat at FortWilliam at 67c. to 68c., October delivery. Ontario wheat affoat at Montreal is quoted at 74c.

### Oats and Barley.

The London market for oats is reported firm at the advance reported last week. Stocks seem to be light, though there have been large receipts of Canadian oats lately. At Montreal a fairly good business has been done in oats during the week, with sales at 28c. to 28 c. afloat, which is a decline of 1c. on the week. There was a little more active demand here towards the end of the week for export. Prices are 23c. to 23 c. for white

The Montreal barley market is quiet but steady, with malting grades quoted at 48c. to 52c., and feed barley at 38c. to 40c. The market here is quiet at 43c. for No. 1 east and 42c. west.

#### Peas and Corn.

The London market for peas is firm but the demand is not brisk as prices are considered too high. The Montreal market has declined 16 during the week with quotations at 61c. affoat. The demand here is better and the market is firmer at 50c. to 511c. north und

No. 2 Chicago mixed corn is quoted in Montreal at 36c. affoat. The market here is easier at 30c. for Canadian yellow and 38c. for American Toronto.

### Rye and Buckwheat.

The Montreal market is 1c. easier for tye at 50c. Rye is reported steady at Toronto at 41c. west. Buckwheat is also steady here at 34c. east and 32c. west.

## Bran and Shorts.

The market at Montreal seems to be easier for these with sales reported at \$11.25 to \$11.50 for Ontario bran. Manitoba is quoted at \$10.50 to \$11, and shorts at \$14 to \$15. The Toronto market is reported dull at \$11 to \$13 for shorts and \$8 to \$8.25 for bran.

# Eggs and Poultry.

The London market is reported quiet this week, with Canadian fresh eggs quoted at Liverpool at 6s. 6d. to 7s. per 120. At Glasweek, with Canadian fresh eggs quoted at Liverpool at 6s. 6d. to 7s. per 120. At Glasgow these are quoted at 6s. 6d. to 6s. 9d. The Montreal market has been steady, with sales of new-laid stock at 17c. to 18c., and straight candled stock, fresh, at 14c. to 15c. Prince Edward Island eggs are looked for, and are expected to be bought at 12½c. to 13c. The market here is steady under fair supply at The market here is steady under fair supply, at 15c. to 16c. for strictly fresh gathered, 13c. to 14c. for held fresh, and 11c. for seconds. At the St. Lawrence market fresh eggs are bringing 18c. to 20c. in small lots.

The supply of poultry has been more liberal of late. The quotations for large lots are 35c. to 45c. per pair for chickens, 40c. to 60c. for ducks, 6½c. to 7c. per lb. for geese, 11c. to 11½c, for young turkeys, and 9½c. to 10c. for ordinary stock. Quotations are a little higher on the farmers' market.

#### Potatoes.

At Montreal the rot is reported to have appeared among late potatoes, but not to any great extent. Sales are reported at 50c. in car lots on track, and 60c. in a jobbing way. The market here is easier at 60c, to 65c, for cars on track, and 70c, to 75c, out of store. They are quoted at 65c, to 75c, per bag on the farmers' market.

#### Hay and Straw.

The bay trade is not in a very satisfactory state. Our new clover mixed seems to be giving good satisfaction in Liverpool, but the trouble seems to be to get satisfactory freight rates. This is a case where the interests of the larmer are seriously hampered by excessive freight rates, and where an important ex-port trade is being left undeveloped. Quota-tions at Montreal for choice baled clover are \$4 to \$4.50 per ton in car lots; No. 2 \$4.75 to \$5.50, and choice timothy at \$6.50 to \$7. Last year Ontario supplied Quebec with considerable hay, but this year she has lots and to spare. The market here remains unchanged, with cars on the track quoted at \$7.50. At the farmers' market timothy is selling at \$7.50 to 98 50, clover at \$5.50 to \$6.50, and straw at \$6 to \$7. Baled straw in car lots is quoted at \$4.

There are good grounds for believing that the bulk of this year's apple crop has passed out of the farmers' hands. As high as \$2 per barrel has been paid for some of this fruit, which would bring the price up to \$2.50 to which would bring the price up to \$2.50 to \$2.55 on board cars, which is considered high. The general range of prices, however, has been from \$1.80 to \$2.05 free on cars. There is undoubtedly a good demand in Great Britain for Canadian apples, and if packers and shippers are only careful in landing them in good condition good prices can be obtained. There have been complaints recently that apples sent in cold storage have not that apples sent in cold storage have not turned out well. Apples on the local market here are quoted at \$1.50 to \$1.75 per barrel. Cheese.

There has been a halt in the activity of the cheese market reported a week ago, and

things have an easier tendency. A special cable to the Montreal Trade Bulletin of date Oct. 6th, from London, says: "The market is firm at the late advance, with a fairly good consumptive demand. Finest Canadian fall cheese, 44s. to 46s.; earlier make, 42s. to 43s." From this it would seem that conditions the other side are not such as to warrent 43s." From this it would seem that conditions on the other side are not such as to warrant the easier feeling which prevails on this side. There is, however, a disposition on the part of English dealers not to pay any more than they can help for their fall goods, and for this reason they are making a strenuous effort to keep prices down. Whether they will be able to do so during the balance of the season remains to be seen. After a season of cheap remains to be seen. After a season of cheap-cheese, during which consumption has un-doubtedly increased and the make has largely decreased, it does seem reasonable to suppose that the rise in the price of fall cheese of last week can be maintained. The total shrinkage in the shipments from Montreal up to Oct. 1st, as compared with last season for the same period, now amounts to 210,676 boxes. This, coupled with the shrinkage in shipments from New York for the same time, makes a total of 443,186 boxes. This must surely have some effect upon the market for fall

cherse.
The local markets have been characterized by dullness and an easier feeling during the week. Buyers and sellers are apart, the latter claiming that factorymen are holding at about 1/2c, to 1/2c, above an export basis. The ruling prices during the week have been from 81/3c, to 9c. Finest western Septembers are quoted at Montreal at 91/3c, 91/3c. These are fully 1/4c, below last week's quotations.

#### Butter.

The London market has an easier tendency. Though prices have not receded any, it is conceded that they have gone high enough. Still, holders are reported turn, as stocks are by no means cumbersome. Finest mild cured creamery is quoted at 98s. to 100s.; fine, 94s. to 96s. There is a feeling on this side that prices have been forced too high, and consequently there is a tendency to lower values. It is claimed that the recent advance has brought supplies from unlcoked-for quarters, and caused a run on fresh margarine in England. The future of the market will depend some upon the Australian supply, but the great bulk of this does not arrive till December. There is a decrease of 21,979 packages in the shipments from Montreal up to ages in the shipments from Montreal up to October 1st, as compared with last year for the same period, while the shrinkage from New York is 125,256 packages, making a total shrinkage of 147,235 packages from Canada and the United States. This is a shrinkage of 43 per cent., which must have some effect on the import trade of Great Britain.

Though the Montreal market is fully 16

Though the Montreal market is fully ½c. lower than a week ago, there has been quite a lot of business done at the decline, which must tend to lessen supplies. Sales are reported of late choice September laid down in Montres' at 19½c., and 19c. to 19½c. for qualities not the highest. Considerable second-class stuff has changed hands at 1734c. to 184c. Creamery butter appears to be in

T h same thing over and over again. Read what the AMERICAN has done this time.

# WILL PAY ITSELF IN 4 MONTHS

BLYTHESWOOD, ONT., JUNE 8TH, 1898. Messrs. Richardson & Webster, St. Mary's, Ont.

DEAR SIRS,-Enclosed find settlement for the Separator and oil received from you on May 28th. I placed the Separator on trial with Mr. S. D. Wilkinson, Leamington, and after 4 days he trial with Mr. S. D. Wilkinson, Learnington, and after 4 days he bought it. He is perfectly satisfied. I have tested the skim milk several times for him and it has never shown more than a trace of butter fat. I consider it a perfect machine in every respect and would like to act as your agent in this part of the county. Mr. Wilkinson is one of the most prominent dairymen around here. He says he will zave enough in butter to pay for the Separator in 4 months. Yours truly, (Signed) F. A. LEAK.

Write RICHARDSON & WEBSTER, St. Mary's, Ont., for Catalogue and Prices. It will pay you to have a Separator as well as others.

W. G. GLENN. Agent of Owen Separator and vicinity.

W. G. GLENN, Agent for Owen Sound and vicini.y

RICHARDSON & WEBSTER.

ST. MARY'S. ONT.

good demand here at 20c. to 21c. for prints good demand nere at 20c. to 21c. for prints and 17½c, to 18½c. for tubs. There is also a good demand here for daily butter at 17c. for pound rolls and 15c. to 16c. in tubs. Dairy butter appears to be scarce at Montreal at 15c. for fine goods and 15½c. for selections.

#### Wool.

This trade seems to be dull on both sides of the line. Reports from New York show this to be the dullest season on record. While manufacturers are buying for their present needs only there is no speculation whatever. The local market here remains quiet. Buyers are unwilling to pay more than 15c, per pound for the fleece wool offered. The situation has not improved with the advanced season. It not improved with the advanced season. It is estimated that at present nine-tenths of the domestic clip is held by owners who are inclined to hold it for further developments, which are not likely to bring any great advance as there is great falling off in the consumities of weal. sumption of wool.

Cattle.

These have held their own during the week. Reports from some of the Western cattle markets do not show much change in the sitmarkets do not snow much change in the situation. Stockers and feeders, however, are active in the West. The supplies on the market here have been fairly liberal, and on Friday's market the supply was principally stockers.

stockers.

Export Cattle.—Choice heavy cattle sold at \$4.40 to \$4.50 per cwt. on Friday, with some extra choice bringing 10c, more. Light cattle bring from \$4 to \$4.10. Export bulls are a little easier at \$3.65 to \$3.85 for heavy choice, and \$3.25 to \$3.50 for medium.

Butchers' Cattle.—There have been too many unfinished cattle on the market lately for which prices are easier. Good butchers' cattle are scarce and are wanted. Picked lots

cattle are scarce and are wanted. Picked lots of these bring from \$4 to \$4.10 per ewt. Prices for other lots are \$3 60 to \$3.75 for good; \$3.25 to \$3.40 for medium; \$2.85 to \$3 to for common, and \$2.75 to \$2 \$5 for in

ferior.

Stockers and Feeders.—Choice heavy feeding steers bring from \$3.60 to \$3.75, with a few picked lots bringing \$3.80 per cwt.
Feeding bulls are quoted at \$2.60 to \$3. Stockers are easier, selling at \$2.75 to \$3.15 for ordinary, with \$3.25 to \$3.30 for picked lots. The bulk of stockers bring from \$3.10 to \$3.15.

Calver. - Prices for these are unchanged at \$\frac{6}{3}\$ to \$6\$ each, or \$5\$ per cwt. live weight for the best heavy yeals. The trade at East Buffalo has been good, choice to extra being quoted at \$7.50 to \$7.75, and good to choice, \$7\$ to \$7.50.

\*\*Mich Cows are scarce, and sell from \$25\$ to \$7.50.

\*\*The water choice quality bringing over \$1.50.

\$44, with extra choice quality bringing over

Sheep and Lambs.

Sheep and Lambs.

Firick Bros'. East Buffalo weekly circular of Oct. 5th says of Canadian lambs: "Offerings so far this week have not been very heavy, and quality never has been any poorer, the loads (25 in all) consisting almost entirely of backs, with very few ewe and wether lambs amongst the receipts. A strictly fancy load of choice ewes and wethers would readily bring \$5.75 per cwt. Those that are coming just at present are selling around \$5.25 to \$5.50—it depends altogether upon the number of ewes and wethers in the load." The market here for lambs is firmer, owing to market here for lambs is firmer, owing to light run selling at \$2.75 to \$3.75 each, or \$3.75 to \$4.10 per cwt. Prices for sheep show very little change, ewes selling at \$3.50 to \$3.60, and bucks at \$2.75 per cwt.

### Hogs.

A further drop has taken place in live hogs A turther drop has taken place in live hogs at Montreal when sales were made early in the week at \$4.25 to \$4.35 per cwt. The deliveries have been large of late and a further drop in prices is looked for next week. On Friday best bacon hogs sold at \$4.40 to \$4.50 per cwt., light fat hogs at \$4.40 to \$4.12\frac{1}{2}, and heavy fat hogs at \$4.25.

#### Horses.

The export trade in these is reported to be very active at Chicago. There is a good demand there for prine heavy draft horses for both the English and German trade at \$125 to \$230, with an occasional sale at \$250 to \$300. Prices are a little lower at Buffalo.

# **EADING COLLEGES** of CANADA

TORONTO

# Central **Business**

Yonge and Gerrard Sts., TORONTO.

College

Largely patronised by Farmers' Sons in the Business Department Special courses in Lelegraphy, Shorthand and Typewriting.

AFE Eight regular Teachers' Splendid Equipment, Reasonable Rates.

W. H. SHAW, Principal.

HAMILTON

# GARFIELD and BUSINESS EDUCATION...

President Garfield publicly declared that commercial schools conferred a more valu-able educational training upon the average man than Harvard or Vale.

### The Hamilton Business College

is a commercial school of the highest type. Read its Annual Announcement, be con-vinced, and attend it.

Address C. R. McCullough, Principal, HAMILTON.



HAM LTON

For nearly 40 years this College has been a leader in Conmercial and Shorthand training, and is very much of a leader to-day Send for handsome illustrated prospectus to R. E. GALLAHER, Principal.

# BELLEVILLE

# Ontario Business College

Established 30 years; most widely attended in America, 22 years under present principals, who are authors and publishers of Canada's Standard Husiness Books—"The Canadian Accountant, "Joint Stock Book Keeping," and "Negotiable Instruments." Affiliated with the Institute of Chartered Accountants.

Address the principals.

ROBINSON & JOHNSON, F.C.A. Belleville, Ont.

M Sell Bes

#### BRANTFORD

# BRANTFORD BUSINESS COLLEGR

Large class rooms and modern equipments of a first-ass school.

class school.

The curriculum taught is that which has been adopted by all the first-class business colleges of Canada, with a high standard of pass and uniform examination papers.
Fall and winter term now on. Book-keeping, arithmetic, commercial law, shorthand, typewriting, etc.

MRS. M. L. RATTRAY, Principal.

LONDON

# FOREST CITY BUSINESS AND SHORTHAND COLLEGE

London, Ont.

The leader amongst business schools. Special Course for farmers' sons. Catalogues free.

J.'W. WESTERVELT, A.K., Principal

**GUELPH** 

# YOUR BOYS AND GIRLS

Need the best course of practical education in business. Be sure, therefore, that they attend the

# Guelph Business College and Shorthand Institute

where the highest possible efficiency is the result. Students may enter any time. Write or call if you are interested. Circulars free.

J. SHARP, Principal GUELPH, ONT.

OWEN SOUND

Write to C. A. FLEMING, OWEN SOUND, Ont.

Principal of the ....



If you wish a thorough course in either

# **Business Subjects**

Or Shorthand and Typewriting. Annual announcement free. Mention Parming.

# THE TORONTO ENGRAVING CO.

20 Bay Street, Toronto

Live Stock Engraving and Photographing a Specialty

> Cuts for Newspapers, Magazines, Advertisements, Catalogues and Circulars supplied on short notice.

# The Unparalleled Reputation of The BELL PIANOS and ORGANS $\dots$

Is accepted without dispute by all other makers

ORGANS from \$40 upwards PIANOS from \$250 upwards

Only the best materials used All others are rejected. On Reasonable Terms from all Agents

> Manufactories . GUELPH, Ont. ~~·

THE BELL ORGAN & PIANO CO., LIMITED

# CREAM . . . SEPARATORS



# THE ALEXANDRA

Hand and Power. Capacity 160 to 2,000 lbs. \$50 to \$350.

# THE MELOTTE

Hand Style only. Capacity 330 to 850 lbs. Price \$100 to \$185.

Up-to-date Dairy Machinery and Supplies.

AGENTS WANTED.

R. A. LISTER & CO., Ltd.,

18 St. Naurice Street, MONTREAL.

# A NEW GRINDER

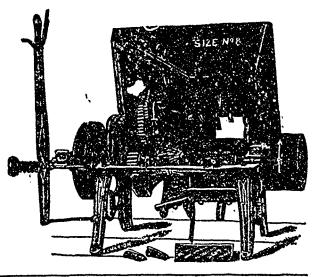
Our combined Grain and Corn Grinder has conical grinding plates as hard as steel, as shown in cut. Top of hopper is 3 feet from the floor. We can also supply suitable elevator.

If you need a Grinder, write for our catalogue.

We manufacture also

TREAD POWERS
THRESHERS
FEED CUTTERS
HAY PRESSES
Circular Saw Machines
etc., etc.

MATTHEW MOODY & Sons TERREBONNE, QUE.



# FARMERS, READ THIS!

"I am bound, and indeed pleased, to confess that I was never more astenished in my life than when noting the effect of Alberts' Thomas-Phosphate Powder upon pastures, clover, roots and corn fields, especially upon the harsh, cold and almost intractable clay lands. The effect in numerous cases was simply marvellous; poor, benty pastures after being dressed with it were simply redolent in clovers and wild vetch, and similar valuable fodder plants. One field especially, of some thirty acres, apparently poverty-stricken to a last degree, had been dressed as to five acres with a ton of Alberts' Thomas-Phosphate Powder, which was one beautiful sheet of white clover in flower, fit to mow, while the remainder of the field scarcely afforded a hate of coarse grass." W. GODWIN, in the Lincoln Chronicle, April 2nd, 1897.

"It seems to carry the roots through the frost better, and I particularly notice the good effects on the following crops, the third year being most surprising, the wheat crops being greener and stronger all through the season where it was used." ROBERT EARDLEY, in Chronicle.

"We have seen old meadows, which were unremunerative previously, become covered, after application, with white and erimson clovers, excellent alike for hay or grazing purposes.
Like all manures which exert a continuous effect over a period of years, it is a little slow in showing the
beneficial effects of its actions, and it is for this reason that we recommend its use during
Autumn and winter, so that sufficient time will have clapsed for its effects upon the crop to be seen
by the summer following." Farmers' Gazette, July, 1898.

"The results which follow the application of Alberts' Thomas-Phosphate Powder are simply marvellous, clovers springing up in abundance where none had been seen in years previous, the quantity of, koop being much increased, as well as the quality of the herbage vastly improved." Mark Lans Express, 27th August, 1838.

"Agriculture cannot fail to benefit when a cheap and readily available manurial agent is at hand,

"Agriculture cannot fall to benefit when a cheap and readily available manurial agent is at hand, which of itself can change a poverty-stricken pasture field into a bed of luxuriant cattle food while every one of the million leaves of white clover and trefoil, and other kindred plants developed by its action, is drinking in from the boundless stores of the atmosphere the most coxtly and one of the most important of all of the sources of fertility." Mark Lane Express, 12th Sept., 1893.

We cull these few extracts from the many in reference to

# ALBERTS' Thomas-Phosphate Powder

And practical farmers and scientific scholars alike freely admit that when the benefits to be gained through the use of this \*\* MISSING LINES\* in manuring are fully realized, it must have great significance.

# WALLACE & FRASER

Masonic Temple ST. JOHN, N.B.

Canada Life Bldg., TORONTO

<u>0%0%0%0%0%0%0%0%0%0%0%0%0%0%0</u>

# LUMP ROCK SALT for Cattle

Domestic animals, to be kept healthy, should have salt within their reach at all times.

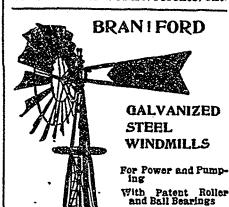
VERRET STEWART & CO., Montreal.

# ROCK SALT

FOR HORSES AND CATTLE

70C. per 100 lbs; 500 lbs. 101 \$3.00 here.
CASH WITH THE ORDER.

TORONTO SALT WORKS, Toronto, Ont.







Makers of the lightest running and best constructed Galvanized Steel Windmills and Towers made.

Write for Illustrated Circulars.





# Every Man His Own Cobbler

The Home Repairing Outfit. A complete set of tools for Boot, Shoe, Rubber, Harness and Tinware Repairing. 44 articles packed in a near strong box; weight, 18 lbs. Every family needs one. They sell like het cakes. Price for the complete outfit, \$1.75.

The Balley Denaldson
Co.
MONTREAL Onebox



armers...

Make it a point to procure the very best implements that money can buy.

# THE Massey=Harris

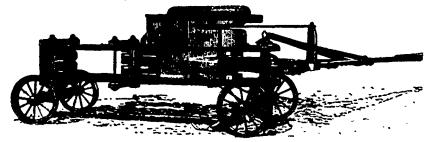
Ensilage and Straw Cutters and **Root Pulpers** 

Are great money-savers and give excellent satisfaction.

# MASSEY-HARRIS CO., LIMITED TORONTO

# Dederick's Patent Steel Case Hay Presses

This is the only Reversible Lever Horse Hay Press that dared appear when called out for competitive test at the Chicago Columbian World's Fair.



Made of Steel. Improved for this Season. Patent Retainers. Patent Folder Roller, Patent Tension Blocks, Patent Side Clamps.

These improvements make the Press lighter, stronger, easier on the horses, and more powerful.

This is the leading Hay Press in Canada and the United States. Also PATENT ADJUSTABLE

AND DIMENSIONS BALE TIES. MANUFACTURED BY

BOYD & CO.,

**HUNTINGDON, QUE.** 



Woodstock Steel Windmills

POWER PUMPING

@%**@**%@%



Get a DANDY

GRAPHITE BEARINGS They Run without Oil.

Steel Towers, Pumps, Tanks, Saw Tables and Watering Troughs, etc.



WOODSTOCK WINDMOTOR CO. Limited

Woodstock, Ont.

The Spramotor to prevent to prevent to put a stop to the local to put a stop to the local to the

ngain.
The SPRAMOTORS are the result of the best

The SPRAMOTORS are the result of the best efforts of the heatinest manufacturers alive.

The SPRAMOTORS embody more good features than all others combined, and that is the reason of the great demand. It is not only necessary to have one good feature, but one to be in the front rank must have all the good features.

The SPRAMOTORS shoot mixtures stronger and evener than any, which fact has greatly increased their sales.

cheer than any, which fact has greatly unconsidered their sales.

The SPRAMOTOR will last longer than any other, and is therefore economical to buy.

The SPRAMOTOR is made of brass, is the result of THREE PATENTS and others pending, is carefully made and less liable to need repairs.

'I any times more SPRAMOTORS are used to-day in Canada than all others combined, which is one of the best arguments why you should buy one and be up with the procession. Nearly every first-class store in this country carry SPRAMOTORS in stock.

All the first-class brewers in Canada are using the SPRAMOTORS for whitewashing and disinfecting work.

work.

SPRAMOTORS are recognized as being the standard of the world, and they have proven it by EVERY TEST that a machine can be put to.

They cost from \$5.00 upward, and a catalogue will be mailed you on application.

# SPRAMOTOR CO.

357 Richmond St., .

London, Ont.

<del>?\\\$</del> Why Do You

Hesitate?

If you have an animal that is afflicted with Lump Jaw, why do you hesitate? Why do you tun the chances of it spreading to the entire herd? to the entire herd?

Mitchell's Anti Lump Jaw

has never yet failed in a single instance after following our in-structions carefully, and if it does not do what we claim it will. we will refund your money.

Price \$2.00, sent by mail postpaid Full Particulars and Treatise Free.

W. J. Mitchell & Co., Winnipeg, Man. or Prince Albert, N. W.T.