

Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

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

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

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

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

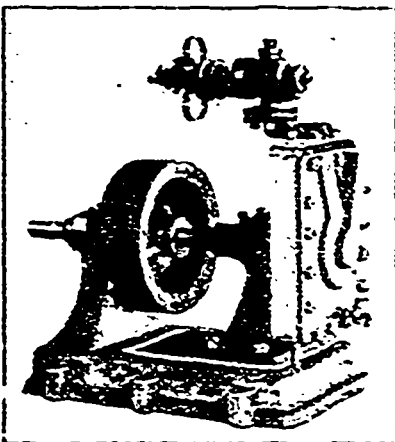
Additional comments: /
Commentaires supplémentaires:

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

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

FARMING

November 22nd, 1898.

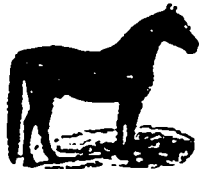


**THE DAKE PATENT
STEAM ENGINE**

With recent improvements, is one of the most Simple, Economical and Durable Steam Motors of its range of power on the market.
SEND FOR NEW CATALOGUE
Just issued - It will interest you.

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

Horse Owners! Use



**GOZBAULT'S
Caustic
Balsam**

A Safe Speedy and Positive Cure
The Safest, Best BLISTER ever used. Takes the place of all treatments for mild or severe cases. Removes Bunches or Hemispheres from Horses and Cattle. **SUPERSEDES ALL CAUTERY OR FIRING.** Impossible to produce scar or burnish.
Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express charges paid, with full directions for its use. Send for descriptive circulars.
THE LAWRENCE-WILLIAMS CO., TORONTO

**Quick Cure
For Lump Jaw**

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

Fleming's
**LUMP
JAW
CURE**



Trade Mark Reg'd.

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

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

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

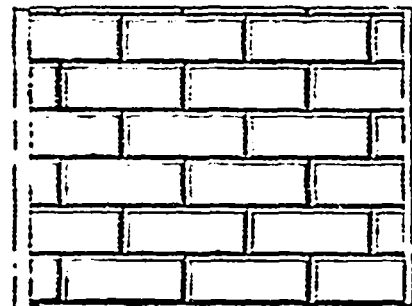
Address: **FLEMING BROS.**
Chemists, ST. GEORGE, ONTARIO

**A Splendid
Finish**

For New Buildings, or fixing up old ones.

OUR SHEET STEEL

PRESSED BRICK



It affords a warm, durable, handsome finish that is fireproof and economical. It can be applied and easily applied, and gives a uniform effect that is highly appreciated.

WHY NOT TRY IT?

Our Catalogue gives full information

METALLIC ROOFING CO.
LIMITED

1192 KING ST. W., TORONTO.

DENTONIA PARK FARM

EAST TORONTO (Coleman P.O.)

W. E. H. MASSEY, Proprietor.

Dentonia Jersey Herd - White and Red Herd bred at both the Toronto and London Fairs this fall, also some thirty other prizes. The herd comprises four (four) 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. Heter and Bull Calves, also good Cows, always on sale.

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

Dentonia Trout Ponds 100,000 healthy fry ready for delivery this fall. Prices reasonable. Trout Eggs in season. Market Trout supplied on short notice.

SHEEP.

OXFORD DOWNS

For Sale

Good Shearling Ram and some fine Rams and five Lambs; also some good young Yorkshire Sows and Boars. Some good young Heifers in Calf for sale.

John Cousins & Sons, Harriston, Ont.



IMPORTED OXFORD DOWN

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

HENRY ARKELL, Arkell, Ont.

FAIRVIEW SHROPSHIRE.

Imported and Canadian RAMS and EWES

Choice lots to select from for breeding purposes, also first-class fitted sheep of both sexes for showing.

JOHN CAMPBELL, WOODVILLE, Ont.

OXFORD DOWNS

For Sale.—A fine lot of ram and ewe lambs, bred from imported sire and dams. Prices to suit times.

SMITH EVANS, Gourack, Ont. Breeder and Importer



One mile north of Clarendon, on C.P.R.

Gotswolds

Twenty good ram lambs, shearing and two-year, at farmers' prices. Some excellent shearing ewes, bred to our best studs.

Berkshire Sows ready to breed. Boars fit for service. Twenty Plymouth Rock Cockerels, choice.

G. T. GARRUTT, Par. 18, Clarendon, Ont.

During OCTOBER and NOVEMBER we offer:

Shropshire ram lambs of No. 1 style and breeding weighing 100 lbs., at \$10. Yorkshire and Berkshire boars, fit for service, at from \$12 to \$15.

W. R. BOWMAN, Mount Forest

Shorthorn Heifers by Statesman, and Berkshires by Baron Lee. Eight weeks old. Also one Baron Lee boar, ten months old.

Bolton Station, C.P.R. and Pakgrave, G.T.R.

A. J. Watson, Castlederg, Ont.

A. TELFER & SONS, Paris, Ont., Breeders and Importers of red, Southdown Sheep. For sale.

JAS. P. PHIN, The Grange, Hespeler, Ont., breeding and importing Shropshire Sheep a specialty.

JNO. A. MCGILLIVRAY, Q.C., Jerseyville Farm, Uxbridge, Ont., Breeder and Importer of Dorset Horned Sheep, Jersey C title, and Tamworth Pigs.

W.M. E. WRIGHT, Glanworth, Ont. Breeder of Shropshire Sheep, Chester White Swine, White and Bronze Turkeys.

SWINE.

Large English Berkshires.

Stock and show boars, 6 months and over. Sows in farrow. Young stock, 2 months up, good length. Write for prices. Mention FARMING.

G. R. DECKER, Chesterfield P.O., Ont.

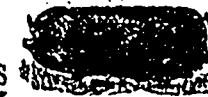
IMPROVED CHESTER AND TAMWORTH SWINE

Boars fit for service. Sows ready to breed, and Young Stock of both sexes for sale at reasonable prices.

H. GEORGE & SON, Crampton, Ont.

LARGE ENGLISH BERKSHIRES

My herd won 306 prizes, 11 diplomas, and 5 medals since 1888. Choice stock of all ages for sale. GEORGE GREEN, FAIRVIEW, ONT. Stratford Station and Telegraph Office.



POLAND-CHINAS ARE THE RIGHT KIND.

Brood sows for sale. Boars ready for service. Young sows ready to breed. Lots of pigs two to three months old; good long pigs with heavy bone. Mention FARMING. 401 R. WILLIS, Jr., Glen Mayor, Ont.



Large English Berkshires

I have a share of some of the best. I keep them for breeding more than for sale. Prices according to Quill y. Also S. L. Wyandottes, S. G. Dorkings, P. Cochins, B. Minorcas, S. Hamburgs. Eggs in season, \$1 per setting.

Geo. Thomson, Bright, Ont. Sunnyside Farm, 7 miles from Bright Station, G.T.R.

Parkhill Berkshire Herd and Poultry Yards

Big reduction in prices for Pigs and Poultry this month in order to make room for the breeding stock.



POULTRY B. and W.P. Rocks, S.L. and W. Wyandottes, Black W. and B. Leghorns, B. Minorcas at \$1 each. Pekin and Ruen Ducks, \$3.50 per pair. Toulouse Geese, \$4.50 per pair. W.R. Turkeys, \$1 per pair. Young Toms, \$2.50 each. All are choice breeding stock.

D. A. GRAHAM, PARKHILL, ONT.

Chester Whites and Berkshires

For a boar or sow of any age, that is right in quality, right in breeding, right in price, and guaranteed to be all right. Address, JAMES H. SHAW, Simcoe, Ont.



CHESTER WHITES.

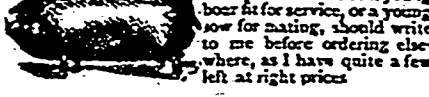
I have on hand forty head of pigs from two weeks to four months, both sexes, pairs not akin, from imported and home-bred stock.

J. H. CHALK, Calton Ont.

R. H. Harding,

Breeders and Importers of Dorset Horn Sheep and Chester White Swine

THORNDALE, ONT.



OAK LODGE HERD

Anyone in want of a young boar fit for service, or a young sow for mating, should write to me before ordering elsewhere, as I have quite a few left at right prices.

..Yorkshire Hogs..

ONLY ONE BREED KEPT A splendid opportunity to secure choice stock at moderate prices. One hundred young pigs to select from.

WRITE FOR PRICES. J. E. BRETHER, Burford, Ontario

JOS. CAIRNS, Camlachie, Ont.

IMPORTER AND BREEDER OF Chester White Hogs

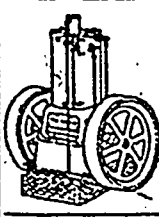
Stock on hand for sale at all times, of all ages, and at right prices.

A. ELLIOTT, Pond Mills, Ont.

Emden Geese, Pekin Ducks, Bronze, White Holland and Narragansett Turkeys, Collie Dogs and Oxford Sheep. All of the best strains.

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

Northey Gasoline ...Engine...



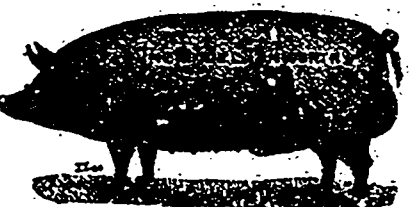
No experience needed to run it. Pays for itself in two years. Send for our illustrated booklet.

NORTHEY MFG. CO. 1008 King St. Subway TORONTO LIMITED

Oxford Herd of Poland Chinas

Choice stock of either sex and all sizes, from 2 months up. Bred from the best strains known to the breeder. Write for prices. W. & H. JONES, Mt. Elgin, Ont. The Home of the Winners

O. FRASER & SON, Felloes, Ont., registered Duroc Jersey swine, bred, and for sale.



TAMWORTH SWINE. For Sale. Bears fit for service. Sows in pig; also bred to order. Large quantity of young pigs. Address, JOHN BELL, Clydesdale Farm, Amber P.O. Agincourt Station, G.T.R. and C.P.R.

LARGE ENGLISH BERKSHIRES

All bred from first-class show stock. Boars and sows 6 to 8 months old; also a choice lot of pigs 6 to 9 weeks old. Also a choice lot of R.P. Rock Cockerels. THOS. TEASDALE, Concord, Ont. Telegraph Office: Thornhill Station.

For Sale 3 First-class Shorthorn bulls, red roans. 40 good Yorkshire boars and sows, 6 weeks to 6 months. 20 Leathery Large English Berkshire boars and sows, 5 months. 4 Shropshire ram lambs, from imported stock. Write.

H. J. DAVIS, Woodstock, Ont. Box 290

NORTH BRUCE HERD Large White Yorkshires

Boars fit for service and young stock of both sexes from eight weeks to six months old for sale. Write for prices. W.M. HOWE, North Bruce, Ont.



GOLDSRING HERD TAMWORTHS.

Two 1/2 of August boars, one a Grant; two sows, sisters of boars, as good as I ever owned. Young pigs out of Amber Rose, Truby and Minnie F. They go at rock bottom prices. NORTHMAN M. BLAIN, St. George, Ont.

FARMING

VOL. XVI.

NOVEMBER 22nd, 1898.

No. 12

One Day's Mail

The following complimentary references to FARMING were received on the same day last week and show that the paper is appreciated by practical and successful farmers in all parts of the country:

Mr. D. C. Flatt, of Millgrove, Ont., who is an extensive breeder of improved Yorkshire swine, says: "I am free to say that FARMING is equal to any journal of its kind in the Dominion, and I certainly have received a great deal of satisfaction in reading the many well-written articles pertaining to the farm."

Mr. D. Harrison, a successful farmer of Irena, Ont., forwards his renewal for 1899, and says: "I appreciate the benefit I have received from your paper very much indeed."

Mr. Wm. Howe, one of the leading breeders of improved Yorkshire swine in Northwestern Ontario, says: "I appreciate your paper very much, and would not like to be without it, having been a subscriber for about eight years. I wish you every success."

Agricultural News and Comments

The creamy winged butterflies which we frequently see fluttering around and consider harmless are responsible for the cabbage worm plague. The insect deposits its eggs upon cabbage or any cruciferous plant of the same family, and the result is the destructive worm.

Farmers' Institute work has already commenced in Nova Scotia. A series of meetings has been arranged for by the Nova Scotia Farmers' Association, and the first one was held at Big Baddick, Cape Breton, a fortnight ago at which several practical farm topics were discussed.

Some 75,000 men are reported to have attended the superior agricultural schools of Denmark between 1844 and 1894, of whom about 11,000 have followed the agricultural schools proper. Denmark also supports a number of "seed control stations," which test all kinds of seed imported for agricultural purposes.

A great many young fruit trees are destroyed by field mice during the winter. A good preventive is coarse wrapping paper, dipped in kerosene and tied about the base of the tree as well as a few pieces laid over the nearest roots. These will repel the mice and at the same time prevent the ravages of boring beetles.

A farmer who attended a local fair in Western New York State, and was swindled out of \$96 by gamblers on the ground, has sued the fair association for the recovery of his money. If he succeeds no doubt a large number of other suits will be entered. This may ruin the fair associations concerned; but they deserve to be ruined if they allow such practices to be carried on.

A New York farmer objects very strongly to the practice of pasturing meadows in the fall. He claims that there is more money lost by so doing than what is gained from the feed which the animals secure. It is doubtless injurious to turn stock on meadows when the ground is soft and wet, but the question is if very much harm is done when the ground is dry and firm in pasturing meadows in the fall.

A great many milch cows have been sold recently in Sussex County, N.B., to be used for dairy purposes in the Eastern States. This may be a good thing for the Yankee but how will it effect the dairy business down by the sea? If the New Brunswick farmer is able to sell his poor cows

to the American buyer and keep the good ones he will help dairying in his own province and be money in pocket.

It is reported that considerable quantities of oleomargarine are being sold in the Maritime Provinces. It is said to be imported from Newfoundland and other places. The persons importing or offering this article for sale are surely very ignorant of our laws on the subject. The punishment for such an offence is a fine not exceeding four hundred dollars nor less than two hundred, and in default of payment imprisonment of not less than three months.

It is the practice in Kansas and other Western States, where the autumn months are always warm, to graze stock on the fall grains. A limited amount of grazing might be beneficial in Ontario this fall where the wheat has attained excessive growth on account of the warm weather. It does not do, however, to turn on stock if the ground is wet, as the plants will be injured by tramping and the grazing must not be too close.

The next annual meeting of the Dorset Horn Sheep Breeders' Association of America will be held at Pittsburg, Penn., January 10th, 1899. Since its organization seven years ago the association has introduced Dorsets into thirty-eight states, and to-day has 659 flocks under its care, and eighteen of these are in Canada. The only importation made during the year was by John A. McGillivray, Uxbridge, Ont., who is president of the association.

To keep apples sound all winter the following plan is recommended: Take dry sawdust and place a thick layer on the bottom of the barrel, then place a layer of apples, not close together, and not close to the sides of the barrel. Put sawdust liberally over and around and so proceed until a bushel and a half are packed in a barrel. Keep in a cool place. No bruised or mellow apples will be preserved, but they will not communicate rot to the other apples.

Dry earth containing a considerable quantity of humus is one of the best and cheapest manure preservatives. Every farm has plenty of this, and the only cost being the placing it under cover. The greatest loss in a manure pile is the escape of volatile gases such as ammonia. These can be largely preserved by sprinkling the dry earth over the manure pile and about the stalls when the stable is being cleaned. Disagreeable odors will be prevented and fertility saved.

The majority of poultry eaters like the white meat better than the dark and the fowl that best suits the majority of purchasers has a large amount of breast meat. The best market fowls carry this white meat, not only on the breast proper, but well back between the legs. A great deal of the market poultry fails to be thick-meated between the legs, which is a vital defect. Fowls should be selected for breeders whose legs stand well apart with the body between them of good width and with a tendency to put on flesh there.

An invention has recently been perfected whereby twine suitable for binding grain can be made from the common wire grass of swamp lands. It is twisted with a cotton thread wound around it to keep it from unravelling. It is heavier than ordinary twine, running 250 feet to the pound, and requires a slightly enlarged knotter to

that ordinarily used. It can be sold from one-third to one-half cheaper yard for yard than other twine. It is claimed that there are thousands of acres of land in Manitoba which produce grass suitable for this purpose.

A movement is on foot for the re-establishment of the School of Agriculture in connection with the Provincial Model Farm at Truro, Nova Scotia. The enlargement of the scope of the institution has found many advocates, but there are a few who seem to fear that any widening of the work will only result in failure. Those who have such fears must have very little faith in the future of agriculture in the Maritime Provinces. Agriculture has reached such a stage in this country, and the lower provinces are no exception to the rule, that unless the best and most up-to-date methods of farming are practised Canada will retrograde instead of going forward.

The Outlook for Creamery Butter

A short review of the creamery butter situation may be quite opportune at this juncture, when so many of our cheese factories are changing from summer cheese-making to winter butter-making. The general outlook is a very hopeful one. Never before has Canadian creamery butter stood so high in the estimation of the British consumer as at the present time. This growing popularity means a gradually increasing demand as the years go by, and a larger market for our butter. True, there are times of depression such as the export butter market has experienced during the past week or two, but these come at certain seasons in every line of trade, and do not affect Canada any more than other butter-exporting countries.

Our chief competitors in supplying butter to the British market up to 1898 were Denmark and the United States, with Australia and New Zealand figuring largely in the trade at certain seasons of the year. If statistics of the present season's trade are any criterion it would seem that the United States is no longer a prominent factor in the export butter trade. Up to November 12th the shipments of butter from New York this season show the large decrease of 120,354 packages as compared with the same period of 1897, and the total shipments up to date amount to only about 50,000 packages. The reason for this shrinkage is either one of two things, the increased consumption of butter in the United States or a falling off in production. If it is the former, and there seems to be good reason for believing that it is, there is a likelihood of the same conditions prevailing another season. The price of butter in the United States has been good all through the summer season, and a week ago prices at New York were from three to four cents per pound higher than what exporters at Montreal could afford to pay for finest creamery butter for export, and, therefore, if there has been a falling off in the production of butter in the United States it has not been because of low prices. It is safe, then, to conclude that American creamery butter is not likely to be as important a factor in the British market as formerly, and that it may in the near future be entirely out of the race. This is the more remarkable when we consider the special efforts made about a year ago by the United States Secretary of Agriculture to develop the export butter trade of that country.

Leaving the United States out of the question let us look at the other countries referred to. It is safe to assume that Denmark is in the butter-exporting business for keeps, and whatever efforts we may put forth to develop our export butter trade we must count on keen Danish competition. As to Australia and New Zealand, their efforts in the past have been somewhat of a spasmodic nature. It seems to be their plan, and especially the former country, to gather together large quantities of butter and send it forward in shiploads at certain seasons. This tends to create a panicky feeling in the market, and gives operators a chance to "bear" the market and reduce prices. It is not likely, however, that this kind of trade will be carried on to as large an extent in the future. A Canadian dairy

expert has recently gone to New Zealand to take charge of the dairy work there, and we may look for more systematic competition from that quarter than formerly.

Canadians, however, should have no fear of competition from these countries. We are near the market and have facilities and conditions as favorable for making as good a quality of creamery butter as can be made anywhere. The competition of France, Sweden and Holland, though not usually considered so important as that of the other countries we have mentioned, should not be overlooked. These countries are near the market, and at present send considerably more butter to England than Canada does. Sweden is, perhaps, to be feared more than any of the others, as conditions there are such that the production of butter could be largely increased, and we understand the Swedes are making special efforts along this line.

Though we will have to depend upon Great Britain to take the bulk of the butter we export, there are other countries that might be induced to take large quantities of our butter if their market is well looked after. Prof. Robertson, in his evidence before the Standing Committee on Agriculture and Colonization last April, stated that shipments of butter sent by the Department to Japan and the British West Indies were well received, and netted from 22 to 24 cents per pound. These are satisfactory prices, and if a proper package can be secured at a reasonable price that will stand the heat of the ocean voyage to these countries a good export trade might be worked up. Then there is our own local market to be supplied. Every year the demand for fine creamery butter in our towns and cities increases. The general outlook then is a very hopeful one, and if our dairymen are vigilant in regard to the quality of the product, and if it is sent to the consumer regularly and in good condition, there is no reason why our export butter trade cannot be largely increased within the next few years.

The Regulations Regarding Imported Stock Into the United States

When the new regulations, affecting the importation of pure bred live stock into the United States, were issued by the Treasury Department at Washington, on August 19th last, it was thought by some that they were more stringent and would militate more against the Canadian breeder than those put into force by the same department on Feb'y 1st, 1895. A comparison of the two, however, shows that there is very little, if any, change. Mr. Henry Wade, Registrar of live stock, Toronto, informs us that, practically speaking, there is no change in the new regulations as compared with the old ones. Mr. Robert Miller, Brougham, Ont., who has made some recent shipments of pure-bred cattle and sheep to the United States, writes us as follows: "I have been shipping sheep and cattle to the United States regularly and have not heard of any new requirements in the Customs department of the United States. The proper form of registration certificate, health certificates and consular invoice, also affidavit of shipper when he does not go with shipment, are required and have been for some time. Secretary of Agriculture Wilson has signified his intention of leaving arrangements as nearly as possible as they now are, believing that they are about right and that people are beginning to understand them." From this it will be seen that the new regulations of August last are merely a reiteration of those issued in 1895, and were probably published anew and scattered over the country as a pre-election dodge to influence votes among the American breeders.

However this may be, the regulations passed in 1895, and which have been confirmed in 1898, do appear unfair to the Canadian breeder and the injustice is in not recognizing any of the Canadian records. In the list of accepted records published by the U. S. Department of Agriculture over eighty are in the United States and as many more in other countries are recognized, while not a single association registry in Canada is included in the list. No reason

is assigned for not recognizing the Canadian records. An American exchange in discussing the question hints that the reason is contained in the following statement published by the U.S. Department of Agriculture when issuing the regulations: "Animals which are crossbred and others with unknown pedigrees have been recorded in certain registers with the sole object of making them eligible for free entry into the United States."

To apply this statement to Canada is to make a very grave charge indeed, and one that cannot be substantiated. That our record associations allow business to be conducted in this way is absurd on the very face of it. Though we send large quantities of pure-bred stock to the United States, and we are pleased to note that, notwithstanding the stringent regulations regarding these exportations are increasing, our breeders are not dependent altogether upon that market. They have the home market to cater to and it is needless to say that purchasers in Canada are just as exacting regarding the pedigrees and registration of the pure-bred animals they buy as those who buy our stock in the United States. If there are frauds of this kind practised the remedy is easy. Our registry associations are conducted on straight business principles and parties reported practising false registration of the kind referred to would be summarily dealt with.

National Thanksgiving

As the day set apart for national thanksgiving approaches, and which falls on Thursday of this week, it is customary to consider what special blessings we have to be thankful for. He must be a very poor specimen of mankind who, in looking over the past year, cannot find anything for which he is truly thankful. This applies to the nation as well as to the individual, and to a class of people as well as to a single member of that class.

There are several things that Canadian farmers as a class have reason to be thankful for. 1898 will go on record as a year of plenty. With one or two exceptions the crops grown on the average Canadian farm during the past summer have been more abundant than for several years back. We have known people who did not consider abundant crops a blessing to the farmer, but we think the majority of our farmers will prefer an abundant crop rather than a sparing one. Considering everything, prices have been pretty well maintained, and the general outlook, in so far as the Canadian farmer is concerned, has not been as bright for several years.

During the past year Canadian food products have grown in popularity in the British markets; our live stock interests have not been in so prosperous a condition for a decade, and the horse, the cow, the sheep, the pig and the hen are of more value to the Canadian farmer than they have been for ten years back. The position of Canadian agriculture to-day, as compared with the agriculture of nearly every other country under the sun is, a very proud one indeed, and the Canadian farmer has reason to be thankful that he lives in a young and growing country where agriculture and agricultural pursuits are fostered and promoted by the governments of the day and where so much is done to enable him to produce largely and to obtain the highest price for his products.

How a Champion Scotch Cheese was Made

The average Scotchman in his own country is said to be very close about the information he possesses. It is said that one Scotch dairyman will never tell his neighbor how he makes his cheese or butter, for fear that he would give away some valuable secret in the trade. Therefore the following description of how the prize cheese at the Kilmarnock and London shows, held a few weeks ago, given by the maker, J. Wallace, Lochlea Craigie, in *The North*

British Agriculturist, will be appreciated by Canadian makers:

"The champion formed one of two cheese exhibited in class 6, confined to Ayrshire, in which they were, of course, first. The two were made on 27th and 28th June respectively, the champion being the one made on the latter date. In each case the half of the evening's milk was put into the vat at once, the other half being put in milk pans and kept until the morning, when it also was put into the vat before the morning's milk. The starter (Drummond's) was added after the whole of the milk was put together in the vat, the particulars as to temperature, etc., being as follows: Temperature of evening milk in morning, 61 degrees; quantity of milk, 112 gallons; quantity of starter used, $\frac{1}{2}$ gallon; second tested at 22; time of ripening, 65 minutes; temperature at which rennet added, 85 degrees; quantity of rennet, $4\frac{1}{2}$ oz. (fully); time when added, 7.45; time of coagulation, 50 minutes; temperature heated to 100 degrees; time of heating, 50 minutes; time settled in whey, 50 minutes; quantity of curd, 115 lbs.; time at which the curd was milled, one o'clock; quantity of salt, 2 lbs. 5 oz.; time when salted, 2.10 p.m.



Group of Ayrshires, property of F. W. Taylor, Wellman's Corners, Ont. The group comprises the stock bull, Douglas of London, 1384, bred by David Morton & Son, Hamilton, and four bull calves, sired by him. The one to the left was calved April 13th last; dam White Princess 2481. The next calved May 29th, dam Hattie 3299. The third calved May 12th (twin), dam Maggi, 1887, and the one to the right calved April 24th, dam Princess Louise 2nd 3301.

The companion cheese, which was first along with the champion cheese in class 6, was made substantially as above, the quantity of starter used, the quantity of rennet put in, the time of coagulation, the temperature heated to, and the time of heating being all exactly the same. The temperature of the evening milk in morning was, however, 62 degrees, against 61; the second tested at 25, in place of 22; the time of ripening, 35, against 65; the temperature at which the rennet was added, 84, in place of 85; and the time settled in whey, 65, against 50 minutes. There was also a difference in the amount of curd, but this is naturally explained by the fact that the original quantity of milk used was only 108 gallons, as against 112 gallons in the other case.

Live Stock Notes

By Stockman

BORDER LEICESTER SHEEP.—Mr. J. P. F. Bell, in the London *Live Stock Journal*, gives the following points for a typical Border Leicester: The head should be fairly large, long rather than broad, with the profile aquiline, and tapering gradually towards the muzzle; while the nostrils should be wide, open, and the outer surface of the skin distinctly black in color. Pale, spotted noses and lips in

dicating delicacy of constitution as well as impurity of breed. The eyes should be bright and prominent, indicative of stamina and courage; while the ears should be neither too long nor too short, but a medium size, and well set upon the head. Ears pricked upward or drooped downward indicate deficiency in breeding and softness of temperament respectively. The face and ears should be closely covered with smooth, white hair, and as free from black markings as possible. A tuft of wool on the forehead is a clear indication of coarseness, and the progeny of such rams will carry the wool tuft prominently.

The neck should taper gracefully away from the head to its base, should be well rounded and strong without being coarse. The chest should be broad, deep, and projecting well forward. It is better to project than to recede, as a weak chested sheep, however good his other points may be, will never be placed very high in the prize list.

The shoulders should be open and wide, while the back should be perfectly level from the root of the neck to the rump.

The ribs should be well sprung, and should describe a circle wide rather than deep, while the quarters should be long and broad. The legs should be set well apart and go squarely down to the ground. Legs leaving the body close together are distinct evidences of narrow chests and plain quarters. Like the heads, the legs should be thoroughly covered with smooth, white hair. Tufts of wool, and black, blue, or dim spots should never appear on the legs of typical Border Leicesters.



Ayrshire Cow, Queen of Burnside 6258, sired by the noted bull Golden Guinea 4454. The property of R. Reid & Co., Hintonburg, Ont.

The flesh should cover well down to the thighs both before and behind, and, with well-arched ribs, a sheep will be likely to carry the flesh well over his back. The wool should cover the whole body uniformly and come well up to the top of the neck. The belly and scrotum should also be well clad.

The texture of the wool should be fine, the fleece open, and tapering into delicate curls towards the exterior.

The flesh should be uniformly over the sheep, and should touch firm and muscular to the hand. Bumpy, uneven sheep should be avoided, as peculiar characteristics of this kind are likely to be developed to a greater degree by their progeny. The head should be carried at a good elevation, which will lend grace and style to the appearance of the sheep. The difference in general appearance between a lot of lambs got by a high-headed and a low-headed sheep respectively is marvellous. The tails are generally worn very short, but this is a matter which is entirely regulated by popular fashion.

A ram possessing the points enumerated above will gen-

erally carry himself well, move with elasticity, and be exceedingly active upon his legs. In fact, the sheep in action will appear "monarch of all he surveys."

SHORTHORNS IN BRITAIN.—The British fall sales of Shorthorns have been very satisfactory. Mr. Duthie Tarris, Aberdeenshire, averaged £80 each, or nearly \$400 for his entire crop of bull calves. Mr. Marr, Uppermill, had nineteen to offer, and averaged \$380, getting for one \$1,650; this was for Scottish Champion, by Wanderer. These two held first place as breeders of Scotch Shorthorns.

CLYDE STALLION FOR CANADA.—Mr. Chas. Mason, of Brucefield, has purchased for Mr. Gardiner the stallion, Union Bank (10016). He is a six year-old bred by Mr. Craig, Thornhill, near Dumfries, and is by Lord Erskine, out of a Macgregor mare.

CLYDES FOR U.S.—The first week in October saw a number of good Clydes leave Glasgow for the United States. Ten of the lot were purchased for A. & W. Montgomery, some of them noted prize-winners.

AUSTRALIA has been buying choice animals in England this fall, and taking them out to improve Australian stock. The selection included Shorthorns, Ayrshires, Guernseys, Red Polled, and Kerry cattle.

RED POLLED CATTLE.—The special points laid down in the Herd Book for this breed are: That it must be of a deer red color, white being allowed only at the tip of the tail. The nose must not be dark-colored. The throat and head finely modelled, the eye full, and a tuft of hair should hang over the forehead. There must be no trace of horns, developed or undeveloped, but the frontal bones should contract into a narrow peak at the summit of the head.

BOOTH OF WARLABY was one of the great breeders of Shorthorns, founding the celebrated Booth family. Thomas Christopher Booth died in 1878, and his brother, who had in his early life been a sailor, William Charge Booth, took the supervision of the Warlaby herd. He died 3rd of September, 1898, while driving in his phaeton in the avenue at Warlaby. An active Christian gentleman, a good speaker and a capital singer, he was much beloved by those who had the pleasure of his acquaintance.

SHIRES for the United States. For a long time there has been little or no demand from the States for Shires, but last month twelve stallions were shipped from Liverpool by the White Star Steamer *Cetic* for New York. The same boat carried five Percherons from France.

Producing Eggs at Minimum Cost

By James R. Covert, U.S. Dept. of Agriculture, in *Reliable Poultry Journal*

As cold weather approaches and the marketability of eggs increases, the problem of how to increase the yield of that toothsome article becomes interesting. The veteran, the amateur, and the good housewife vie with each other in an endeavor to compound a ration which shall produce the maximum yield of eggs at a minimum food cost. The public is awakening to a realization of the food value of the egg. More attention is given the subject of feeding, and the agricultural press are devoting more space to articles on poultry. Some of the Experiment Stations are investigating and throwing light in many hitherto dark corners. Their conclusions in many cases closely coincide with the teachings of experience, and show conclusively that correct feeding is both a science and an art.

If to the sum total of the chemical constituents in the eggs produced during a given season, we add the materials required to maintain the hen in health and activity, we have approximately the amount of digestible nutrients which should be present in her food. As we all know, the

digestible nutrients in food articles vary in amount and quality and some breeds of chickens return a greater profit in eggs for the food consumed than others. This article, however, is confined to the subject of rations which must be prepared with due regard to the purposes for which the chickens are kept. Thus if we desire to produce flesh we must feed a ration richer in flesh-forming ingredients than if we were feeding for eggs which require nitrogenous materials. Reports of digestion experiments with fowls are seldom met with, presumably because they are not often undertaken. The public should take an interest in the matter and demand of those expert in the determination of feeding problems the solution of this question.

It is assumed that the nutritive ratio for the laying hen and the milch cow should be approximately the same. Their products closely resemble each other, but their relative actual cost makes milk usually much the cheaper food article for man, especially in the larger cities. The German feeding standard for a milch cow calls for 15.4 lbs. total nutritive substance in the digestible portion of her food, these nutritive substances to be proportioned as follows: Protein, 2.5 lbs.; carbohydrates, 12.5 lbs. and ether extract, or fat, 0.4 lb. This gives a nutritive ratio of 1:5.4. In other words, to every pound of protein there are 5.4 lbs. of nitrogenous materials.

The nutritive ratio may be determined by multiplying the ether extract by 2.2, adding to this product the carbohydrates and dividing by the protein. Each pound of fat or ether extract is assumed to have a feeding equivalent of 2.2 pounds carbohydrates. The author has been unable to find the reports of any experiments determining the amounts of these materials necessary for fowls. For want of definite information on several points he is unable to do the subject justice, but, with many apologies and a few misgivings, he will attempt to formulate a ration which shall be practicable for the farmer.

It is usual to feed a ration of soft foods in the morning, with a whole grain ration at night. We will suppose we have our choice of the following feeding stuffs: Bran, cornmeal, ground oats, oil cake, cottonseed meal, beef and blood meal, red clover hay, skim-milk, with oats, rye, wheat, and corn for a whole grain ration. The following table gives the digestible nutrients found in 100 pounds of each of these and a few other articles.

PERCENTAGE DIGESTIBLE MATTER IN AMERICAN FEEDING STUFFS.

FEEDING STUFF.	CRUDE PROTEIN.	CARBOHYDRATES.	ETHER EXTRACT.
	Per Cent.	Per Cent.	Per Cent.
Red clover hay.....	6.5	34.9	1.6
Alfalfa hay.....	7.6	37.8	1.3
Cowpea hay.....	8.1	37.3	1.7
Potatoes.....	1.4	16.1	0.0
Corn, average for all varieties.....	7.1	62.7	4.2
Wheat, average for all varieties.....	9.3	55.8	1.8
Rye.....	8.3	65.5	1.2
Oats.....	9.1	44.7	4.1
Bran.....	12.6	44.1	2.9
Middlings.....	12.2	47.2	2.9
Cottonseed meal.....	36.0	31.1	12.3
Linseed meal.....	27.2	31.8	2.7
Dried blood.....	19.1	0.0	2.3
Meat scraps.....	68.4	0.3	13.5
Skim milk.....	3.1	4.7	0.8

For convenience we will mix 250 pounds of soft food at a time, selecting as an experimental ration 100 pounds bran, 50 pounds cornmeal, 50 pounds ground oats, 25 pounds cottonseed meal, 25 pounds beef and blood meal (assuming the latter to be composed of equal parts of blood and meat scraps). These quantities, by reference to the foregoing table, are seen to contain the following amounts of digestible nutrients; Protein, 45.34 pounds; carbohydrates, 111.90 pounds; ether extract of fat, 11.51 pounds. The nutritive ratio we find is 1:2.8, while the German standard for a milch cow is 1:5.4. Therefore, to balance the ratio, we must select some material rich in carbohydrates and fat

In selecting clover hay, we secure a high percentage of carbohydrates, and, at the same time, by properly preparing and mixing the clover with the morning mash, we are able to furnish what closely approximates green food. Fifty pounds of red clover hay, added to our ration, raise the nutritive ratio to about 1:3.00.

When skim milk is at hand a very profitable use can be made of it by mixing the soft food with it. A quart of skim-milk weighs about two and a-half pounds. By adding in the feeding period an aggregate of one hundred pounds of milk we make it very palatable, but lower the nutritive ratio to 1:2.76. This we will accept for our morning mash, feeding what each fowl will clean up quickly. For our whole grain ration we may select corn, wheat, or rye, as they are all relatively rich in nitrogenous materials and will help balance the ration. We will select corn to scatter in the litter in the evening. If we use two hundred pounds in connection with the two hundred and fifty pounds soft feed, our nutritive ratio will stand 1:4.3—still somewhat narrower than the standard but very practicable.

The relative amount of grain and soft food used varies with different individuals, some using more and others less. The nutritive ratio, however, should conform more closely to the standard than the average ration does if best results are desired. The experimental ration outlined above is not intended as a criterion but simply to show how the different factors are obtained. Theoretically it would be better for the growing chick than the laying hen.



Fitting Horses for Market

In reply to the question: "What is the ration and course of feeding used in fattening and fitting horses for market by Western farmers?" propounded by an Eddytown, N.Y., reader, Prof. C. F. Curtiss, of the Iowa Experiment Station, says in the *Breeders' Gazette*: The methods of feeding and fitting horses for market appear to vary as widely as the methods of fitting cattle for market. I spent half a day last spring at the stables of an extensive horse-feeder near here. This man has barn room for 80 to 100 head, and stocks up in the fall and begins selling and replacing with fresh horses as soon as any are ready for market. Every horse's mouth is carefully examined on arrival and his teeth properly dressed by a competent veterinarian. This is regarded as a very essential matter, as a large majority of the unthrifty horses that farmers are unable to fatten are found to have defective teeth. Horses properly conditioned usually put on flesh very rapidly. This man seldom feeds over 100 days, and generally makes from 300 to 400 lbs. gain in that time. Some of the horses are not kept more than thirty to sixty days, and a proportional or even greater gain is made. They are forced on a heavy ration and fed to make the greatest weight, and, at the same time, finish in sound and saleable condition. Horses purchased from farmers that are considered finished and ready for market are frequently made to take on 200 or 300 lbs. of flesh in a comparatively short time, during which the market value of the horse is generally about doubled. The hay is used liberally. One attendant feeds eighty head at precisely the same time for each feed. Both grain and hay are fed from the floor above. This man sells to local shippers, as he says that the shipping is a trade of itself and he prefers to take no chances on the city markets.

Some time ago I visited another farmer in the southwestern part of the state who makes it a practice during the latter part of the summer to pick up one or two carloads of good, saleable horses and fatten and finish them for market. He buys from neighboring farmers and claims that there is more money in it than in feeding steers. These horses are grazed in the meadows and stalkfields, supplemented with corn fodder, until December or January. They have but little, if any, shelter until that time and make good gains. They are then given thirty to sixty days of feeding and fitting in the stable, during which time they are groomed and put in the best condition for market. This man employs a horse dealer to help him in buying.

Another feeder in this state prefers to buy in the spring. He feeds ten ears of corn at 5 a.m., ten ears of corn at 10 a.m., a chopped ration at noon, composed of two-fifths bran, two-fifths chopped oats and corn and one fifth oil-meal; corn again at 5 p.m., and oats or corn at 8 p.m. clean, bright hay with each grain feed, clover hay preferred if properly cured. These methods give heavy gains and materially add to the value of horses thus handled. There is no doubt whatever that it pays to properly fit horses for market and make them fat. There may be some question as to whether flesh put on in this way adds much to their serviceability, but as long as the fat horse sells best this question may safely and profitably be ignored by the producer. In other words, it pays to produce what the market demands, and these horses should be finished on the Western farms, where there is always an abundance of cheap feed. A well-known auctioneer, who was recently selling a lot of half-fed horses at a public sale, very truthfully remarked that "Corn would have brought \$10 a bushel in the shape of flesh on these horses' back." That statement applies with equal force to a great many horses and other stock that annually goes to market.



Did Not Recognize Their Own Herd Book

Mr. Robert Beith, M. P., Bomanville, Ont., exhibited his fine young Hackney stallion, Squire Rickell, at the New York Horse Show. But a most annoying and uncalled for delay occurred in getting the animal through the customs. Squire Rickell was registered in the New York Stock Book, and was bought in the United States, but was not allowed to go through the customs free of duty on the presentation of his certificate of registration. Before Mr. Beith could have the animal passed he had to pay a heavy duty. Besides, the delay caused by this uncalled for imposition prevented Mr. Beith from getting the animal to New York till four hours before he had to appear in the show ring. Still for all this he succeeded in winning second place in his class; no small honor under the circumstances.

For some time the United States authorities have not recognized Canadian herd books in the admission of breeding stock, and now it would seem that they do not recognize their own herd books, especially when animals from Canada are under consideration. Unless there has been a mistake on the part of the Customs officer, which is altogether likely, we may well ask: Where are we at? If the Americans won't recognize either our herd books or their own, in making importations, Canadian breeders will have to seek an outlet for their purebred stock elsewhere.

Mr. Henry Wade, who has just returned from New York, reports the Horse Show as a great success, and that Canadian exhibitors carried off a large number of the prizes. One Canadian sold a horse exhibited at the show for \$2,500.

CORRESPONDENCE

The Value of Small Threshing Machines.

To the Editor of FARMING:

We notice in your issue of November 1st an article regarding "The Threshing Problem," and we wish to point out some reasons why the small threshing machines are in such favor in some parts of the country.

Small threshing machines, run almost exclusively by tread powers, are in universal use throughout Canada, east of Ottawa. Among other reasons for their being so generally used, we believe are:

THEIR ECONOMY.

(a) Economy of time. They may be used in wet or stormy weather when no other work can well be accom-

plished. They can be used whenever desired, as there is no reason for waiting for the thresher man.

(b) Economy of grain. The best of these small machines have arrived at such a state of perfection that properly worked they will throw over with the straw absolutely none of the grain. A farmer in the trial of a threshing machine before purchasing it, in this part of the country, will often be seen to place a receptacle at the end of the machine where the straw is thrown out, and carefully examine the *debris* and the straw with a view to ascertaining whether there is any grain coming out at that end. If there is, he may be depended upon not to purchase the machine unless it can be adjusted to stop the waste. This is in contrast in many sections to the large threshing machines where a very considerable percentage of waste is made at this point. A farmer in purchasing one of these machines also demands that the grain comes out of the machine fit for the market, and yet that none of the grain be blown over with the chaff, and he may be seen often on his hands and knees blowing at the chaff to see that his requirements are complied with.

(c) Economy of labor. While the large threshing machine requires a great many hands to operate it the small thresher can be worked with from four to five hands; thus enabling the work to be done in most cases with the labor on the farm, and obviating the necessity of employing outside help.

THEIR SAFETY.

Where they are operated by tread powers or other similar motor there is of course the total absence of danger by fire or explosion by steam.

THEIR DURABILITY.

Where one of these machines is used by a farmer for his own threshing only they will last a life-time. There are very few parts in them to get out of repair with fair usage. In our machine we guarantee that the thresher teeth will not break from any other reason except from actual wear, no matter whether any foreign substance should go into the cylinder or not.

Besides the above reasons there are quite a number of other reasons why the smaller thresher is preferred, among them doubtless that mentioned in your article in November 1st issue, but we consider that these we have mentioned are among the most important.

We issue a catalogue giving a great deal of information regarding this kind of threshing machine, and we may say that we would be very pleased to send it to any of your readers who will take the trouble to send us their address asking for a copy to be sent them. We would be pleased to do this altogether aside from the question of whether they are likely to purchase or not.

Yours truly,

M. Moody & Sons.

Terrebonne, Que., Nov. 13th, 1898.



The Omaha Milk and Food Test

To the Editor of FARMING:

The above test was won by the Holstein cow, Helena Burke. This cow is well known as a large producer, having an official test of over 25½ lbs. of butter in 7 days—654 lbs. milk. A large producer is invariably a cheap producer. Give me a large producer, and I will risk the cost of production every time. We want cows that are good feeders and have good digestive organs, so that the food of support does not bear too large a ratio. The degree of cheapness will be affected by several things. Full particulars are not to hand, but it is not to be expected that this cow could make in this test her best work. She has been away from home for six or seven weeks, travelling several thousand miles. That she could win under such adverse conditions shows the stamina of the cow, which is characteristic of the breed.

Yours truly,

GEO. RICE.

Curries Crossing, Ont., November 14th, 1898.

THE DUKE OF BEDFORD LAND.

Land which the Duke of Bedford pronounced as impossible to convert into really satisfactory pastures, except, perhaps, at prohibitive cost, was partly treated with Alberts' Thomas-Phosphate Powder, and Dr. Fream, reporting on it last year, concludes as follows: "The portion of the field bordering the road was occupied by exceedingly poor herbage, moss was plentiful, and there was an abundance of hawkweed, both of which are indicative of poverty of the soil." "The inner part of the field, where Thomas-Phosphate Powder had been applied, had obviously benefited from the dressing, the herbage was greener and fresher, and had been more closely grazed. In addition there was marked development of clover and other leguminous plants. Hence, as the result of the dressing, it may be concluded that the condition of the soil is undergoing improvement, and that the gradual accumulation of nitrogen by the leguminous species will lead ultimately to the production of better and more valuable herbage."

STOCK FEEDING HINTS.

In the report of the Maine Experimental Station, Mr. J. M. Bartlett condenses scientific feeding into simple and practical form as follows:

"The valuable ingredients in animal food are ash or mineral matter, protein, fat and a class of compounds called carbohydrates, of which starch, sugar and crude fibre are the most important examples. Although the ash or mineral matter is essential to the well-being of the animal, it is abundantly supplied by most materials one is likely to feed, so what one most needs to consider in buying and using cattle foods are protein, fat and carbohydrates.

"A sufficient supply of protein in the food is indispensable. The working animal depends upon it to replenish and repair its working machinery, the growing animal to make muscle and build up its whole system, the sheep to make wool and the milch cow to make the casein and albumen of its milk. No other substance can take its place, or be manufactured into protein by the body. When more protein is fed than is needed for the growth and repair of the body, the excess performs the same functions as the fats and carbohydrates. As a rule, however, this is not an economical use to make of it. It is worth but slightly more than the carbohydrates and about six-tenths as much as fats for this purpose and is, commonly, the most expensive ingredient to produce or buy.

"The office of the other two substances, fat and carbohydrates, is twofold. First, they serve as fuel and are oxidized or burned in the body to supply heat and force. The fat is worth about two and one fourth times as

much as the carbohydrates for that purpose. Second, they are used as material for making fat.

It has been ascertained, by accurate experiment, that the amount of food required to keep an animal from losing weight is not materially different for different animals of the same size and species. All the food that they will profitably eat above that amount depends on their individual digestive and producing capacities. It is therefore evident that a ration which would be profitable for one animal would not be for another, and no hard and fast rules can be made. For this reason the accuracy of feeding standards has been questioned by some feeders, but they certainly must be considered a vast improvement over the commonly practised, haphazard feeding of any materials at hand. The successful and progressive feeder can, by studying his herd, learn the capacity of each animal and vary its ration from the standard to suit the individual.

"The table of digestible nutrients in 100 pounds."

TESTING SEEDS.

A good method of testing seed is a table plate that is not warped, and a pane of glass large enough to cover the plate. Then take two circular pieces of moderately thick cloth, and make them moderately wet; spread these over the plate, and place the seeds between them. The plate should then be covered with the glass to prevent evaporation from the cloth, and placed in a room of comfortable living temperature. A hundred seeds or more of each sample should be used and the lot should be well mixed before taking the sample. The seeds should be frequently examined, and may be removed as they sprout, when, by subtracting the number that fail to sprout from the number put in, the per cent. of vitality may be readily found. It is a good plan to place the cloths in boiling water for a few minutes before using them for a second test to destroy any spores or mycelia of mold with which they may have become infected. The time required to germinate varies greatly in different seeds, so that it is not possible to give any definite rule to go by. The operator will have to be guided by his own experience in determining the time necessary to sufficiently test a lot of seeds.

Publishers' Desk.

A Handy Riveter.—The Enterprise Manufacturing Co., of Toronto, are advertising a very convenient tool which every one should possess. For repairing harness, belting and other things of that kind it will save a vast amount of time, labor and expense.

Guelph Fat Stock Show.—Intending exhibitors at this show, the Smithfield of Canada, should make special note of the fact that all animals for exhibition must be in the Victoria rink, Guelph, by 1 p.m. on Tuesday, December 6th. The secretary reports that

the indications at present are that the show will be one of the best the Fat Stock Club has ever held.

Federated Business Colleges.—The combination of the staffs of the Hamilton Business College and the Galt Business College forms one of the strongest educational establishments in Canada. It will be found a great convenience as well, for those entering either colleges will enjoy the advantages of both in the combined staff and the combined facilities for acquiring a practical knowledge of business.

You Can't Make a Mistake.—This is the head-line of Messrs. S. Vessot & Co.'s advertisement in this week's issue, and we believe it is correct to say that no farmer can go very far astray in placing his order for agricultural machinery with any of those manufacturers who advertise in FARMING. The Joliette Grain Grinders, made by Vessot & Co., were awarded two gold medals and a diploma at the World's Fair, Chicago, in 1893, and that is pretty good evidence that they are all right.

Metallic Roofing.—In our travels through the country during the past summer we noticed that many of the best farm houses and barns were covered with the "Eastlake" steel shingles, and wherever used they added greatly to the appearance of the structure. Those contemplating building should write to the Metallic Roofing Company, 1192 King street west, Toronto, for a copy of their illustrated catalogue, which tells all about them.

Tolton Bros.' Root Cutter.—The No. 1 double root cutter and slicer made by Tolton Bros., of Guelph, has long since passed the experimental stage. It is one of the most complete successes of the age and solves the problem of adapting one machine to two distinct uses. Either as a pulper or slicer it is perfect itself, and in addition to being two perfect machines in one it can be run advantageously by hand or power, being highly recommended in either capacity.

Feeding Experiments.—A correspondent of *The North British Agriculturist* calls attention to the fact that, on the Cocker Park Experimental Farm of the Northumberland County Council, one plot of land stocked with gray-faced sheep, each having three-quarter pounds of cotton seed cake per day, gave in two months an increase of fifty-two pounds of mutton, whilst another plot, dressed with Alberts' Thomas-Phosphate Powder, gave an increase of sixty-seven pounds of mutton in two months, without cake.

Intelligence and Enterprise.—We have received from Mr. W. H. Shaw, principal of the Central Business College, a little booklet bearing on its front cover the portraits of the staff for 1898-99. The pictures are an index to the character of the institution, for every face carries the impress of that intelligence and vigor which are the distinguishing features of this enterprising institution. The list of those who have lately gone from the college into important positions in the business world is interesting reading for those ambitious to succeed in life.

The Dandy Wind Mill.—Mr. Thomas Watson, secretary-treasurer of the Woodstock Wind Motor Co., in an interview with a representative of FARMING, this week, reports business in this line as exceedingly encouraging. Like a majority of manufacturers throughout the Dominion, the Woodstock firm have felt the new impetus of trade which has prevailed for some time now. During the present year the firm have extended their trade to a greater extent than at any other time previously, and goods are now being shipped to some of the most remote parts of the Dominion. As Mr. Watson truly observed, the "Dandy Wind Mill" has given such widespread satisfaction that orders are being filled from almost every country. Asked as to the future prospects of trade, Mr. Watson states that prospects for a large and satisfactory output in this line were becoming brighter every day. The works are now running on full time and indications point to a steady output during the winter months.

Stock Notes.

MR. JNO. DUNKIN'S sale of Shropshire sheep, which, as announced in FARMING took place on November 5th last at Thorndale, was a success financially and otherwise. The sheep sold well at from \$12 to \$22 each. Some of the larger purchases were 25 head by James McFarlane, Clinton, Ont.; 14 by Hector Read, Brucefield, Ont., and 16 by Henry Harding, Thorndale, Ont. Richard Gibson, Delaware, Ont., and William Beattie, Wilton Grove, Ont., were among the other purchasers.

MR. NORMAN M. BLAIN, of St. George, Ont., writes: Have had a very successful season at the fall fairs, winning twenty-three firsts, eighteen seconds, and eight third prizes.

CLUBBING LIST

SAVE MONEY by ordering your newspapers and reading matter through us. We can furnish almost any book, newspaper, or magazine in combination with subscriptions and save you money in every case. The following are some of the leading publications we offer with FARMING:

	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
Toronto Morning World.....	3 00	3 00
Farm and Fireside.....	1 00	1 40
Montreal Daily Witness.....	3 00	3 00
Montreal Weekly Witness.....	1 00	1 60
Family Herald and Weekly Star —with great premium picture.....	1 00	1 75
London Daily News.....	1 50	2 00
London Weekly Free Press.....	1 00	1 75
London Weekly Advertiser.....	1 00	1 40
Ottawa Semi-weekly Free Press.....	1 00	1 60
Ottawa Semi-weekly Journal.....	1 00	1 55
Ottawa Semi-weekly Citizen.....	1 00	1 50
Ottawa Morning Citizen (daily).....	3 00	3 00
*Hamilton Semi-weekly Times.....	1 00	1 60
*Hamilton Semi-weekly Spectator.....	1 00	1 60
Branford Weekly Expositor.....	1 00	1 75
The Semi-Weekly Sun (St. John, N.B.).....	0 75	1 50
The Welland Tribune.....	1 00	1 50
The Halifax Herald.....	3 00	3 00
*Citizen and Country.....	1 00	1 50
Hoard's Dairyman.....	1 00	1 75
The Breeder's Gazette.....	2 00	2 00
Rural New Yorker.....	1 00	1 55
The Guelph Herald.....	1 00	1 70
The Jersey Bellein.....	1 50	1 50
The American Kitchen Magazine.....	1 00	1 75

Papers marked thus * will be sent until the end of 1899—other papers for the year only—but FARMING will be sent until the end of 1899 for the price mentioned in every case. Address FARMING, Toronto, Canada.

OVER \$2,000.00 IN CASH PRIZES

WE have arranged to divide over \$2,000 in cash amongst all those securing new subscribers before 1st June, 1899. Any live man should easily be able to make from \$500 to \$700 during that time. Our plan is the most liberal ever published by a Canadian newspaper, and affords an opportunity to those having spare time to turn it to excellent account. Write at once for particulars. Delay means loss of time, and time means money.

Sample copies and outfit free to reliable and earnest workers. Subscribers and members of their families will have the preference in the allotment of territory

Address **FARMING** 44-46 RICHMOND ST. W. TORONTO.

and have found that the Tams are right in the push. Sales continue good. Last week's shipments, fine young boar to D. Burt, M.L.A.; pair to E. H. Standing, Buford; boar to J. D. McIntosh, Brigden. I find the three things essential are, a good pig, a fair price, and an ad. in FARMING.

MESSRS. SILLS SHAVER & SON, of Winchester Springs, Ont., are advertising the best strains of Jersey (A.J.C.C.) cattle and large improved Yorkshire swine in this issue. We bespeak for them the patronage of those of our readers who desire improved stock of their breeds.

MR. E. E. MARTIN, Canning, Ont., is offering choice young Berkshire pigs and Southdown sheep for November. See his advertisement.

SUCCESS OF CANADIAN STOCK.—This is one of the constantly recurring instances which show the success of Canadian-bred stock in competition with the best of other countries. Last spring Mr. James Snell, of the township of Hullett, sold eleven head of Leicester sheep to a gentleman in New York State, who showed them at various American fairs this fall, with the result that they netted him \$2,000 in pure money, taking 274 first, and 54 second, prizes in all. At the end of the season he also disposed of the lot at a good round figure. Mr. Snell is not perhaps so widely known as other stock breeders, but he is one of the oldest as well as one of the most successful amongst them.

ROYAL STANDARD GOES BACK TO SCOTLAND.—Messrs. Graham Bros., Clarendon, Ont., have sold and shipped to Messrs. A. & W. Montgomery, of Scotland, the celebrated Hackney stallion, Royal Standard, winner of more prizes and championships than any other horse ever imported to Canada. Royal Standard, it will be remembered, won the championship over all coach horses, Hackneys, Clevelands, German and French at Chicago last fall, and had his winnings withheld because he was not registered in the American Hackney Stud Book. But he is good enough to be re-registered and was sold for three times the price originally paid for him in Great Britain by the Messrs. Graham. The exporting firm has purchased the Hackney stallion, Lord Rosebery, sire of the champion carriage horse, Illecher, now carrying all before him at the United States' shows, to take his place. Lord Rosebery is by Lord Derby and of a mare by Denmark.

We notice in all the newspapers of Canada hearty congratulations extended to "THE FAMILY HERALD and WEEKLY STAR," of Montreal, on their very handsome picture this year. The picture, entitled "THE THIN RED LINE," is a stirring battle scene, and is immensely popular. "THE FAMILY HERALD and WEEKLY STAR" we notice is a 24 page this week. A twenty-four page paper like the "FAMILY HERALD and WEEKLY STAR" and a picture like "THE THIN RED LINE" all for one dollar is marvellous. The equal of it certainly has never been seen before.

EXCELLENT FARM FOR SALE

THE splendid Dairy and Grain Farm, "Bracefield," of 250 acres, near Mount Elgin, in the Township of Dereham, in the County of Oxford. Cheese factory and Creamery close by; convenient to good markets for all produce. Post Office, Churches, Store, Mills, Blacksmith shop and Telephone all convenient. This farm is in a high state of cultivation, well adapted for dairying or grain raising; well watered by creek and wells; Stone House and good Barns; Power Windmill; good fences; thirty-four acres of fall wheat in. For further particulars apply to owner.

LEWIS A. PRICE, Mount Elgin,
Or to M. WALSH, Barrister, Ingersoll.

If desired, this farm can be sold in two parcels of 150 and 100 acres respectively. Easy terms for payment.

A VERY DESIRABLE IMPROVED FARM FOR SALE

BEING parts of Lots 125 and 126 South Talbot Road, Township of Bayham, County of Elgin. 153 acres—about 115 cleared and in a good state of cultivation. Good orchard and small fruits. Frame barn, 40 x 100. Good stabling and accommodation for cattle and horses, 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.

FARMERS WANTED

To take orders in their section for the famous land reclaimer.

Alberta's Thomas-Phosphate Powder (Reg.)
Purity and analysis guaranteed. Correspond at once, as full dressing of the land is important.

WALLACE & FRASER

55 Canada Life Building. - TORONTO

CONSUMPTION.

What a Well-known Medical Journal Says About This King of Disease.

"This is essentially an age of scientific progress. Science and invention go hand in hand. Thanks to a distinguished chemist consumption is robbed of its terrors, deprived of its destructiveness, and this insidious disease can first be relieved and then cured. But to accomplish a cure that is final and effective there must be constant persistency in treatment and right living. The sufferer must take the right medical relief, rightly administered. By the labor, skill and research of an eminent chemist, T. A. Slocum, consumption can be both relieved and cured."—*Medical Tribune*.

Three free sample bottles of the Slocum Cere will be sent to any sufferer from consumption, lung or throat troubles or general debility, if name, address and express office are sent to The T. A. Slocum Chemical Co., Limited, 179 King street west, Toronto, Ont. This is a genuine offer, and if the reader is—or knows a friend who is—a sufferer, send at once for the free sample and mention FARMING.

AGENTS WANTED.

We want reliable agents in all unrepresented districts. Liberal terms will be given to men of integrity and ability who will devote their whole time to the work. Address

FARMING, Toronto, Ont.

"I have now nearly ready for shipment to Thomas Andrews & Sons, Cambridge, Neb., 29 Shorthorns, and have a carload partly bought for Wisconsin."

Mr. Wm. Howe, of North Bruce, Ont., reports that his Yorkshires are progressing favorably since the close of the exhibitions. He had entries at four local fairs, including Centre Bruce Industrial, at Paisley, and the North Bruce Union, at Port Elgin, and was awarded first for boar under one year, first on sow over eight months, and second on sow under eight months at Paisley, and first and second on boar under one year, first on sow over one year, first on sow under one year, first and third on pig, boar or sow, under six months, at Port Elgin. At other places he was equally successful. His herd is headed by Oak Lodge Clarence 2nd - 2895-, bred by Mr. J. E. Brethour, of Hurford, and was winner of first at the riding exhibitions. He is a good, lengthy hog, having all the characteristics of the lacon type. His sows include Yorkshire Beauty-2551-, a first-prize winner in the aged sow class, a good breeder, having farrowed 27 pigs already this year, and due to farrow again on 1st December: Beauty-2685-, bred in the herd, and winner of four first prizes last year, her little sister, Queen-2686-, standing second to her three times. Her dam is York-hire Beauty, and her sire Oak Lodge Magnate 2nd -1917-. She is now suckling a fine litter by Oak Lodge Clarence 2nd. Probably the best sow in the herd is Oak Lodge Victoria 2nd -2935-, by Oak Lodge Seaman 4th -2466-, dam Oak Lodge Victoria 2nd -2917-, by Oak Lodge Diamond -924-. Her grand-dam, Princess of Oak Lodge, was first at Toronto and London this year. She is due to farrow in February by Oak Lodge Clarence 2nd. There are others equally good in the herd, but these will give a pretty fair idea of the class of stock which Mr. Howe is offering to his customers.

THE S. W. HERD.—One of the finest herds of Yorkshire hogs we have seen for some time is that of Mr. D. C. Platt, of Millgrove, Ont. Mr. Platt has about a hundred head now in the pens, and from a care-

HORSE HURTS

As an effective healer for sprains, curbs, galls, splints, sore throat, coughs, swelling, soreness or inflammation in horses and cattle, Griffith's Liniment has proved a supreme success—as good for the horse as for his master! P. H. Ritchie & Co., ranchers in Vancouver, B.C., say: "We consider Griffith's Menthol Liniment unequalled for horses. One of ours had a bad swelling on the left leg, which was swollen to an immense size. We applied the liniment, and in two days the swelling had left him. We have tried many liniments but have found nothing to equal it."

Griffith's
VETERINARY MENTHOL
Liniment
Relieves the instant applied
At all Druggists—75 Cents



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



Every Man His Own Cobbler

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

The Bailey Donaldson Co.
MONTREAL, Quebec.

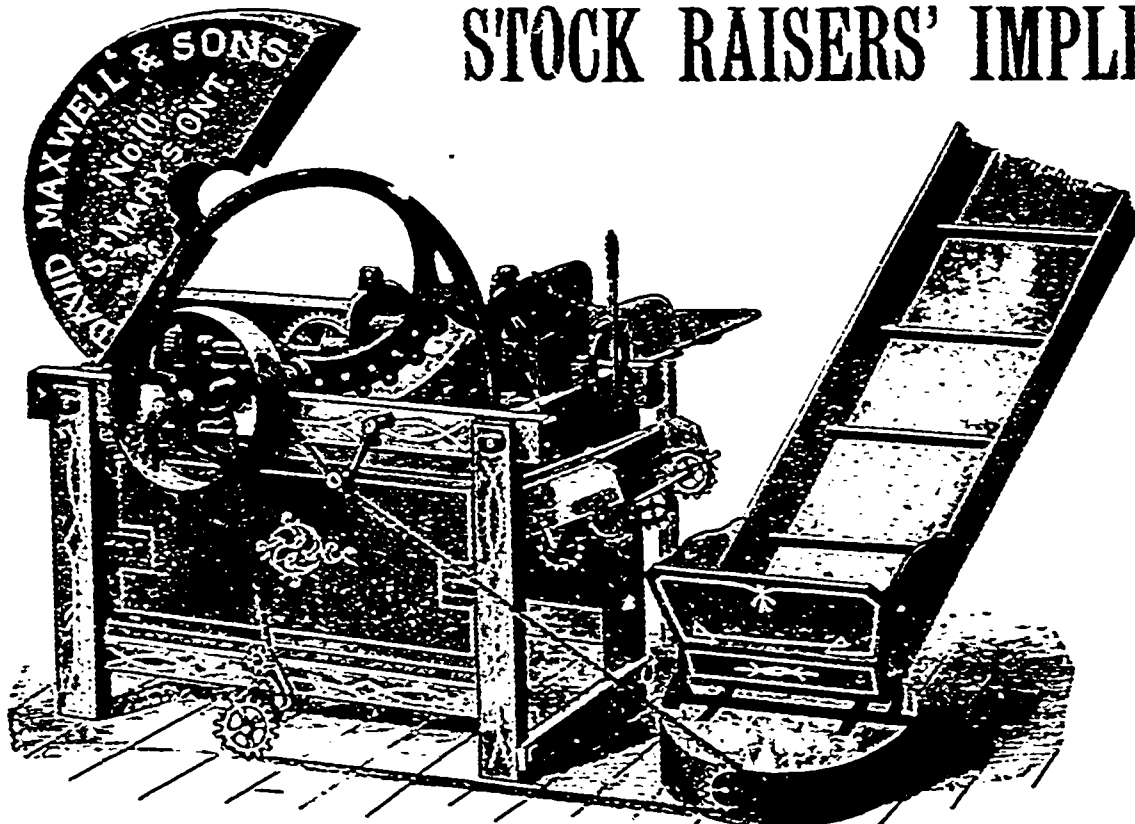
Dr. Leavitt's DEHORNING CLIPPERS



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.

STOCK RAISERS' IMPLEMENTS



Power Ensilage Gutter 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

ful examination of the stock it is safe to say there is nothing to surpass them in the entire Dominion. Amongst the lot is the famous boar, Look-Me-Over—2602—, admitted to be one of the best of its breed in Canada. The hog is a fine specimen of "hoghood," measuring from the tip of the nose to the rump nearly six feet and a half. It carried off first prize at Toronto Industrial Exhibition, notwithstanding strong competition. Nothing wanting in the "make up" of Look-Me-Over, either from the point of view of a bacon curer, breeder, or feeder; has a firm, deep body, well fleshed back, smooth shoulders, and long, deep hams, with strong, straight legs; hair exceedingly smooth, and in fact is everything to be desired either by the breeder or curer. Besides having won the first prize at Toronto, he has also taken firsts at Belleville and a number of local fairs this year, and is yet to be beaten. Amongst the herd are a number of fine breeding sows, notably imported Royal Duchess 2nd, who has carried off the first prize at Royal Show at Birmingham, England, in June, 1895, as the best sow farrowed within the year. She was bred to a prize-winning boar at the show, and is due to farrow on 20th inst. She is a perfect model of the bacon type, long length, deep and smooth, with full requirements of quality. Space does not permit us to offer a more extended account of the herd at this time, but mention should not be omitted of two fine sows recently pigged, and who gave birth to twelve and thirteen pigs respectively, eleven and twelve of the litter living and in a thriving condition. These young ones will be ready to remove in a few days now, and are well worth seeing by those who contemplate purchasing. It is the intention of Mr. Flatt to visit England in the spring, when he states neither time nor money will be spared to complete his herd, and secure the best that that country can produce. Mr. Flatt is full of enthusiasm on the Yorkshire breed of hogs, has both the experience and money to be laid upon, and it is safe to say that within a few years he will have the most extensive herd in Canada. Already his stock ranks with the best in quality, and holds a high place amongst the Yorkshire breeders. He certainly deserves success, as he has shown both enterprise and determination in securing only the highest grade animals.



Persialic Sheep and Animal Wash

For the complete and effectual removal of all insects or vermin peculiar to sheep and cattle. Powerful, without being harsh; immediate in effect, without any irritating effects; it leaves the animal refreshed and in good spirits after use; does more than destroy the pest, it completely removes all trace of their attacks—beating sores or boils, curing open sores and leaving the skin whole and sound. Mr. G. A. Brodie, a prominent stock raiser of Berhada, Ont., used it with great success in castrating lambs, the wash healing the wounds rapidly and keeping the maggots away. He considers it the most effectual wash in the market, and heartily recommends it to farmers generally.

If your dealer hasn't it, write us for it, and tell us of anything special in the ailments of your flocks or herds, and we'll advise you how best to use it.

The Pickhardt Renfrew Co.

(LIMITED)

STOUFFVILLE, ONT.



Good News

Never since we came to Toronto in 1889 have we had better success in business than we have at the present time. Good orders and complimentary reports are coming to us from all quarters. Farmers are patronizing us as never before.

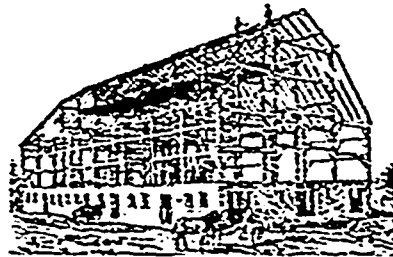
Good goods at right prices, and prompt returns for all produce sent us, gives the farmer confidence in us. We believe we have the best farmers' co-operative store in Canada.

THE PEOPLE'S WHOLESALE SUPPLY CO.

144-146 KING ST. EAST (Cor. Jarvis), TORONTO

R. V. MANNING MANAGER

Thorold Cement High in Quality Low in Price 58 years in use



Floors for Horses and Cattle were put in this barn with Battle's Thorold Cement.

Hagersville, Ont., July 1st, 1897.

We used Thorold Cement in our Stable Floors, and we must say it has given us good satisfaction in every particular. Our floors are as hard as stone. We can truly say it is just perfection for stable floors.

BESWETHERICK BROS.

Our Thorold Cement is the best and cheapest for Silos, Barn Walks, Floors for horses and cattle, Fire Pans, Etc. Write us.

Estate of Jno. Battle Thorold Ont.

Are You Going

to the Ontario Provincial

Fat Stock and Dairy Show

TO BE HELD IN

Brantford, Nov. 30th and Dec. 1st and 2nd

Over \$4,000 given in Cash Prizes.

Prize Lists and Entry Forms may be had by applying to F. W. Hodson, Secretary-Treasurer, Parliament Buildings, Toronto, Ont.

The exhibit in the fat cattle dairy and sheep departments promises to be better than ever before. The exhibit in the swine department will be very large, and for the first time in this Province prizes will be awarded for the best dressed carcass. Animals in all classes and sections will be judged from a consumer's standpoint.

During the time of the Exhibition the following meetings will be held:

A Joint Public Meeting, at which the Hon. A. S. Hays will preside, will be held in the Opera House, Brantford, on the evening of November 30th. An excellent programme has been provided.

On November 30th the annual meeting of the American Oxford Down Record Association; Secretary, W. A. Shafer, Middletown, Ohio.

On December 1st, the annual meeting of the American Leicester Breeder's Association; Secretary, A. J. Temple, Cameron, Ill.

On December 2nd, the annual meeting of the Dominion Swine Breeder's Association; Secretary, F. W. Hodson, Parliament Buildings, Toronto.

Reduced Freight and Passenger Rates on all Railways.

Patent Roller and Ball-Bearing Galvanized Steel

Wind Mills Towers and Flag Staffs

"Maple Leaf" Grain Grinders. Iron and Spray Pumps. Seed for New Illustrated Catalogue.

SHAPLEY & MUIR CO LIMITED

BRANTFORD CAN

WE TRUST THE PUBLIC

and send them our Incubator on trial. No man should buy an incubator and pay for it before giving it a trial. You may not be a great egg-eater, but you have never had a thorough trial. It's made so that nobody can fall with it. A child can run it with its mother's attention daily. It has all the latest improvements of the World's Fair, Nashville and Omaha Expositions. The best catalogue and treatise on incubation published, was for 25 cts. From the New York, Peabody House, etc., and upon receipt of 25 cts. You can't incubate Co. 38 Adams St. Delaware City, Del.

BUY **Coleman's Salt** 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.

TRY IT.

R. & J. Ransford,

CLINTON, ONT

C. M. SIMMONS, - IVAN, ONT.
Breeder of Shorthorns and Berkshires.
Farm 7 miles from Hlerton Stn., G.T.R. Stock of all kinds for sale. Prices and quality sure to please.

NOVEMBER OFFERING

4 choice young Berkshire Boars about 6 months old.
10 Sows same age. Also fine lot of young pigs two months old ready to ship.
3 Extra good Southdown Ram Lambs and one pair of Aged Ewes to part with.

E. E. MARTIN,
Paris Station, G.T.R. Canning P.O., Ont.

MAPLE-HILL

Holstein-Friesians BULL CALVES FROM

QUEEN DEKOL 2nd. Winner of Prince of Wales' prize, over holders of a 1 breed in public test.
LADY ANKRUH 2nd. 67½ lbs. milk in 1 day and 2½ lbs. butter in a week.
KAATJE DE BOER. 3½ lbs. milk and 3 lbs. butter per day at 14 years old.
MERCENA. 5½ lbs. milk per day at 14 years old.
DAISY TEAKE. Dam of Daisy Teake's Queen, whose 4-yr. old public test has never been equalled.

G. W. CLEMONS, St. George, Ont.

Bursley Stock Farm.

A.J.C.C. JERSEYS

St. Lambert Blvd.

Registered Stock, all ages, including some excellent choice young heifers ready for service. Also some choice Grade Mixers and Heifers, cheap.



Large Improved Yorkshires
Six Young Boars ready for Service cheap.

Some Choice Young Breeding Sows. Also Young Stock, at right prices.

SILLS SHAVER & SON,
Winchester Springs, Ont.

W. D. FLATT

HAMILTON P.O. and TELEGRAPH OFFICE



..... OFFERS FOR SALE.....

TEN Choice Shorthorn Bells, from six to eleven months; ten very fine Cows and Heifers served by imported bull, Golden Fame - 2006; also a few cows with calves at foot. Farm 5 miles from Hamilton. Catalogue sent on application. Visitors meet at G.T.R. or C.P.R. if notified.

JAS. S. HENDERSON,
ROCKTON, Ont.

OFFERS FOR SALE at reasonable prices a number of extra fine BRONZE TURKEYS, Barred Plymouth Rock Cockerels, Silver Laced Wyandotte Cockerels, and one Pecker. All bred from high-class stock.

BARRED PLYMOUTH ROCKS

A few choice Cockerels and Peckers for sale at moderate prices. Satisfaction guaranteed. Write.

JAMES ROW, Avon, Ont.

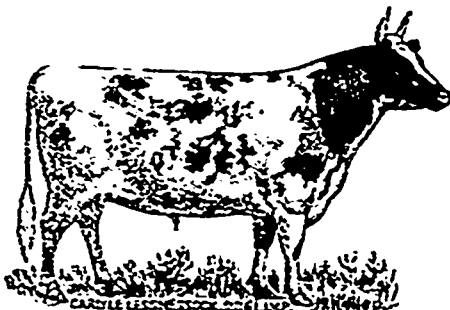
STRATFORD BROS.
BRANTFORD, ONT.

Tenworth Bantams, Doves, Rams, Shetland Ponies, Light Brahmas, Houdans, Cornish, Indian Game, Black Langshans, White Langshans, White Plymouth Rocks, Buff Plymouth Rocks, Barred Plymouth Rocks. Price Right.

EARN A WATCH

Earn this valuable Watch, Chain and Charm by selling twenty Topaz Scarf Pins, at 15 cents each. Send your address and we forward the Pins and our Premium List, postpaid. No money required. These Pins will almost sell themselves, for the Topaz has all the brilliance of the best diamonds, and has never before been offered at anything like this price. The Watch is neat in appearance, thoroughly well made, and fully guaranteed. Unsold Pins may be returned. Mention this paper when writing.

THE GEM PIN CO., Freehold Building, Toronto, Ont.



PUREBRED AYRSHIRE IMPORTED CATTLE

Largest and Most Expensive Importation in America

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

Sweepstake Herd Montreal, Toronto, London and Ottawa in 1897

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

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

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

Maple Grove Ayrshire Stock Farm
Lyn, Ont.
Line-G.T.R.

R. G. STEACY,
Importer and Breeder,
Box 724, Brockville, Ont.



Summer Hill Herd

Improved Large White Yorkshire Hogs.

"LOOK ME OVER" - 2602, 1st prize, Toronto, Belleville and other places, 1898, at head of herd. Royal Durbest 2nd, first prize, Royal Show, England, among breeding sows.

Young Stock for Sale. By notification, will meet train at Hamilton. Telephone, "Millgrove Ont."

D. C. FLATT, Millgrove P.O., Ont

HATCH CHICKENS BY STEAM—with the simple, perfect, and regulating **EXCELSIOR INCUBATOR**—Thermometer in successful operation. Lenses priced 100 glass hatcher made. **GEORGE STAMM,** 118 to 122 R. 6th St., Guelph, Ill.

HOW TO START in the POULTRY BUSINESS and how to make it a profitable venture. In the Home of our POULTRY GUIDE. Tells all about poultry business, how to hatch, rear, and how to breed, feed and market fowls. Terms of the famous **CYPHERS INCUBATOR** with delivered freight paid to every purchaser. The machine operates absolutely on artificial heat. Send 10 cents and get the book. 4 in. color P. 111. THE CYPHERS INCUBATOR CO. Box 39 WATLAND, N.Y.

National Cream Separators

No. 1—350 lbs. \$75
No. 2—600 lbs. \$125
HAND OR POWER
EAST ORO, Aug. 30, 1897.

Creamery Supply Co., Guelph:—
DEAR SIR,—I am well pleased with the separator—very easy to run and a perfect skimmer—milking 12 to 16 cows. The separator has increased the yield of butter 1 lb. per week per cow. We expect the separator to more than pay for itself in one year. Yours etc., T. H. McMANON.

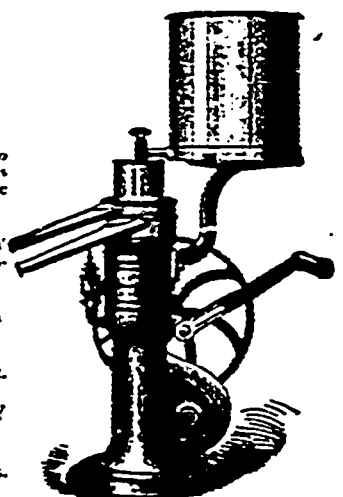
DEAR SIR,—The separator is so easy to run we have to be careful not to use too much power. A child 10 or 12 years old is quite competent to run it for 10 or 12 cows.

DEAR SIR,—My 8-year-old boy can run it from start to finish. The increased yield is about 1 lb. per week from each cow. J. M. BARBER, Guelph.

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.



The Ontario Agricultural Gazette

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

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

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

BENEFITS OF MEMBERSHIP.

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

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

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

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

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

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

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

LIST OF STOCK FOR SALE.

THE DOMINION CATTLE BREEDERS' ASSOCIATION.

Shorthorns.

Bonycastle, F. & Sons.....Campbellford.....Registered bull, 3 years; 10 cows and heifers.
Doerfla, Jas.....Caledonia.....12 bulls, 6 to 11 months; young cows and heifers.
Fairbairn, H. K.....Thedford.....2 bulls; 10 cows; 4 heifers, 2 years.
Holdsworth R. L. & Son.....Port Hope.....3 bull calves.
Jeffs, E. & Sons.....Dood Head.....5 young bulls and 10 heifers.
Scott, F. W.....Highgate.....3 bulls, 3 months, 12 months, and 2 years.

Ayrshires.

Stephens, W. S.....Tross River, Que.....2 bull calves
Yeild, J. & Sons.....Carleton Place.....5 bull calves under 2 months; 12 heifer calves, under 2 months; cows and heifers, all ages.

Galloways.

McCrae, David.....Guelph.....5 bulls and 20 heifers.

Hercfords.

Stooc, A.....Guelph.....Stock all ages.

Polled Angus.

Varcoe, John.....Carleton.....5 bulls, 5 to 8 months; 10 females, all ages.

THE DOMINION SHEEP BREEDERS' ASSOCIATION.

Cotswolds.

Bonycastle, F. & Son.....Campbellford.....10 ram lambs; ewes and ewe lambs.
Hoey, R.....Brickley.....Ram, 3 years; 6 ram and ewe lambs; shearing ewe.
McCrae, David.....Guelph.....4 rams and 50 ewe lambs.
Thompson, Wm.....White Rose.....Stock, all ages.

Shropshires.

Copeland, W. E.....Teeswater.....Choice rams.
Yeild, J. & Sons.....Carleton Place.....Ewes and ewe lambs.

THE DOMINION SWINE BREEDERS' ASSOCIATION.

Tamworths.

Bell, Joe.....Amber.....Imported boar; 12 boars, 6 to 8 months; 25 sows; 70 pigs, 6 to 9 weeks.
Brown, Wm.....Paisley.....Stock, from 1 to 2 months.
Cotwill Bros.....Newcastle.....Boar, 2 months.
Fulton, J., Jr.....Brownville.....6 spring sows and boars; 30 choice pigs.
Gibson, D. J.....Bowmanville.....Boar, 2 years; 4 boars and 1 sow, 3 months.
Golding, H.....Thamesford.....4 sows, 6 months; stock, both sexes, 1 to 2 months.
Holland, T. F.....Dorham Centre, Ont.....Boar; 2 sows and 10 fall pigs.
McDonald, W. R.....Kildgetown.....Boar; 12 boars, 2½ to 3½ months; 4 sows; sows, 2½ to 3½ months.
Row, F.....Belmont.....2 boars and 5 sows, 7 months; sow, 18 months; 15 pigs, 8 and 10 weeks.
Odell, W. H.....Belmont.....6 sows, 8 months.
Simcocks, J. H.....Chatham.....7 boars and 6 sows, 6 months; boar, 9 months; 30 head, both sexes, 2 and 3 months.

Berkshires.

Bonycastle, F. & Sons.....Campbellford.....35 pigs, 4 weeks to 6 months.
Coleman, T. J.....Markdale.....20 pigs, 8 weeks.
Cotwill Bros.....Newcastle.....4 boars and 3 sows, 4 months; 14 pigs, 5 weeks.
Gibson, D. J.....Bowmanville.....Boar, 2 years.
Holdsworth, R. L. & Son.....Port Hope.....Sow and litter; sows and boars, 5 months; aged boar.
Jeffs, E. & Sons.....Dood Head.....4 young boars and 10 young sows; fall pigs.
Righmeyer, S. D.....Peterboro.....2 sows, 8 months.
Thompson, Wm.....White Rose.....12 young pigs, both sexes.
Yeild, J. & Sons.....Carleton Place.....Sows, all ages.

Yorkshires.

Coleman, T. J.....Markdale.....5 sows, 8 months.
Cotwill Bros.....Newcastle.....7 pigs, both sexes, 1 month.
Hoey, R.....Brickley.....8 boars, 4 to 6 months; 4 sows, 3 to 4 months.
Howe, Wm.....North Bruce.....2 boars, 7 and 9 months; 20 pigs, 8 weeks to 5 months.

Chester Whites.

Golding, H.....Thamesford.....4 sows, 6 months.
Holdsworth, R. L. & Son.....Port Hope.....Sows and boars, 6 and 12 months; aged boar.
Heron, Henry.....Avon.....8 boars, 1 to 6 months; 14 sows, 1 to 6 months.
Row, F.....Belmont.....Aged boar; sow 18 months; young stock.

Duroc-Jerseys.

Fraser, I. O. & Son.....Fallows.....Boar, 7 months; 20 sows, 6 months; young stock.

ONTARIO PROVINCIAL FAT STOCK AND DAIRY SHOW.

Ontario Provincial Fat Stock and Dairy Show to be held at Brantford, Ont., November 30th, and December 1st and 2nd, 1898. Half-fare passenger and freight rates from any part of Ontario to Brantford and return. Good from November 26th to December 6th inclusive.

PASSENGER RATES.

Those desiring to attend as visitors can obtain reduced rates by purchasing a first-class one-way ticket to Brantford, and securing from the ticket agent at the starting point a *Standard Convention Certificate*, duly signed by him. On the return trip, the certificate, on being signed by the secretary of the show, and surrendered to the ticket agent at Brantford at least ten minutes before the train is due to start, will entitle the passenger to free transportation to the starting point. These reduced rates commence November 26th, and continue until December 6th. Should any railway agent in Ontario refuse to furnish a passenger with a *Standard Convention Certificate*, said passenger is requested to purchase a regular ticket to Brantford and return, and obtain a receipt from the agent for the money paid for the ticket, and at once report the matter to the secretary. A rebate for the amount paid for said ticket, in excess of the excursion rate, will be forwarded to the applicant. When passengers have to travel over more than one railway to reach Brantford, they will require to purchase a ticket and obtain a certificate from each of such railways. The return tickets are good for continuous passage only; but the going ticket may be either limited or unlimited.

FREIGHT RATES.

The following reduced freight rates on exhibits have been granted by the C.P.R., G.T.R., T.H. & B. Railways and their connecting lines:

Exhibits forwarded to Brantford at full tariff rates, and reshipped without change of ownership within ten days after the close of the exhibition, will be returned to the original point of shipment free of charge; except that, if exhibits are carted on the return journey by the railway companies' cartage agents, the full cost of this service will be charged against the goods. Stock to be exhibited at Guelph before being returned to the original shipping station, having paid full tariff rates to Brantford, will be carried to Guelph at one-half tariff rates, and will be returned free from Guelph as explained in the above paragraph.

Freight and cartage charges must be prepaid and bills of lading so endorsed, separate receipts being received for the prepaid charges on live stock in addition to the usual written contract, as these contracts have to be surrendered on delivery. The bills of lading or prepaid receipts, together with a certificate from the Secretary of the exhibition, to the effect that the shipments are unsold exhibits, must be produced at the time of reshipment to entitle the exhibitor to have his property returned home free or carried at half rates to Guelph, as the case may be; the certificate to be securely attached to the way-bill.

Releases must be executed relieving the company from liability on the return journey in consideration of free transportation.

Men in charge of car loads of exhibition stock will be passed free, both going to and returning from the exhibition.

Way-bills should bear the words "For" or "From Exhibition."

THE BUILDING WHERE THE SHOW WILL BE HELD.

The building used last year (the Grand Trunk Car Shops) has again been chosen as the most suitable in which to hold the Provincial Fat Stock and Dairy Show. The building is built of brick, one storey high, and is well lighted, having many windows in the sides, ends and roof. Large boilers are in place in an adjoining building, and steam pipes surround the inside of the building, and are so arranged that steam can easily and quickly be turned on to heat the entire space. This structure is 345 feet long by 136 feet wide, giving a floor space of over 45,000 square feet, all of which is floored with pine plank. The cattle, sheep and swine will all be stabled and shown in this building. The offices and exhibitors' rooms are under the same roof, and a lunch counter will be placed alongside these offices. Visitors and exhibitors need not leave the building from the time they enter in the morning until night. A cloak and parcel room will also be arranged where small parcels, overcoats, etc., may be checked. A telephone will also be conveniently placed in the building.

HOW TO REACH THE BUILDING.

The show building is situated within three minutes' walk of the Grand Trunk Railway station and the street cars, and is, therefore, of easy access to the public.

UNLOADING AND RELOADING LIVE STOCK.

Cars containing exhibits will be delivered at the building, so that no cartage will be necessary.

They will also be run up to the building again for the purpose of re-loading.

HOTEL ACCOMMODATION.

There are a number of excellent hotels in Brantford. Arrangements have been completed with Mr. Fred Westbrook, proprietor of the Hotel Belmont, to make his hotel the headquarters of the officers of the Provincial Winter Show, and as many of the exhibitors as wish to avail themselves of the privilege. The rates are \$1 per day for persons occupying a double room with two beds in the room, and \$1.50 per day for persons occupying single rooms.

Officers and directors who remain for four or five days will be charged \$1 per day. It is hoped that the officers of the exhibition and as many of the exhibitors as possible will patronize this hotel during the exhibition.

ENTRIES.

Entries should be received on or before November 20th; entries received after November 20th and up to November 25th will be charged double fees. No entries will be accepted after November 25th. This regulation will be strictly enforced.

Take This One It Will Last a Lifetime



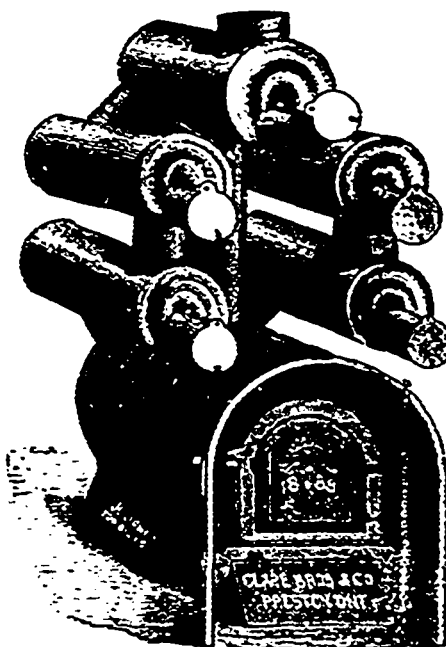
THIS is no idle saying of the Souvenir Kitchen Range. Hundreds of purchasers throughout the Dominion will tell you of its durability. It's not built for a year to give way for something else at the end of that time.

This is not the way the manufacturers of Souvenir do business. They build well with the idea that satisfaction and use can be gotten out of their stove. At the same time every worthy improvement and advance in the world of Stovedom is promptly engrafted into Souvenir. They are perfection in stoves. Sold everywhere.

- Ask the local agent in your locality for
- booklet telling specially of the aerated oven—
- an unrivalled and exclusive feature of Souvenir.

THE GURNEY-TILDEN CO.,
Manufacturers, HAMILTON, Ont. Limited

\$155 in 5 Prizes for 5 best short essays on Souvenir Ranges. Ask for particulars.



The Millbern Wood-Burning Furnace.
Our Catalogue explains.

WE MAKE A Specialty of Heating

And have placed many thousands of our "Millbern" Wood Furnaces in country homes. Farmers use only rough and unsalable 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 list of the homes that we are heating?

We prepare free estimates, send catalogues and full information upon application, and invite correspondence.

•••••

CLARE BROS. & CO.

PRESTON, ONT.

Branch at WINNIPEG, MAN.

MARKET REVIEW AND FORECAST.

Office of FARMING,
43 and 46 Richmond street W., Toronto.
November 21st, 1898.

The warm, unsettled weather during the week has had a tendency to lessen activity in general trade circles. Eastern business houses are paying more attention to trade in Manitoba and the Territories, and an increased volume of business from that quarter is reported. Wholesale merchants state that payments have been better during the past few weeks than for several years past, which is a very healthy sign.

Wheat.

The world's wheat markets are still influenced by the political complications of Europe. Producers are anxiously watching the situation with the hope that things will come to a climax soon. The Canadian farmer is holding back his product more than the American farmer. Since July 1st the aggregate exports of wheat and flour from the United States were equivalent to 77,230,000 bushels, as compared with 89,319,000 bushels for the same time last year, though there is more wheat to export this year. The visible supply in the United States and Canada increased 2,194,000 bushels since a week ago and the world's supply 1,394,000 bushels.

A special cable to the *Trade Bulletin* of Nov. 17th reads: "The price of wheat on Mark Lane, the Baltic, and at Provincial markets has declined from 3d. to 6d. per quarter on the week; but to-day a steadier feeling has set in, more on its own merits than from political consideration." The feeling at Chicago has a stronger tendency and December futures sold higher at the end of the week. The business at Montreal is merely nominal, as nothing has been done on that market. The Toronto market is firm, and Ontario red and white is quoted at 69 to 70c. north and west. Goose wheat is steady at 70c. north and west. No. 1 hard Manitoba is quoted at \$1 to \$2c. Toronto, and 71 to 71½c. afloat Fort William. On the local farmers' market here red and white wheat brings from 74 to 75c. per bushel; goose, 71½ to 73c., and spring 6c., 72c.

Oats and Barley.

Receipts of American and Russian oats are more liberal on the London market, and Canadians have sold lower than a week ago. The Montreal market has ruled firm during the week at from 30½ to 31½c. afloat, and 31½c. in store. There is reported to be large quantities of oats in store throughout the country. The market here is steady at 26c. north, and 27c. east. On the local market oats bring from 31½ to 32½c.

The Montreal barley market is firm, No. 1 malting grades being quoted at 58 to 59c. The market here is steady at 48 to 50c. f.o.b. west, and 51c. east. On the local market it brings 49½ to 52½c. per bushel.

Peas and Corn.

The London market for peas continues firm under light receipts, but prices are considered too high. The Montreal market has been steady with quotations 68 to 69c. in store. Peas here are quoted at 59 to 60c. north and west, and on the local market at 69 to 69½c. per bush.

Corn is firmer on the British market. Reports from the West indicate a shortage before spring. The Montreal market is steady and through cargoes for export bring 40 to 40½c. for No. 2, Chicago mixed. American corn is quoted here at 40 to 41c., and Canadian at 31 to 32c.

Rye and Buckwheat.

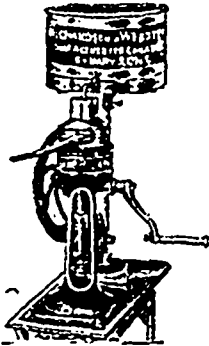
There is a good demand at Montreal for rye, which brings from 57 to 57½c. afloat. It is quoted here at 48 to 50c. north and west. Nothing doing in buckwheat here. The Montreal market is firm at 53c. afloat, and 52 to 52½c. in store, which is an advance of 1½c. over last week.

The 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 23th. I placed the Separator on trial with Mr. S. D. Wilkinson, Leamington, 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 save 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 for Owen Sound and vicinity

RICHARDSON & WEBSTER,

ST. MARY'S, ONT

Bran and Shorts.

A scarcity of bran is reported at Montreal owing to the extraordinary demand from the United States. Ontario bran is quoted there at \$12.50 to \$13 in bulk; Manitoba at \$11 to \$11.50, and shorts at \$14 to \$15. The market here is stronger at \$11 to \$13 for shorts, and \$10 to \$11 for bran west.

Timothy and Clover Seed.

There have been several large shipments of clover seed from Toronto of late. Prices on the local market are the same as those quoted last week.

Eggs and Poultry.

The London market for eggs is reported quiet but firm, with no change in prices there or at Liverpool. There have been large receipts of pickled stock at Liverpool and Glasgow, and the latter market is easier. The Montreal market continues fairly steady at about last week's prices. Strictly new-laid in large lots bring from 20½ to 21c. Eggs are not in large supply here, and the demand for good stock is active and the market firm at 18 to 19c. for new-laid and 14 to 15c. for held stock. New-laid eggs on the local market bring from 22 to 25c. per dozen.

The indications are that Canada will ship more poultry this year than ever before to the English market. Already extensive arrangements and purchases have been made by dealers for this trade. One Montreal firm expects to handle from 65,000 to 85,000 head of live poultry. Choice dry-picked turkeys at Montreal bring from \$1½ to 2c. per lb.; chickens, 7 to 7½c.; geese, 6 to 7c.; and ducks at 7 to 8c. The Toronto market is steady and the demand fair at 7 to 9c. per lb. for turkeys, 5½c. for geese, 30 to 60c. per pair for ducks, and 25 to 45c. for chickens.

Potatoes.

The Montreal market is firm at 50 to 55c. in car lots. In a jobbing way they bring from 60 to 65c. per bag. Potatoes are quiet here, and are quoted at 50 to 60c. in car lots. They sell for 60 to 65c. out of store. They bring from 50 to 65c. on the local market.

Hay and Straw.

The problem of getting rid of this year's big hay crop is still unsolved. Farmers in Quebec are reported to be plowing up their meadows, so that there may not be such big things next year. There has been a fairly active demand for baled hay at Montreal at \$5 to \$6 per ton for clover on track, and \$7.50 to \$8 for No. 1 timothy. The market here is quiet at \$7 to \$7.50 for cars on track. Baled straw is quoted at \$4.50 in car lots. Hay brings from \$6 to \$8 on the local market.

Fruit.

There is very little change in the fruit market. \$2.75 to \$3.25 continue to be the ruling prices for No. 1 apples, while poorer quality brings from \$1.90 to \$2.25 per barrel at Montreal, which will give some idea of what can be paid at country points for export.

Cheese.

The cheese situation just now is in a very much healthier condition than it was last year at this time. There is not so much cheese held by factorymen, and the quantity in the country is not so large. Last season, at the close of navigation, we had shipped 373,000 boxes in excess of the year previous, while this year, when navigation closes, our shipments will be about 200,000 boxes less than a year ago. Besides there will be a great deal less to go forward. One large exporter has made the statement that by next spring the total shipments from Canada and the United States will be 700,000 boxes short of last year, and he seems to have good ground for thinking so. Up to Nov. 12th the total shipments from Montreal and New York show the large decrease of 454,842 boxes as compared with the same period last year, so that it only requires a couple of hundred thousand boxes to make up his estimate.

The London market is firm but quiet, the recent advance not stimulating consumption. Finest Canadians are quoted there at 45s. 6d. to 47s., and good to fine at 41s. to 44s. More activity is reported at Montreal, and in the country, where large quantities have changed hands at 9½ to 9¾c. for finest Westerns, and 9 to 9½c. for finest Easterns. Quite a few of the local markets have closed, especially east of Toronto. In the west prices on the local markets have ruled from 8½ to 9c., and considerable cheese has been sold at the factories at 8½ to 9c. It factories have good curing-rooms it would pay to hold awhile.

Butter.

There have been large receipts of Canadian and Australian butter at London and the market there has dropped another shilling, the quotations for finest Canadian creamery being 95 to 99t. At the decline, however, quite a large business has been done. The Australian supplies are earlier than usual this year. There is not thought to be very much October creamery in the factorymen's hands, the bulk of it having gone forward and is either stored in Montreal or gone forward. The total shipments from Montreal up to Nov. 12 were 251,700 packages against 210,106 packages for the same time last season, showing an increase of 41,594. The shipments from New York for the same period show a decrease of 120,354 packages, making the decrease from this side of 78,766 packages.

The export demand at Montreal is confined to the finest quality of fresh made goods which bring from 18 to 18½c. Some special factories bring a little more money, but quite a lot of creamery butter during the week at 17½ to 17¾c. The market for creamery butter is steady here at 19 to 21c. for prints and 18 to 18½c. for tubs. The supply of large rolls of dairy butter has been liberal, but the demand good at 14 to 15c. Dairy pound prints bring from 16 to 17c., and choice dairy tubs 15 to 16c. Pound prints on the local market bring from 16 to 21c., and large rolls from 14 to 15c. per lb.

Cattle.

Cattle at Chicago and Western markets

have ruled about the same with no change in prices and the general tone has been from steady to strong. Owing to a falling off in receipts prices advance a little. The approach of Thanksgiving Day and the resultant supply of all kinds of poultry is making things a little dull for butchers' cattle. Trade here has been generally slow and there have been too many inferior cattle coming forward.

Export Cattle.—Very few of this class have been offered, and there were none of choice quality in the cattle yards here on Friday. Choice quality bring from \$4 to \$4.25; light exporters from \$3.60 to \$3.75. Export bulls bring all the way from \$3 to \$3.85 per cwt., according to quality.

Butchers' Cattle.—Choice picked lots weighing from 1000 to 1100 lbs. each were scarce on Friday's market, selling for from \$4 to \$4.25 per cwt. Loads of good cattle bring from \$3.40 to \$3.60; medium from \$3.25 to \$3.45; common \$2.85 to \$3.10; and inferior \$2.50 to \$2.75 per cwt.

Stockers and Feeders.—Choice heavy feeders bring from \$3.50 to \$3.70 for steers, and bulls from \$2.50 to \$2.70 per cwt. The supply of feeders has not been large. On Friday stockers for buffalo sold at \$3 to \$3.25 per cwt., with a good demand. Stock bulls bring about \$2 per cwt.

Calves.—These are in lighter demand at Buffalo, where prices rule from \$6.50 to \$7.25. Calves are in good demand here at from \$3 to \$6 each, with veals of heavy weight selling at \$5 per cwt.

Milk Cows.—The price for these varies all the way from \$25 to \$45, with choice milkers bringing \$50 each.

Sheep and Lambs.

There have been extra large supplies on the Buffalo market during the week with a very light demand. On Friday only about half the offerings were sold. Good export sheep are in fair demand here. Prices for ewes are from \$3.25 to \$3.40, with \$3.50 per cwt. for choice picked lots. Bucks bring from \$2.50 to \$2.75 per cwt. There was a large run of lambs on Friday, and the market is easier at \$1 to \$4.25 per cwt., or \$2.75 to \$3.75 each.

Hogs.

In contrast with the market here the American markets showed an easier feeling during the week, and prices had a lower tendency. The hog market here is higher and firmer, and, though there were large receipts on Friday, prices remained firm. Choice bacon hogs, weighing from 160 to 220 lbs. each, un-fat and unwatered, sell at \$4.25 to \$4.37½ per cwt. off the cars, and light and thick, fat hogs at \$4 per cwt. One of the features of the week has been the advance in price of choice bacon hogs. A week or two ago these and thick, fat hogs sold for about the same money.

Cable reports show that the steep decline in bacon of a couple of weeks ago has induced a much better demand for Canadian bacon, and the market is steady at last week's prices, which are 43s. to 45s. for No. 1, and 37s. 6d. to 40s. for stout and fat sides.

BOOKS AND BULLETINS RECEIVED.

Evidence of J. W. Robertson, Commissioner of Agriculture and Dairying, before the Committee of Agriculture and Colonization, April, 1898. This pamphlet contains some valuable information on cold storage, illustration stations for farmers, and the methods of preparing fruit, eggs, and poultry for the British markets.

Principles of Plant Culture, by E. S. Goff, Professor of Horticulture in the University of Wisconsin. It is an elementary treatise designed as a text-book for beginners in agriculture and horticulture, and is published by the author, who resides at Madison, Wisconsin.

LEADING COLLEGES OF CANADA

TORONTO

THE

Best Job

Invariably goes to the one with best brain—one who has education, special training. Why not qualify for one of the best places going? You have the chance. The

CENTRAL BUSINESS COLLEGE, TORONTO

opens the door to success for many young Men and Women each year. It offers splendid equipment, thorough work, a strong staff and good results.

You may enter at any time. Write for prospectus. W. H. SHAW, Principal.
Yonge and Gerrard Sts., Toronto

HAMILTON

CANADA BUSINESS COLLEGE

HAMILTON

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

Federated Business Colleges

HAMILTON Business College
111 C.A. Building, Hamilton, Ont.
C. R. McCULLOUGH, Principal

GALT Business College
Galt, Ont.
W. BROOKS, Principal.

Intercollegiate Business Practice between the students of these two representative Business Schools enter either, and enjoy the best in Business and in Shorthand Instruction. This is an excellent time to begin. **CIRCULARS FREE.**

Address, C. R. McCULLOUGH, President
Hamilton.

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 Business 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.

BRANTFORD

BRANTFORD BUSINESS COLLEGE

Large class rooms and modern equipments of a first-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

OWEN SOUND

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

Principal of the....

NORTHERN Business College

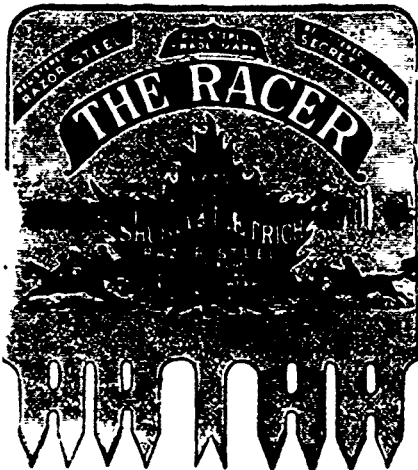
If you wish a thorough course in either

Business Subjects

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

THE RAZOR STEEL, SECRET TEMPER, CROSS-CUT SAW

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



Maple Leaf Saw Set



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

Manufactured only by **SHURLY & DIETRICH, Galt, Ont.**

CREAM . . . SEPARATORS

THE ALEXANDRA

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

THE MÉLOTTE

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. Maurice Street, MONTREAL.

The Smithfield of Canada!

GUELPH'S CHRISTMAS FAT STOCK AND POULTRY SHOW

THE seventeenth annual Christmas Fat Stock and Poultry Show, under the auspices of the Guelph Fat Stock Club, the South Wellington Agricultural Society, and the Guelph Poultry Association, will be held in the Victoria Curling and Skating Rink, in the City of Guelph, on Tuesday, Wednesday and Thursday,

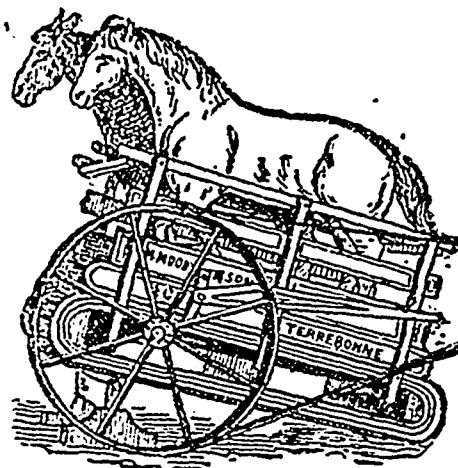
DECEMBER 6th, 7th and 8th, 1898

Exhibits must be in place at 1 o'clock p.m. on the 6th.

Price lists on application.

JAMES MILLAR, President. **JNO. McCORKINDALE,** Secretary.

Two Horses



We supply a first-class Governor when required with our Tread Power. Most governors cause friction and thus consume a great deal of power unnecessarily.

We make Powers any width to suit customers and keep three widths of 2-Horse Powers in stock. Do not buy a 3-Horse Tread Power if you are going to use only two horses on it; you are wasting your money and losing power both at the same time.

CORRESPOND WITH US and
SEND FOR CATALOGUE.

MATTHEW MOODY & SONS,
TERREBONNE, QUE.

BIG MONEY
FOR AGENTS

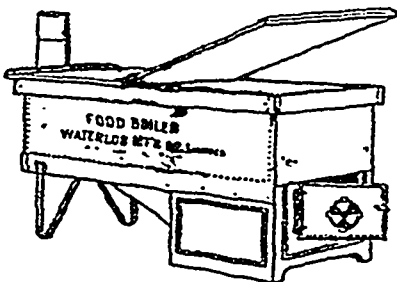
THE STAR RIVETER



For MENDING HARNESS, BELTING, etc. Indispensable to Farmers, Livemen and Threshermen. **STAR RIVETER** complete with 50 tubular rivets. \$1.00. Post selling article never introduced. Agents write for special prices and territory.

ENTERPRISE MAN'G CO., - TORONTO, ONT.

THE WATERLOO ...FOOD BOILER



Used chiefly by Farmers, Stock Feeders and Butchers for
**COOKING FEED FOR STOCK AND
POULTRY,**
For BOILING SAP,
SCALDING HOGS,
Etc., Etc.

The Most Economical on Fuel and the Most Convenient for all-round purposes of any Cooker in the Market

IT PAYS TO BOIL FEED for STOCK, HOGS and POULTRY

Built in 40, 90 and 125 Gallon Sizes. Write for Circulars and Prices

WATERLOO MANUFACTURING CO., Limited
WATERLOO, ONT.

Extract from Annual Report for 1897

of the Consulting Chemist of the ROYAL AGRICULTURAL SOCIETY OF ENGLAND, published in their Journal, 31st December, 1897, page 732:

"It has been necessary to call attention to the fact that under the name of 'slag' and sometimes even under that of 'basic slag' have been sold refuse materials of a very different character, and having little or no manual value. These have not been the product of the now well-known 'Basic' or THOMAS process of iron or steel-making, and have contained little or no phosphoric acid such as basic phosphate has. In several instances the purchasers believed that they were buying the true basic slag. It behoves one, therefore, to be careful to stipulate for THOMAS-PHOSPHATE, and to have a guarantee of phosphoric acid contained, and of freedom of division."

We handle the only true . . .

Thomas-Phosphate Powder

sold in Canada; and to be sure of genuine material, see that the bags have our name and address.

WALLACE & FRASER

Masonic Block
ST. JOHN, N.B.

Canada Life Building
TORONTO

Good Butter Making

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

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.

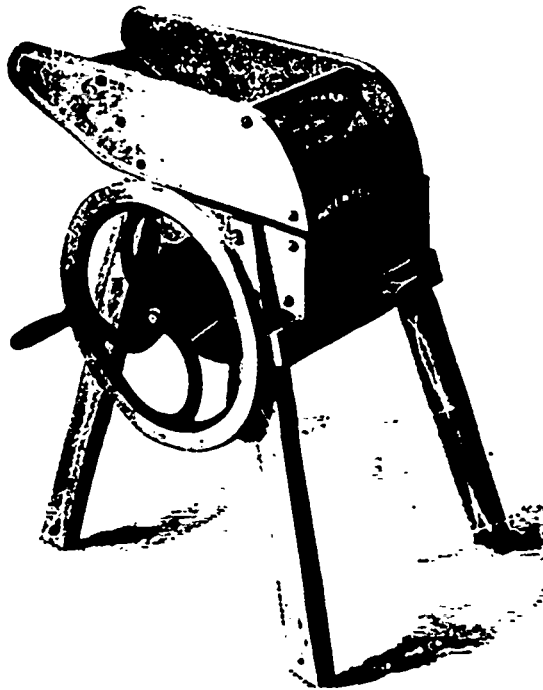
Progressive Grocers Sell

Windsor Salt

The Windsor Salt Co.
Limited,
Windsor, Ont.

Your Cattle

need careful attention in order to bring you good returns. The roots they eat should be well sliced and pulped. The



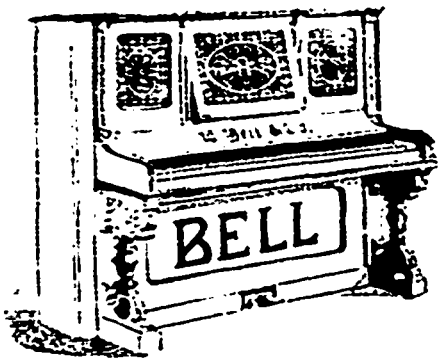
**THE
MASSEY-
HARRIS**
Roller
and
Ball-
Bearing
PULPERS

are the best machines made for this purpose: they go so easily and will do the work so speedily.

MASSEY-HARRIS CO., LIMITED
TORONTO

The Unparalleled Reputation of

The **BELL PIANOS** and **ORGANS** . . .



is accepted without dispute by all other makers.

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

On Reasonable Terms from all Agents
Manufactured by BELL PIANO CO.

THE BELL ORGAN & PIANO CO., LIMITED

You Can't Make a Mistake

If You Buy this Grinder. It is made by

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



Prices and Terms are right

Why Do You Hesitate?

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

Mitchell's Anti Lump Jaw

has never yet failed in a single instance after following our instructions 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.

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

The Spramotor

Mrs. Pattington would say. Many fruit-growers and farmers are induced to buy cheap sprayers, for one reason and another, and they always regret it.

Cheap sprayers are always in need of repairs, cheap sprayers are always made of iron or mostly iron, and iron sprayers are useless in copper mixtures. You would not use a cast-iron carving-knife, because it's unsuitable.

The only way to prevent this trouble is to put a stop to it before it happens, or at least before it happens again.

The **SPRAMOTORS** are the result of the best effort of the most expert manufacturers alive.

The **SPRAMOTORS** embody in their general features the best there is, and that is the reason of the great demand for them. It is not only necessary to have one of the best features, it is to be in the front rank must have all the best features.

The **SPRAMOTORS** of this nature are stronger and more durable, and have greatly increased their sales.

The **SPRAMOTOR** will last longer than any other and is the most reliable in the world.

The **SPRAMOTOR** is made of brass, is the result of three patents, and their combined effect is care.

As you can see, the **SPRAMOTORS** are used to spray the fruit trees, and they are applied with a hose.

It is the only way you should buy one and be sure you get the best. Nearly every first class store carries them.

Write to the **SPRAMOTORS** people.

Write to the **SPRAMOTORS** people in Canada, and using the **SPRAMOTORS** for white washing and disinfecting work.

SPRAMOTORS are the greatest as being the standard of the world, and they are produced by EVERY

High Quality of the world.

For the full particulars and a catalogue will be mailed to you upon request.

SPRAMOTOR CO.

357 Richmond St., London, Ont.

FREE.

We give this fine watch, with a beautiful chain for ladies, two dozen **LIVER HUTTON** watches, each at \$10.00 each. Send your address and we forward the **HUTTONS**, postpaid, and our Premium List. No money required. Sell the **HUTTONS**, among your friends, return the money, and we send the watch, prepaid. A genuine American watch, guaranteed a good timepiece. Mention this paper when writing.



LIVER HUTTON CO., 20 Adelaide St. E., Toronto, Ont.