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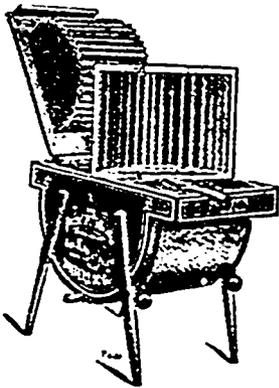
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# FARMING

December 6th, 1898.

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Every Machine guaranteed to give satisfaction, is an easy seller.

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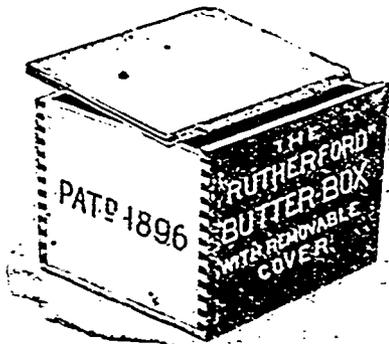
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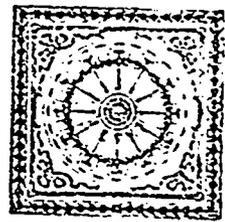
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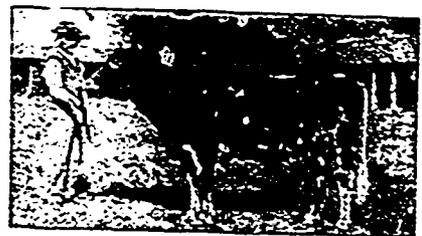
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FOR SALE—Five bull calves from one to eight months old. Could spare a few young heifers. Young pigs of fall litters.

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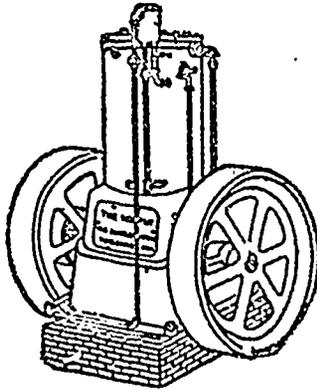
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FROM IMPORTED STOCK.

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

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SIX BULLS FOR SALE.



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

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W. E. H. MASSEY, Proprietor.

**Dentonia Jersey Herd**

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

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**LAURENTIAN STOCK and DAIRY FARM,**

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Ayrshires, imported and homebred herd headed by imported Tam Glen 2nd, No. 170 D. A. H. B. Jerseys all of the celebrated St. Lambert family; herd headed by Major Potts of St. Anne's 2500 A.J.C.C. Berkshire Pigs. Young stock of all the above breeds for sale.

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A. E. SCHEFFEL, Manager.



# FARMING

VOL. XVI.

DECEMBER 6th, 1898.

No. 14

## Agricultural News and Comments

Get in line for breeding your cattle as prices advance, and when you feed off a few steers you have the whole price and do not have to pay the breeder or the banker the lion's share. Get a few good cows and breed to a pure-bred bull of the right type, and follow up this line of breeding, which gets better with each succeeding cross.

When hens are kept in confinement the eggs often have very pale yolks. This condition is quite common in winter with most flocks. The cause is the same which makes butter pale in the winter—lack of green pasturage. Steamed cut clover will restore the color; steamed clover, or clover ensilage, meat and fresh bone are the three great winter egg specifics.

Some dairymen seem to use their feed to heat the drinking water for their cows; not directly, but through the medium of the animal. If the dairyman uses his fodder for this purpose it will pay him better to burn it directly under the water tank instead of in the cow. It will heat more water if used in that way, and the wear and tear on the cow is less.

The exports of breadstuffs to Europe from the United States for the ten months ending October 31st, 1898, amounted to \$250,237,455, which is \$65,000,000 greater than for the same time last year. The provision exports for the same time were \$162,880,643, against \$146,607,039 for the ten months of 1897. The demand for American corn is increasing.

In picking poultry the feathers will come out more readily if the carcass is dipped in cold water and allowed to drip. Then sprinkle finely pulverized rosin over and among the feathers, which causes them to stick to the hands, even the pin feathers coming out with little difficulty. The common crude rosin is best; about half a teaspoonful for each fowl.

A wealthy Englishman has devoted \$50,000 to the establishment of an Agricultural School in Worcestershire. It is the intention to have this a school and not a college. The ages of the scholars will be from fifteen to eighteen years, and the minimum term of study will be two years. There will be a thoroughly-equipped farm in connection with the school, and a charge of £15 a year will be made to each pupil.

Australian and New Zealand shippers are feeling their way with a view to shipping butter to British Columbia. Such action does seem to be a little bit "cheeky," but trade competition is not confined to national boundaries, and if our dairy friends in the Antipodes can ship butter to British Columbia and make a profit out of it they have a perfect right to do so. Our own dairymen, however, should be on the alert to supply the home market with all it requires.

It will pay the dairyman to raise his own cows. By this method he is apt to get better cows if he understands breeding and selection thoroughly. The best way is to start with your own herd. Weed out the cows that are not returning a profit and then use a bull of some recognized dairy herd who comes from a strain of milk producers. By a method of this kind, carefully and intelligently practised, a dairyman will in a very few years be in the possession of a good dairy herd.

There are twelve societies for co-operative farming in England, with 4,500 members and a share loan capital of \$285,000, their sales being nearly \$500,000 a year, and their profits about \$9,000 annually. Ireland has sixty-seven societies for co-operative farming, with some 2,000 members and \$18,000 capital, their annual sales amounting to about \$175,000, on which a profit of some \$2,000 is reported. Most of the Irish societies run little creameries on the co-operative plan such as we have in Canada.

An egg is a complete food because it contains all the elements essential to the support of the embryo chick. The shell is 91 per cent. carbonate of lime, 6 parts phosphate of lime and 3 parts nitrogenous organic matter. In 100 parts of the white there are 84.8 parts water, 12 of albumen, 2 of fat, sugar and membranes, and 1.2 of mineral matter. The yolk contains in 100 parts, of water 51.5 parts, casein and albumen 15, oil and fat 30.1, pigments, extractives, etc., 2.1, and mineral matter 1.4. Eight average eggs should weigh one pound.

Though the New York Horse Show was one of the best of its kind ever held on this continent, the attendance was comparatively light. The price of boxes fell from \$52,000 to \$16,000, and the clamor for general admission, which had marked previous shows, was totally absent. The falling off in attendance is due to the management of the show and to the reactionary feeling which seems to have set in to making the affair such a great social event. There is a lesson in this for the management of other horse shows, who carry on the social fad to excess.

Pumpkins are said to be effective instruments in eradicating certain forms of parasites from sheep. They should be fed seeds and all, as the chief medicinal properties are in the seeds. Pumpkins make a good milk flow, and are good to feed sows and little pigs. They can be grown very cheaply in the corn field, and it would pay every farmer to have some for his stock in the fall. It is said that when pumpkins are fed largely to hogs there is not so much danger of hog cholera. They tend to keep the bowels in a healthful condition.

It is reported that a large number of big cattle firms on the western ranges are going out of business because cattle of all kinds are scarce and hard to get, and cost too much to afford a profit even if they could be obtained. Two-year-olds used to be bought for \$10 or \$11, and cows with calves at about \$12; now yearlings to three-year-olds command from \$22 to \$42, and cows with calves about \$36. The corn-grower has allowed himself to run out of cattle, and his competition for range stock has been so keen that in the judgment of the cattle companies prices are too high to afford much prospect for profit during this winter.



## Give the Foals a Chance

The following paragraph, taken from *The Western Horseman*, is full of good, sound philosophy on raising horses: "A good horse, like a good house, is built 'from the ground up,' the superstructure of the future horse being formed in the weanling colt, and while a 'lousy calf' sometimes comes out all right 'in the spring,' one that has escaped the 'vermin' is just so much the better off. As the character of the future man is generally formed in the boy, so also does complete development in the future

mature horse depend on the thriftiness of the weanling colt. Therefore, that a good horse may result, the colt should not only be given a good start early in life, but should be kept in healthful and thrifty condition throughout the growing stage."

It is only too true that the large number of poor horses to be found in the country to-day is, to a very great extent, due to careless and improper treatment of the colts. How often we see a colt thrive and grow well so long as it is following the dam, but begins to fail and grow thin from the day it is weaned. Weanlings should not be neglected in this way. If they are a poor, unsatisfactory, unthrifty horse will be the result which the owner will blame on the breed. Breeding must not be overlooked, but it will not overcome negligence in rearing the colt on the part of the breeder. Too many farmers raise young colts on the "root hog or die" principle, and expect a prime, first-class horse as the result.

A young colt for the first couple of years of its life must have nutritious, tissue-building, and blood-making food. A good growth the first year of a colt's life costs less than at any other age, and is twice as valuable to the breeder. It is a great deal easier and cheaper to put two years' growth on a colt in the first year of its age than it is to make up for a year's loss of growth in two or three years. Many farmers complain that they cannot breed the large-size horses desired, while they make the mistake of not feeding and caring for the colt properly from the start. Young colts should be encouraged to eat, and should be given plenty of milk and ground food to cause rapid growth, as the English and French farmers do. "Spare the feed and spoil the colt" is true in every case.

### Canadian Cattle in Great Britain

The following extracts from the report of Dr. McEachran, Chief Inspector of Live Stock for Canada, just issued, on his visit to Europe last winter to study the health of animals in Great Britain, France, Germany, and Denmark, should be read with interest by Canadian cattle men. Dr. McEachran, after inspecting the arrangements for handling stock at Liverpool, says:

"In the lairages we found a consignment of fat cattle owned by J. W. Snell, which I presume were justly pronounced about the best bred and best finished lot of Canadian cattle which had landed there during the past shipping season. The gentleman who was showing us round remarked: 'What a pity that all our Canadian cattle are not like these.' This led to an assertion being made which substantiated the statement contained at the foot of page 4 of my annual report for 1897, viz.: 'It is evident to all interested observers that year by year Canadian cattle are failing to hold their own in quality, and the time has come when they must be improved by the importation of fresh blood from abroad.'

"We were shown a large number of United States cattle evidently from the far west. They were good rough cattle, but capable of being much better finished. A consignment of Argentine Republic cattle was also shown us, and here I saw convincing evidences of the adaptability of that country for stock-raising. Owing to the climate, the cattle get no check on their growth. Their coats are as fine as those of groomed horses, they are large (over 1,400 pounds each), and show evidence of short-horn crossing on long-horned, probably Spanish, cattle. It is well known that the Argentines have been the most extensive purchasers of thoroughbred cattle in Britain for years back, and it is quite evident that they can raise them much more cheaply and incur fewer losses than can be expected in the west of Canada or the United States, and, if we would derive the benefits of our nearness to British markets, as compared with them, we must produce cattle of the most improved and most profitable breeds."

He also visited the Glasgow market, and has the following to say regarding the prices for cattle:

"The difference in the prices between inferiorly-bred, unfinished cattle as compared with well-bred, finished cattle was most marked—in every instance, when a well-bred heifer or steer, well fed and in finished condition, appeared in the ring, bidding became active and long; two-year-olds brought from £14 to £20 each (\$70 to \$100) for beef purposes."

In regard to the scheduling of Canadian cattle, Dr. McEachran says: "I fear, from all I could learn, that there is no prospect whatever of this embargo being raised." He points out that the Scotch feeders feel keenly that it prevents them from obtaining healthy cattle for feeding purposes. The following table shows that Canadian cattle far outstripped home-bred and Irish cattle in the returns for feeding, and shows also what might be received by Canadian farmers if they would only finish their cattle as the Scottish feeders did before scheduling days:

	Net Average Cost per Head.			Average Length of Keep.		Average Selling Price per Head.			Average Monthly Return for Keep.		
	£	s.	d.	Mos.	Dys.	£	s.	d.	£	s.	d.
Home-bred.	10	0	0	5	0	18	4	0	1	12	9½
Irish.	10	10	0	5	24.5	17	19	0	1	6	1½
Canadian.	10	3	6	5	2.5	26	6	6	2	3	8

### Ontario Crop Reports

The final crop report of the Ontario Department of Agriculture has been issued. It is chiefly a confirmation of the report published in August last with more definite estimates as to yields. The yield of fall wheat is given at 24 bus. per acre, the total yield being 25,158,713 bushels. The increase in the acreage of new wheat sown in the fall is placed at 10 per cent. upwards. The fall has been favorable for growth, and in some cases the crop was so heavy in the top that cattle and sheep were turned in to pasture upon it. Spring wheat yielded 17.7 bushels per acre and a total of 6,873,785 bushels. Barley has yielded well, and 36.6 bushels is given as the yield of oats per acre. Peas have been the poorest of the grain crops. The bugs did considerable damage and the yield was only 15.6 bushels per acre. Corn was a fair average crop. Corn for husking (in the ear) yielded 70.9 bushels and corn for the silo and feed (green) 11.20 tons per acre.

The potato crop was light owing to the effects of late frosts and the protracted drought. The quality of the crop is put down as good. The average yield of turnips has been fair. Turnip lice (green aphid) have been destructive in many places. Mangel wurzels have yielded better than any other of the root crops. Fruit trees and vines are generally in a healthy and thriving condition. The San José Scale is mentioned as doing some damage in Kent. The apple crop has suffered much from worms, much of the fruit affected being in unsprayed orchards.

### Dairy Instructor Millar Resigns

Mr. T. B. Millar, who has been travelling instructor for the Western Dairymen's Association since 1891, and also instructor in cheese-making at the Provincial Dairy School, Guelph, for the past three years, has resigned both positions to engage in business for himself. Mr. Millar has purchased the Dorchester, Thames and Pond Mills cheese factories near London, and will carry on a combined cheese and butter manufacturing business. The product will be shipped direct every week to Great Britain. In this way, it is hoped to get the output in the hands of the consumers in the best possible condition and to be able to pay the patrons the highest prices for their milk.

Mr. Millar has rendered faithful and able services to Ontario dairying in his work as instructor, and we voice the sentiments of Western Ontario dairymen generally when we wish him success in his new venture.

## CORRESPONDENCE

### A Criticism of Mr. Fearman's Letter in Our Exhibition Number

To the Editor of FARMING:

In your exhibition number of Farming, dated Sept. 6th, you publish a letter over the signature of E. C. Fearman, of Hamilton, regarding the feeding and breeding of hogs suitable to supply the bacon trade of Canada. I have been waiting for some of the parties who were more directly concerned in the affair to reply to Mr. Fearman, but, as neither answer nor criticism seems forthcoming, I take it upon myself to criticize his letter, particularly in the matter of feeding and breeding hogs. I have had an experience extending over a number of years in hog raising and feeding, but never fed, nor heard tell of anyone in this district feeding hogs after Mr. F.'s plan, viz. . . . To allow hogs to range at will during finishing period. This kind of management would simply spell ruin to farmers foolish enough to be led astray by such talk. I think I would be safe in saying that I have the approval of ninety per cent. of the practical feeders of the country when I say that, no matter what the breed, hogs cannot be fed at a profit if allowed to range.

Mr. Fearman in no uncertain voice advises the farmers what to feed. From a packer's standpoint Mr. F.'s sayings may be wise; from a feeder's standpoint they are unwise. Mr. F. must know that farmers have to feed the kind of grain that their land will produce most abundantly. With us corn is the principal coarse grain, barley and oats are poor yielders, and peas have been abandoned altogether. Must we then buy nice stuff for our hogs, or go out of the business? Essex and Kent, the two corn counties of Ontario, produce annually hundreds of thousands of pounds of pork, large quantities of which finds its way to the Britisher as A-1 Wiltshire. The farmer who feeds his hogs on the plan outlined by Mr. F. will find his profits considerably smaller at the end of the year than if he had taken the more sensible plan of penning his hogs up during finishing period.

I am not personally acquainted with Mr. F., but think that his adverse criticisms of certain breeds, and his endeavor to "boom" certain other breeds, to say the least, was very indiscreet. The positions occupied by the Duroc-Jersey and Poland-Chinas, at the test conducted by the O. A. C. staff in 1896 (see page 72, O. A. C. Report, 1896), places these two valuable breeds in an enviable station. Mr. F.'s condemnation of the Duroc-Jersey reminds me of an amusing incident which occurred in this vicinity a short time ago. A neighbor, Mr. A., sold ten head of hogs to a shipper here, the lot weighing twenty hundred and twenty, or an average of over two hundred pounds, at not quite six months old. The shipper of these hogs drew the attention of different farmers to this lot of hogs, and said that they were one of the best lots that he had bought this year, telling the farmers that they were Tam and Chester White cross. In reality they were bred from a Duroc-Jersey hog and a grade Berk sow and had not one drop of Tam or Chester blood in them, all of which goes to prove that a lot of prejudice against certain breeds has no substantial foundation. It is not the wish of the writer to detract from the merits of any breed, all breeds have their merits and demerits; but in the humble opinion of your scribe, if the Britisher had to wait for his dinner until it was furnished off Mr. Fearman's lean rangers, the jolly, rotund figure that generally represents John Bull would have to be replaced by a more meagre specimen.

Respectfully yours,

J. L. WRIGHT.

Clachan, Kent Co.,

Nov. 28th, 1898.

## The Chronic Deterioration of Fertility

To the Editor of FARMING:

It has afforded me much pleasure and information to peruse the many intelligent articles with which your valuable journal abounds. The remarks made from time to time re phosphatic manuring have been excellent, and are calculated to do much good, as the enormous importance the phosphates exercise in our agricultural and general economy has only become to be duly appreciated since, during these latter years, we have found much of our land becoming unproductive and unprofitable. Experience, observation, investigation, and experiment have now taught us that this chronic deterioration of fertility is in a great measure owing to the soil having, under the influence of cropping or grazing, become depleted of its phosphatic principle. Of course, it is well known that phosphate is the foundation of bone, and that to this end it must first be incorporated into the vegetable kingdom. In carrying out this grand scheme of co-operation, nature has arranged that phosphate shall form an essential and vital part of every plant, and no plant or crop can reach maturity if there is not a sufficient supply of phosphatic plant food available in the soil.

The same rule follows through the animal kingdom. If the phosphatic element is not in sufficient abundance in the food the animal cannot thrive. This natural law applies equally to the human family and to the lower animals. For but too ample evidence of this amidst frail humanity we have but to glance at the decrepit, rickety, weak-kneed millions to be any day seen in the slop-fed slums of our magnificent cities.

But my purpose just now is not to philosophize, but to assist in calling attention to the urgent necessity for maintaining the land in good phosphatic heart, as at the present low price of reliable phosphatic fertilizers this may be accomplished under all circumstances profitably; and there is no excuse for those benighted agriculturists who meander through a useless existence with half crops and half-starved cattle.

It is these half measures wherein the danger lies, for, as Tennyson says:

"A lie which is a lie may be  
Dealt and fought with outright,  
But a lie which is half a truth  
Is a harder matter to fight."

If land is entirely exhausted of its phosphates, it has, of necessity, to be either renovated or abandoned, as it has become practically barren and sterile. But there is not a large proportion of land totally denuded of phosphate, yet there is an immense area throughout the world that has become partially so; in fact the great majority of cultivated lands, both arable and pasture, are now phosphatically below the standard of maximum productive fertility. Under such conditions live stock will not thrive satisfactorily, neither can crops be grown remuneratively; yet, admittedly, millions do continue under such depressing influences to eke out a sort of hand-to-mouth existence, bewailing the fatality which has destined them to a life of drudgery on such "poor land." And yet in thousands upon thousands of these cases it needs but an inexpensive dressing of phosphatic manure, such as "Thomas-Phosphate Powder," or superphosphate, to place them on a sound progressive basis. Superphosphate, as is well known, is a quick acting phosphate, suitable for immediate crop-forcing purposes, while the more stable "Thomas-Phosphate Powder" is peculiarly well adapted for the top dressing of clovers and pastures, and the restoration of permanent fertility to exhausted soils.

A very interesting case of land recuperation is now being discussed in that well-known English journal, *The Field*. A Welsh gentleman, Mr. Morgan Richardson, a few years ago entered on some land that was then considered well-nigh valueless. By repeated inexpensive dressings of phos-

phate the farmer has so raised the condition of this land that his present difficulty is that his cattle have a tendency to run to beel rather than breed. He says this one time "poor land" will presently feed a bullock per acre. I might quote hundreds of similar instances that are within my own experience, but, for the present, space will not permit.

FRANK WALLIS.

Lincoln, England.

P.S.—Mr. Wallis is an agricultural and dairy specialist and lecturer for the Lindsey County Council. He has made a specialty of all kinds of manuring and is competent to speak with authority on the subjects he writes about. It is therefore with pleasure that we give publication to the above letter.—Ed.

## Fattening Chickens for Export

Editor of FARMING:

Seeing the interest you have always taken in anything which pertains to the advancement of the farmers' interest we send you a statement of an experiment we have just closed on our farm for the Department of Agriculture for the Dominion Government. Through Prof. Robertson, we purchased 133 chickens, for which we paid \$35.75. They weighed 575 lbs. They were fed in crates eight feet long and one foot four inches square, divided into three apartments, four chickens in each apartment.

They were fed for six weeks. The first four weeks they were fed three times a day on peas, oats, barley and wheat, mixed and ground fine and mixed with skim milk.

The feed, for the first four weeks, was as follows: 24 bus., 22 lbs. oats; 5 bus., 7 lbs. barley; 2 bus., 52 lbs. wheat; 1 bus., 3 lbs. peas; 23 lbs. tallow, and 2,589 lbs. skim milk.

The above feed, with the exception of the tallow, was fed for the first four weeks. The last two weeks they were fed with a machine called a Crammer twice a day. This machine has a rubber tube, which is inserted down the bird's swallow into the crop, through which the feed is injected.

The above feed being too coarse to feed through the machine, they were fed 466 lbs. kiln dried oats, ground very fine and mixed with tallow and skim milk. This was their feed for the last two weeks.

During the six weeks we fed them they gained as follows: First week, 57 lbs.; second week, 74 lbs.; third week, 127 lbs.; fourth week, 12 lbs.; fifth week, 13 lbs.; sixth week, 58 lbs. Total gain for six weeks, 347 lbs.

At the end of the third week the birds began to moult, which accounts for the small gain for the last three weeks. They grew feathers instead of putting on flesh.

They were killed on the 25th of November, and on the 28th they were shipped to Liverpool, and when the returns come back we will let you know what has been the result.

We are now feeding a lot of turkeys under the same treatment.

MRS. JOSEPH YUILL.

## Prince Edward Island Crops and Trade Prospects

To the Editor of FARMING:

The ground has at last frozen. The frost kept away longer this fall than for many years. We had the first frost—and it was a light one—on the 17th November. By noon the frost was all out of the ground, but on the night of the 13th the ground again froze, and up to date it is freezing at night and thawing during the day. So far, the frost has not prevented the plowing of sod land.

The markets are very dull in this county. The usual general drawing of loads to market at this season is conspicuously absent this fall. Every second farmer, on an average, has nothing to haul to market.

The failure of the wheat crops is the greatest calamity. Only the millers know the extent of the wheat failure.

At a custom mill yesterday I was struck with the proportions of the failure. The miller showed me some wheat he was grinding for a customer that was horribly shrunken. Chicken feed would be the only class which it would come under. It is said that there are farmers who sowed last spring imported Russian seed wheat from Ontario and who had immunity from the damages of the Hessian fly. Farmers in the spring wheat regions of Ontario who have been accustomed to ship seed wheat down to the Eastern Provinces will do wise to hold it and prepare it in first-class condition, as there will be a big demand for seed wheat of the Russian variety in the Maritime Provinces next spring.

It is estimated that the potato crop on the Island will not pan out more than fifty bushels per acre of immature tubers. The price now being paid in our outposts is twenty five cents per bushel. In Nova Scotia the price is about eleven cents higher. Nova Scotia does not grow sufficient potatoes for home consumption. In New Brunswick, too, its price is higher. This province is not an exporting one. They grow about enough for themselves.

Oats are worth 28 to 30c. and 32c. is being paid for some fancy lots for special cargoes. There will be few if any cargoes of oats shipped to Britain this fall. The neighboring province will take all the oats we can spare, and more. Island oats are probably the best oats in the world. A farmer in this county has had a new variety of oats this year imported two years ago from New York State. Last spring he had sowed 32 bushels and harvested 650. This he has already all sold for seed purposes at 50c. per bushel. It is entirely rust proof and black in color. It is named the Plymouth Cluster. This man imported 10 lbs. of this seed two years ago, from which he had 8 bushels. Last year he sowed 7 bushels and harvested 172, and this year had, as already said, some 32 bushels from which he harvested 650. Query.—Do our farmers pay sufficient attention to varieties of seed?

In wheat, this season, all varieties, old and new, except the White Russian rusted so badly that little was thrashed. The black Tartarian and some white varieties of oats, which generally do not do well here, have been good this year. One farmer said that were it not for the Tartarian he had sowed last spring he would have no oats at all. This is certainly an off year in P. E. I. farming, and valuable deductions cannot well be made from the results of the harvest.

Bacon pigs were selling a week and ten days ago for 4c. per lb. for weights over 150 lbs. No discrimination is being made by the packing firm of B. & M. Rattenbury. All hogs of whatever breeds, sizes and shapes, if they weigh over 150 lbs. bring the same price. This state of affairs is not encouraging to swine-raisers, who have studied the demands of the market, and have procured breeds of pigs conformable to requirements, and have fed them for flesh more than for fat, and endeavored to furnish a so-called "bacon hog," to find that this hog does not fetch any more money than the commonest scrub. It is said that the price of hogs is now less than 4c. This I cannot vouch for, however. A great many drovers are scouring the country for young year-olds, to be shipped to Nova Scotia for winter fattening. For to consume the big hay crop in Nova Scotia these young cattle are sought. Lambs have been worth here but \$1.50 each this fall. So low a price is quite discouraging, and wool is worth, washed, but 18c. now. Old ewes and wethers are worth 2½c., and the demand is large.

There seems to be springing up a large inter-provincial trade between P. E. I. and Nova Scotia in animals. This is as it should be. We want the Nova Scotia coal and iron, and the miners want our food products. A fine trade with Britain is resurrecting in fine perishable food products.

A steamship of the Beaver Line has already made two trips from Charlottetown to Liverpool, and our Cabinet Minister, Sir Louis H. Davies, has now arranged for another ocean steamship, the *Galatia*, with cold-storage accommodation for 400 tons perishable product. It sails from Charlottetown on Dec. 15. The last, the *Lake Winnipeg*, took away a cargo valued at \$70,000. With direct com-

munication a good trade in fat cattle and sheep will soon spring up with the Old Country.

P. E. I. is much behind the times in the production of beef-cattle. There is now a grand opening in this Province for beef-growing. What is wanted, however, is a large importation of beef herds of cattle, such as the Aberdeen-Angus, to improve the beef qualities of our cattle. Any speculator and cattleman who would import a car-load of well-bred Aberdeen-Angus cattle would find a ready market for them from the farmers of this Province. There never was a better opening than now for beef-making on an improved scale. So far our farmers have had dairying so much in mind that beef has been lost sight of. A very shrewd farmer told me the other day that when his new barn was completed he intended to go extensively into beef and sheep, and, with this in view, contemplates making an importation of Angus cattle. He has already a fine flock of sheep. Sheep and beef, he thinks, are avenues for cash that our island farmers have not, so far, considered. This man is making provision in his new building for a large root cellar and silo, and affirms that there is much less hard labor and fussing about sheep and beef cattle than with dairy cows; and he is right. The trade in lambs this fall was very large. One shipper, Mr. Jones, of Quebec, has shipped 10,000 lambs from here to Boston, and about 500 live geese. The trade in poultry is increasing rapidly, and at present there is a grand opening for turkey-raising. I believe the poor harvest of this year is a blessing in disguise, as it will cause our farmers to move as they never otherwise would in the production of more extensive live stock.

J. A. MACDONALD.

Hermanville Farm, P. E. I., Nov. 20.

## Argentina Competition in the Cattle Trade

According to the *Liverpool Journal of Commerce* one of the great shipping questions of the future will have reference to the arrangements for carrying on the live cattle trade with Argentina. The shipment of live stock from that country to Great Britain is increasing by leaps and bounds, and considerable interest has been aroused as to the best plan for conveying the cattle on the ocean trip. The journey is a long one and the risks are much greater than those involved in the traffic across the Atlantic. The difficulties connected with the shipping, however, do not seem to put any damper upon the trade, which is growing larger every year.

South America has boundless free grass range and the breeders there are importing largely of the best English beef breeds to improve their herds and bring them up to the export standard. The only way the American and Canadian farmers can meet this competition and maintain their supremacy in the European markets is by breeding high grades and purebred stock of the improved beef breeds. The South American farmer may have a larger amount of free pasturage for his cattle to run on, but the farmers of this country, with their skill and experience, should be able to breed better beef cattle of the best beef type. To do this, however, more importations of good beef breeding stock will have to be made than have been made during the past few years.

## Docking Horses

The council of the Royal Agricultural Society has passed a resolution that, beginning with the Maidstone meeting in 1899, no foals with docked tails shall be allowed to be exhibited at the society's country meetings; that after 1900 the same rule shall apply to yearlings as well as foals, and that after 1901 to two-year-olds also. This action of the council is arousing considerable discussion in horse-breeding circles in England. Those opposed to docking horses claim that it is a cruel practice, and should not be

countenanced in any way by the Royal Society. The cruelty is not alone in connection with the operation, which at any age of the animal should be performed with the greatest care, but with the poor docked animal when turned out in the fields in fly time.

Those in favor of docking claim that the practice is not as cruel as castration, fowl cramming, and a number of other things that are contrary to nature. Their strong objection to the action of the Royal Society is that it will interfere with the very profitable trade in carriage horses, whose tails are invariably docked. By preventing animals with docked tails from being shown breeders will not dock their foals, and consequently the practice will largely disappear. So it is claimed by those in favor of docking, and no little feeling has been aroused against the council's action.

## Do Fattening Pigs Need Exercise?

It is a debatable point whether the modern up-to-date pig-pen is the best thing in the world for the export bacon trade. Some recent experiments in pig feeding, notably those conducted by Professor Day of the Ontario Agricultural College, seem to indicate that a pig needs a goodly amount of exercise in order to produce the best quality of bacon. More definite information on this point will be forthcoming when the results of Mr. Day's experiments are published. If these show that exercise is a necessary factor in the production of the best quality of bacon, the modern pig-house, in which a number of hogs are confined in a small pen while being fitted for the trade, will have to give way to some more suitable method.

In our issue of November 1st we gave a short description of a small pig-house used in some of the Eastern States, which should fill the bill where exercise is necessary in the feeding and fattening of hogs. These are built so that they can be moved about as needed. Some of the modern piggeries are raised from the ground so as to give a chance for drainage, and thus making it impracticable for the pigs to get from the pens to the adjacent yard if one could be secured. Where the piggeries are built close to the ground a small yard can easily be arranged for adjacent to them, where feeding pigs can get all the exercise they need. This subject is worth considering by those contemplating erecting piggeries. During the winter months warmth should be considered, but, even so, it is not necessary to keep pigs cramped up in a small space in order to get it.

## The Mission of the Agricultural Paper

The *Ohio Farmer* in a recent issue discusses this question in a practical and common-sense way. It says:

"The wonder is that every farmer does not take some agricultural paper. The excuses made for not taking such a paper are varied and amusing. One hasn't time to read. Another can't afford it. Another takes too many papers. Another comes out flat-footed, and says he don't believe in paper farming. This latter class, however, will not stop to discuss the question, generally. He passes right on, with his nose in the air. The writer once kept a record of eighty-eight farmers solicited at a fair, in half a day. Of these only about one-fourth took any agricultural paper, and only eleven subscribed for the short term. Communities differ. In some, half or more are readers of agricultural papers, and in others not one in five read such papers.

"We have analyzed this matter quite thoroughly, trying to get at the cause of the prejudice against book or paper farming. We have watched farmers at fairs who said they took no farm journal, and would not subscribe, and have seen them invest twice the cost of the paper in gambling schemes, tests of strength, etc. They are men whose education has been neglected. They have been taught that 'paper farming' is no good, and they are men who do not

take to study from a printed page. Their knowledge of farming is all empiric, and any progress they make comes from absorption. They do not know how to make use of the information conveyed in agricultural articles. They have not the remotest idea of the constituent elements in plants, and hence, of the fertilizing elements required to produce them. Occasionally these men are induced to subscribe for a first-class farm journal, and after a three months' or a year's trial they declare it is worth nothing. They simply do not know how to use it to advantage, and they do not read it."

The article further states that if agriculture were taught in rural schools there would be more readers of agricultural papers. The insight and knowledge obtained in this way by the future farmer will make him a closer student, and a patron of a wide-awake agricultural paper. There is a lot of sound truth in this line of reasoning. The successful farmer of the present day is the man who keeps himself thoroughly abreast of the times in so far as his own profession is concerned, and the only way to keep abreast of the times, in so far as agriculture is concerned, is to read an up-to-date weekly agricultural paper. No farmer to-day can afford to be without such a medium of receiving information regarding his own work and business. The weekly farm paper is more of a necessity in these days of keen competition and close margins to the farmer than it ever was, and the agriculturist who thinks he can get along without one had better take heed lest he come to the wall. The farmer of to-day must be a student. He must read and keep in touch with what is going on in the agricultural world around him.

## Provincial Fat Stock and Dairy Show

The Provincial Fat Stock and Dairy Show, which took place at Brantford on Wednesday, Thursday and Friday of last week, was one of the finest, if not the finest, show of its kind ever held on this continent. In all the sections, dairy cows, beef cattle, sheep and swine, no such display of really choice stock has ever been seen in this country. The large and spacious quarters provided by the city of Brantford for holding the show in were filled with the best stock that this country can produce, and that is saying a great deal. The Province of Ontario is the leader in the breeding of all kinds of purebred stock on this continent, and the display at Brantford was convincing proof, if any were needed, that our breeders are strictly up-to-date in the quality of their stock and in the kind required to meet the markets to which they cater. True, there is always room for improvement in every line of business, and when a branch feels that it is at the top and there is nothing more to be gained its quality begins to recede, which, we hope, will never be the case with our live stock. However, a visitor to the show, and many of our American friends who were there were of this opinion also, would think that many of our breeds of sheep, cattle and swine had about reached perfection and could not be improved upon.

There was a larger number of Americans present than ever before, due, no doubt, to the American Oxford Down and Leicester Breeders' Associations holding their annual meetings in Brantford during the show. A specially attractive feature was the exhibit of bacon hogs, and the killing and dressing of a number of pigs to show their bacon qualities. This was a great educational feature in the show. In fact, the whole show is one of the best educational institutions that could come into any community, and the farmers in the Brantford district who missed visiting this year's exhibition have lost by it. A large number of them did do so, however, and a great many of Brantford's citizens, ladies as well as men, attended. On Thursday, which was the big day, over \$400 was taken in at the gate, by far the largest amount ever taken on any one day at any previous show held under the same auspices. The arrangements for exhibitors was excellent, and the whole show reflects great credit upon its management. A full report of the show with the prizes awarded in the different classes is given below. Reports of the meetings in the Opera House and the breeders' meetings will appear in next week's issue.

### CATTLE.

So eager were the visitors about the cattle ring to see the animals that they crowded over the barriers, and all efforts of the President and Directors were unable to keep a clear space for the judges to do their work. There were seventy-five head of beef cattle shown and thirty-six dairy cows. Of the beef animals thirty were grades and forty-five were in the pure-bred classes. These were sixteen Galloways, fifteen Shorthorns, ten Polled Angus, three Devons and one Hereford. The Galloways, while the most numerous, were not in fat stock show condition, being only moderately fat—good butchers' cattle—no more, but in their black woolly coats made a fine exhibit.

**SHORTHORNS**—The Shorthorns were the feature of the show, and, while there were but three or four plums, the bulk were good animals—thick-fleshed and meaty. The Grades, with two or three exceptions, were all Shorthorns, and there are few experts who could have separated the classes of purebred and grades. The dates this year are from the first of September, which conforms to the dates fixed by the great fall fairs, so that an animal calved on or after September 1st, 1897, was eligible to show as a calf under one year old, while in reality it might now be 15 months. In the class for steers under 3 years old, three Shorthorns faced the judges. All were pure white. First went to Lord Minto, by Sittyton Chief, 17060, shown by Mr. Wilson, of Fergus, Wellington county. This was one of the best animals in the show—well grown, thickly and evenly fleshed, with good quarters and grand rib—a finished beeve. He was eventually the runner up for the sweepstakes, and many good butchers thought him the best animal in the show. In yearlings three roans and a white were shown. J. Oke & Sons, Alvinston, won with a good roan, son of Sir Walter 17,442. He was the heaviest in the ring with a good front and thick rolls of fat on the rib. Second went to Harry Smith, Hay, for a white son of Abbotsford, 19446, a much smaller animal, somewhat younger, but very neat and nice. Mr. Smith was sweepstakes winner last year with a brother of this steer. In calves there were only two shown—one a big roan, son of Scottish Leader 21,658, shown by J. Oke & Sons. This was a September calf, and so well had he been forced that a cattle buyer coming to the ring during the judging asked, "Is that a three-year old?" In the cow and heifer classes for Shorthorns there were only two in each class, perhaps the most notable animal being Roan Lily, by Lord Abbot 20707, shown by J. Freid & Sons, Roseville, and a very good heifer. She was grand above, with plenty of width and very evenly fat.

**OTHER PURE BREEDS**—Herefords and Polled Angus showed together—the only Hereford in the show captured first place in two-year-olds. This animal shown by John Brown, of Galt, was well-fitted—a trifle patchy but showing a good back and a grand loin. In yearlings, Walter Hall had a neat compact block in the Polled Angus Robin, sire Lucretins, 146. This animal was a winner at the fall shows and easily repeated here his former winning. He is well-ribbed and the blockiest animal in the show on very short legs. H. McDougall, Guelph, won with Hyman's Lassie, 22607, in the Cow class with James Bowman second and third. In the Galloway Devon group W. J. Rudd, Eden Mills, won with aged cow and first and second for two-year olds. The former a big cow and the latter were fatted though not very smooth animals. They looked, with large horns and long legs, quite different from the shaggy, short-legged Galloways. In yearlings, Thomas Lloyd Jones & Sons, Burford, won with Blanche of the Oaks, 13573, a nice yearling with grand coat of hair. In calves, D. McCrae, Guelph, won first and second with a neat pair of black beauties. Allan and Robt Shaw, Brantford, won several prizes, notably second place for Countess of High Park, 10803, a short-legged cow, with rich marked meat claimed by all the Galloways.

**GRADES AND CROSSES.**—This was the feature of the show. Seven two-year-old steers faced the judges. John Campbell, Woodville, the well known Shropshire breeder, came first with Perfection, by a white son of the well known Scotch bull, Indian Chief. This is a sweet steer, not over ripe, with a great, wide top, and fine front. Not only did he come out winner in his class, but he also won the Dominion Shorthorn Breeders' prize, and also the championship of the show. The next was the yearling class—animals now just about two years old. They were a fine, level lot—the beef now required; the kind that pays the farmer and pleases the eater. They are beyond the baby-beef stage, and, while the meat may not be as firm as if they were kept another year it is more juicy and palatable. The profit and quick returns in marketing such two-year-olds should commend itself to every feeder; weighing from 1,200 to 1,400 lbs. they are just the article for the best city trade. James Leask, Greenbank, came first and third with animals sired by Moneyfuffel Lad, the first prize white and the third a very smooth-skinned roan. Thos. Russell & Son, Exeter, came second with a red and white, very thick-fleshed. In the calves, these were the first reds seen in the show, as it happened a solid red lot. James Leask had an animal of great promise, a very good calf. Deep, very deep; as we usually have with great depths, a trifle flat on the ribs. In the cows, the Polled Angus shown by James Bowman, Guelph, easily beat the Shorthorns, though there were some good ones of the red, white, and roan. In the heifers, James Leask captured both the red ribbons in very good classes. Second in the two-year-olds went to J. Freid & Son for a white heifer, and the yearling second place to John Campbell.

**CHAMPIONSHIP.**—Seldom has there been seen a more exciting finish than the contest for the championship of the show. Nine of the most likely first-prize winners lined up. Two polled blacks and the solitary white-faced Hereford. Two whites and four roans, or red and white and roan. The sides of the ring were lined with eager watchers, many ladies in the group, and the crowd so great they had but a slim chance of seeing what was being done. After going carefully over the lot, three were retained and the others sent in. Then came the tug of war, and a close contest sent John Campbell's steer the ribbon.

### SHEEP.

The exhibit of sheep was one of the best ever seen at the show. Last year the quality of the exhibit was good, so that it was difficult to improve upon it very much. The demand for sheep this fall has been large, and many exhibitors had disposed of good sheep that would have shown up well in their classes. Nevertheless the exhibit

was a creditable one, and there was the keenest kind of competition in most of the classes, and the ability of the judges was put to the highest test in making the awards.

**COTSWOLDS.**—The two exhibitors in this class were John Park & Son, Burgessville, and Geo. Allen, Oriol, the former carrying off the bulk of the awards. For ewe, 1 year and under 2, four nice sheep were shown. Park & Son came in for 1st, 2nd, 4th, and Allen 3rd. The same order was preserved in section 2 ewe lambs, with the exception that Allen got 2nd instead of 3rd. In the winter yearling section Park & Son had no competition. The order was reversed in wether lambs, with Allen 1st with a good typical animal. For 3 wether lambs Park & Son got 1st and Allen 2nd. In pen of 3 ewes the same order was preserved.

**LINCOLNS.**—These were out in good force, especially in ewe lambs, when 12 lambs faced the judges. The honors were divided between Gibson & Walker, Ilderton, and Wm. Oliver, Avonbank, who exhibited many of the prize-winners at the Omaha Fair. In the yearling ewe class Oliver came in for 1st and 5th, Gibson & Walker 2nd and 3rd, and Wm. West, Ilderton, 4th. Under 1 year Gibson & Walker were 1st and Oliver 2nd. In the three wether classes Gibson & Walker had no opposition. For pen of 3 ewes under 1 year Gibson & Walker were 1st and 4th, and Oliver 2nd and 3rd.

**LEICESTERS.**—In this section A. W. Smith, Maple Lodge, J. M. Gardhouse, Highfield, Orr & Lillico, Galt, and the old reliable Jno. Kelly, Shakespeare, had out some fine representatives of this breed. Wherever the good qualities of Leicesters are known they have become popular. In ewes one year and under, Gardhouse was 1st, with A. W. Smith 2nd, 3rd, and 4th. Under one year, 1st and 2nd went to Jno. Kelly, with Gardhouse 3rd and 4th. Orr & Lillico had it all their own way in the wether classes, the others not competing. For pen of three ewes, under one year, Kelly was 1st, Gardhouse 2nd and Orr & Lillico 3rd.

**OXFORDS.**—A very fine lot of sheep, in every section of this class, faced the judges, Mr. George McKerrow, W. Conson, and Professor Curtiss, of Iowa. Both judges stated that the animals shown were as fine as any they had examined. For yearling ewe Smith Evans, Gourcock, took 1st and 2nd prizes, and J. H. Jull, Mt. Vernon, 3rd, and 4th. For yearling ewes under one year, twelve lambs faced the judges and a most interesting contest took place. Andrew Elliott, Pond Mills, took first place, and Smith Evans, 2nd and 3rd, while Mr. Jull's lamb was highly commended. The judges here diverged from the usual routine and address the crowd which had gathered pointing out why the awards were made. The first prize winner was a large, lengthy lamb of a good butcher's type, while the second was small and shropy in character. Mr. McKerrow pointed out that a typical Oxford, would come between the two, but the first place was given to the larger because it was a better butcher's sheep. For yearling wethers, Mr. E. Wright, Glanworth, secured 1st honors, J. H. Jull 2nd and 4th and W. H. Beattie, 3rd. Smith Evans did not show for wethers under one year and for pen of wethers Andrew Elliott had no opposition. For pen of ewe lambs Smith Evans won 1st for three lambs of superior killing qualities and with little waste. The judges considered the second, Andrew Elliott's, as being too fat, while the third which went to Jull was not fitted up enough.

**SHROPSHIRE.**—There was the keenest kind of competition in this class and honors won were well earned. The leading breeders of the class were out in good shape. For yearling ewe 1st and 2nd honors went to Jno. Campbell, Woodville. The first winner was shown as a lamb last year. D. G. Hanmer & Sons, Mt. Vernon, were in third place. In ewe lambs there was strong competition, and the judges had no easy task. Jno. Campbell was again the winner of first honors, with D. G. Hanmer & Sons coming in for 2nd and 3rd places. For yearling wethers 6 entered the ring, 1st and 4th going to Hanmer & Sons, 2nd and 3rd to Richard Gibson, Delaware, and 5th to W. E. Wright, Glenworth. For wether lambs there was strong competition with Gibson winning 1st and 3rd places, Hanmer 2nd, Beattie 4th and Campbell 5th. For pen of 3 wethers Gibson won 1st, Hanmer 2nd and Wright 3rd. Campbell did not show in this section.

**SOUTH-DOWNS.**—The exhibit of these was a very fine one indeed, and like the Shrops honors were not easily won. In ewes, 1 year and under 2, 1st and 4th places went to John Jackson & Sons, Abingdon, 2nd and 3rd to W. R. and G. L. Telfer, Paris. For ewes under one year Jackson & Sons again won first place, with T. C. Douglas, Galt, 2nd and A. Simenton & Sons, Blackheath, 3rd. In wether class, 1 year and under 2, Telfer won 1st and 3rd places and Wrights 3rd. For wethers under 1 year there was very strong competition, and 12 lambs faced the judges. Here again Jackson won 1st and 2nd, Telfer 3rd, Hanmer 4th and Simenton 5th. For pen of wethers Jackson was 1st, Hanmer 2nd and Simenton 3rd. Jackson was also first for 3 best ewe lambs.

**DORSET HORNS.**—A very good lot of these was shown, with Henry Harding, Thorndale, chief exhibitor. For ewes 1 year and under 2 Harding won 1st, 3rd and 4th, and Jas. Bowman, Guelph, 2nd. For ewe under 1 year 1st, 2nd and 3rd went to Harding for 3 lambs that would be hard to beat, Bowman won 4th place and W. E. Wright 5th. Harding won all the honors in wether classes.

**HAMPSHIRE AND SUFFOLKS.**—There were only two exhibitors. Jno. Kelly, Shakespeare, who won 1st in yearling ewe class and W. J. Rudd, Eden Mills, who had the honors in the other sections where he had no opposition.

**GRADES AND CROSSES.**—There was a fine display in this class with such well-known breeders as Jno. Campbell, who carried off 1st and 2nd honors for the ewe one year and under two, Gibson & Walker, D. G. Hanmer & Son, W. H. Beattie, Rich. Gibson and J. H. Jull &

Son. There was keen competition in all sections in which grades and crosses of the different pure-breeds competed.

The grand sweepstakes for the best sheep exhibited at the show, a plough donated by the Wilkinson Plough Co., Toronto, was awarded to Jno. Jackson & Sons, Abingdon, Ont., breeder of Southdown sheep. At the time of going to press we had not been able to get the names of the winners in the Leicester and Shropshire specials.

## SWINE.

No exhibit at the show attracted so much attention as that of swine, and never, perhaps, on this continent has there been such a fine exhibit of bacon hogs as that seen at Brantford last week. Visitors to the famous Royal Show state the exhibit was much superior to that seen at England's famous show. The great attraction was the special bacon hog exhibit, and that feature of it where the hogs were killed and dressed, and prizes awarded for the best sides for the export bacon trade.

**BERKSHIRES.**—These were out in good strength from the well-known herds of Geo. Green, Fairview, and T. A. Cox, Brantford, with the honors pretty evenly divided. For barrow 6 months and under 9, 1st and 2nd went to Cox and 3rd to Green, while for barrow under 6 months the honors were reversed, Green securing 1st and 2nd places and Cox 3rd. For sow 6 months and under 15, 1st went to Green's Highclere. This sow is a fine Berkshire type, Canadian bred, and won the sweepstakes for the best animal in the swine department, a very high honor indeed. Green also won 2nd, and R. Agnew, Acton, 3rd. For sow, 6 months and under 9, Green won 1st, 3rd and 4th places, with Cox 2nd. For sow under 6 months Green was 1st and Cox 2nd and 3rd, for two very fine young sows. For three pigs, the offspring of one sow bred by exhibitor, Green was 1st and Cox 2nd.

**YORKSHIRES.**—There was a fine display of improved Yorkshires, J. E. Brethour, Burford, and Joseph Featherston, Streetsville, being the chief exhibitors. Mr. Brethour exhibited many of the animals from his herd which won him so many honors at Omaha last October. For barrow 6 months and under 9, 1st and 2nd honors went to Henry Dedels, Kossuth, and 3rd to Featherston, and Brethour 4th and 5th. These last two were fine types of the breed, and many were of the opinion that they should have been higher up in the lists. For barrow under 6 months Featherston was 1st and 2nd, and Brethour 3rd. For sow 9 months and under 15, Brethour was 1st with a fine sow, the 1st in her class at Toronto last fall. The 2nd went to Featherston. For sow 6 months and under 9 Brethour was 1st, Featherston 2nd, and Dedels 3rd. For sow under 6 months Featherston was 1st and 2nd, and Brethour 3rd and 4th. For three pigs, offspring of one sow bred by exhibitor, 1st honors went to Brethour for three beauties out of Oak Lodge Cinderella, and 2nd to Featherston.

**CHESTER-WHITES.**—There was a good display in this class, and a number of the leading breeders of this kind of hogs had some of their very best specimens on exhibition. In Sec. 1 barrow, 6 months and under 9, H. George & Sons, Crampton, carried off 1st and 2nd honors; Wm. Butler & Sons, 3rd and 4th; and Daniel DeCoursey, 5th. For farrow, under 6 months, George & Sons were also 1st and 2nd; Butler, 3rd; and DeCoursey 4th and 5th. Some fine sows, 9 months and under 15, were shown and honors were divided as follows: George & Sons, 1st; Butler & Sons, 2nd, 3rd and 4th; and DeCoursey, 5th. For sows, 6 months and under 9, seven animals faced the judges, and their awards were the same as in Sec. 1. For sows, under 6 months, the same division of the prizes resulted, and for three pigs, the offspring of one sow, bred by exhibitor, George & Sons were again 1st, having secured the coveted red ribbon in each section; DeCoursey, 2nd; and Butler & Sons, 3rd.

**POLAND CHINAS.**—There was a good exhibit of these, and quality fine. The chief exhibitors were W. & H. Jones, Mount Elgin, and W. M. & J. C. Smith, Fairfield Plains. For barrow, 6 months and under 9, 1st honors went to W. & H. Jones, and 2nd and 3rd to W. M. & J. C. Smith. In the next section, for barrow under 6 months W. & H. Jones won 1st and 2nd, and W. M. & J. C. Smith 3rd and 4th. There was a fine lot of sows shown. For sow 9 months and under 13, 1st and 2nd prizes went to W. & H. Jones, and 3rd to W. M. & J. C. Smith. For sow 6 months and under 9, 1st and 2nd went to the Mount Elgin herd, and 3rd and 4th to Fairfield Plains. The Mount Elgin herd also took 1st, 2nd and 3rd places for sows under 6 months, and also 1st and 2nd for 3 pigs, offspring of one sow bred by exhibitor.

**SUFFOLK AND ESSSEX.**—The only exhibitors in this class were Joseph Featherston, M.P., and T. C. McClure, Meadowvale, who showed some fine types of the breeds named.

**TAMWORTHS.**—These made an exceedingly strong exhibit both in quantity and quality. The large number of exhibitors in this class indicates the popularity of this bacon breed. Competition was keen in all the sections and honors were not easily won. For barrow 2 months and under 9, A. Elliott & Sons, Galt, were 1st. H. George & Sons, Brampton, 2nd and Wm. Butler & Sons, Durham Centre, 3rd. For barrow under 6 months there were six competitors. First honors went to H. George & Sons, 2nd and 3rd to Wm. Butler & Sons, Dereham Centre, and 4th to Norman M. Blain, St. George. In section 3, sow 9 months and under 15, 1st and 3rd prizes went to Norman M. Blain for two fine animals of the Tamworth type, and 2nd place to Wm. Butler & Sons. For sow 6 months and under 9, eight animals faced the judges. Norman M. Blain was again first and W. R. McDonald, Ridgetown 2nd and 3rd. There were no less than 12 animals shown in section 5, sow under 6 months, and the ability of the judges was put to the test to make the awards, all three prizes went to W. R. McDonald. For three pigs, offspring of one sow, bred by exhibitor, Butler & Son were 1st and A. Elliott & Sons 2nd.

**DURCO JERSEYS**—There was a fine display of these, in which the chief competitors were Tape Bros., Ridgeway, Wm. Butler & Sons, and W. M. & J. C. Smith. F. W. Trehune, Brantford, was also a strong exhibitor. To judge from the number of exhibitors, this breed is becoming more popular. There was keen competition in all the sections, particularly in sections 2, 3, 4 and 5. Tape Bros. carried off first honors in most of the sections, and had on exhibition some very fine pigs, as also had Butler & Sons and W. M. & J. C. Smith.

**GRADES AND CROSSES**—A number of good pigs was shown in these classes, the principal exhibitors being A. Elliott & Sons, Butler & Sons, Norman M. Blain, and J. Featherston.

The prize for the heaviest hog at the show was awarded to Robt. Agnew, Acton, Ont., though George Green's Berkshire came near gaining the red ribbon.

#### EXPORT BACON HOGS.

The keenest interest was shown in this branch. All animals were judged as to their suitability for the export bacon trade by representatives of the pork packers in the persons of Mr. Chester Fearman, Hamilton, and James Leach, of the Wm. Davies Co., Toronto, with C. W. Yapp, Brantford, as a reserve. Prizes were awarded for the best bacon hog in the different breeds, and a grand sweepstakes with special prizes for the hogs that killed the best.

**BERKSHIRES**—Three animals faced the judges. They were all of good length, but, as they were fitted for the regular classes, were too heavy for the export trade. Geo. Green was first and third, and T. A. Cox, second.

**YORKSHIRES**—As was to be expected this breed showed up well in this class, and the judges had considerable difficulty in judging. The two lots (four in each) which were in it for first place bothered the judges considerably. These were shown by J. E. Brethour and Jas. Featherston, the latter getting first place and the former second, and Henry Didels third. Many were of the opinion that Oak Lodge should have had first honors, but the judges did not seem to think so.

**TAMWORTHS**—Some capital bacon hogs were shown of this breed, the winners being H. George & Son 1st, A. Elliott & Sons 2nd, and W. R. McDonald 3rd. Wm. Butler & Sons showed in this class, but as one of their pigs was too thin they had to drop back.

**CHESTER WHITES**—The Chesters showed up better as bacon hogs than many expected. First honors went to D. DeCoursey, Bornholm; 2nd to Wm. Butler & Sons, and 3rd to R. H. Harding, Thorndale, who had a really nice lot on exhibition, two of which showed up pretty well in the killing test.

**POLAND CHINAS**—First and third went to W. & H. Jones, Mount Elgin, and second to W. M. & J. C. Smith, Fairfield Plains.

**DURCO-JERSEYS**—F. W. Trehune won first place and Tape Bros. second in this class. The only competitor in Suffolks and Essex was Jos. Featherston.

**GRADES AND CROSSES**—Some extremely fine bacon hogs were shown in this class, and the judges had to make some very fine distinctions in making the awards. First honors went to J. M. Wilson, Mount Vernon, for a Tamworth cross, though showing Tamworth qualities to a very marked degree. This was also the case with the second prize pig shown by Butler & Sons, which was a Tamworth and Durco-Jersey cross. The third prize went to A. Elliott & Sons, Galt, for a Tamworth and Berkshire cross, a very fine lot for the export trade.

For the best 4 bacon hogs of any breed or grade there were 25 different lots entered in the catalogue, nearly all of which faced the judges. The coveted red ribbon in this class was looked upon as the highest honor in this section, so that the keenest interest was shown in the contest. After a great deal of handling and examining the 1st honors went to J. E. Brethour, Brantford, for four Yorkshires, ideal bacon hogs. One of the judges stated that a barrow in this lot was one of the best pigs on the ground. The 2nd prize also went to the Yorkshires, Joseph Featherston being the winner, his lot being a very close competitor for 1st. The 3rd prize went to J. M. Wilson for his Tamworth grades, winners of 1st place in the grade class. H. George & Sons won 4th place, and Wm. Butler & Sons 5th.

Eighteen different lots were slaughtered for the two best export bacon hogs dressed, making thirty-six hogs in all. These hogs were on exhibition till the second day, when they were killed and the awards made on the last day of the show. This was really the great feature of the show, not only because it was a new one, but because of the great object lesson it furnished of the kind of hog that was really required for our export bacon trade.

The prizes in this class were awarded as follows: First to H. George & Sons, Crampton, for a pair of Tamworth grades; 2nd to Jno. W. German, St. George (Tamworth); 3rd to J. R. McWilliams, Mt. Vernon (Tamworth); 4th to Geo. Green, Fairview (Berkshire); and 5th to Jos. Featherston (Yorkshire grade).

There were thirty-six cows competing in the dairy test, but as the results were not made out till this week we will have to reserve our report till next issue.

There was an interesting exhibit of cream separators shown by R. A. Lister & Co., Montreal, and of grain grinders and windmills by the Gould, Shapley & Muir Co., of Brantford.

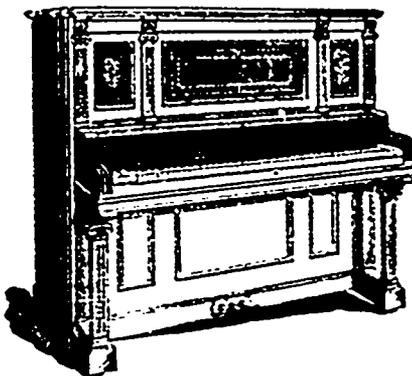
A very interesting, as well as valuable, exhibit was made by the Dominion Department of Agriculture of chickens from the poultry fattening stations dressed, prepared and packed for the export trade.

Write for our list of Cash Prizes and Premiums.

# Gourlay, Winter & Leeming

188 YONGE STREET.

## PIANOS..



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At less than manufacturer's prices. Consolidation of interests. Four Warehouses in one. Few Local Agencies, make this possible.

**GOURLAY, WINTER & LEEMING** want to submit prices to every intending buyer in the Dominion. Write us; state the terms you want, and we will send you full information by return mail. We guarantee every Piano we sell for at least five years. We ship subject to approval, and pay return freight if Piano is not fully satisfactory.

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### "Stella" Music Boxes

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'STELLA' MUSIC BOXES are unequalled for Sweetness, Harmony and Volume of Tone, and have smooth, metallic tune sheets playing thousands of tunes. No Pins or Projections to break off.

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## GOURLAY, WINTER & LEEMING,

188 Yonge St., TORONTO.

**CHEESE AND BUTTER-MAKERS' MEETING.**

A meeting of the Executive Committee of the Cheese and Butter-Makers' Association was held at the Grigg House, London, on Nov 23rd. Members present: President T. B. Millar, Kincardine; G. H. Barr, Sebringville; G. E. Goodhand, Milverton; John Brodie, Mapleton; and W. W. Brown, Attercliffe Station. The business of the meeting was the preparing of the programmes for their Annual Convention, which will be held in Listowel on 1st and 2nd February, 1899, and also the making of arrangements for the cheese and butter exhibit, which will be held in connection with the convention, when the following prizes will be awarded:

- First Prize \$25; Second \$10; Third \$5; one Sept. Cheese, white.
- First Prize \$25; Second \$10; Third \$5; one Sept. Cheese, colored.
- First Prize \$25; 2nd \$10; 3rd \$5; one 50 lb. package Winter Creamery Butter.
- First Prize \$15; 2nd \$10; 3rd \$5; 10 lb. prints Winter Creamery Butter.

A new feature of this meeting will be that the cheese scoring the highest number of points will be bought by the association, and cut up and distributed to the members, and at the same time the judge will address them on the qualities of fine cheese.

**SCALY LEGS ON HENS.**

Scaly legs are so easily cured that there is no excuse for allowing flocks to get in bad condition from the disease. Take the kerosene can into the pen at dusk. Pick up each hen and pour the oil right from the spout, from the knee toward the feet, taking care not to get any on the skin above the shank. Sometimes one application will entirely kill the scale insects. Those that still look badly after a few days should be kerosened again. But little scale will usually survive the second time. If any does, scrape a little with a knife and apply kerosene with a pocket oiler.

**Publishers' Desk.**

**Pure Salt.**—If all butter-makers would use pure salt it would increase the value of their products and save much loss and annoyance to dealers. "Rice's Pure Salt," which is advertised in this issue, is an article of great merit and excellence. There can be no mistake in using it, as there is only one quality of it made, and that is the best.

**A Strictly Reliable Firm**—We ask our readers to look out for the special advertisement of The Lawrence, Williams Co., the proprietors of Gombault's Caustic Balsam, the great French Veterinary Remedy, which will appear on the back cover of our issue for Dec. 20th. We have known this Company for a number of years and have found them one of the most honorable and reliable houses with whom it has been our pleasure to have business relations.

**Satisfactory Results**—The Waterloo Mfg. Co., of Waterloo, Ont., write under date of 25th Nov., 1898, as follows: "We are receiving good results through your paper, especially on food boilers and gasoline engines,



## 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.

# SOUVENIRS

## HAVE AERATED OVENS

**SCIENCE IN COOKING**



It is admitted that cooking to-day has become a science. If the food we eat is to do the good intended, it must be properly cooked.

The skilful cook has worked wonders by her skill.

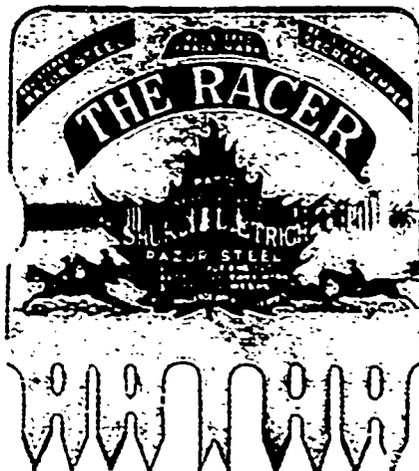
But the cook cannot do everything. She must rely on the stove in which the cooking is done. The Souvenir Kitchen Range has combined with science, and given Canadian cooks a Stove scientifically constructed, and on which they can rely at all times. It cannot fail. Souvenirs are sold everywhere. One will last a lifetime.

—The Aerated Oven is the great scientific principle of SOUVENIR Stoves—making them an absolutely perfect cooker.

**THE GURNEY-TILDEN CO. LIMITED** **\$155.00** in five prizes for five best Short Essays on Souvenir Ranges. Ask for particulars.  
Manufacturers, HAMILTON, CAN.

**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.**

enquiries coming in daily. Our Company wish to thank the many readers of FARMING for their liberal support in response to our advertisements, especially in the food boiler line. Our sales in this particular line have been enormous and orders are constantly coming in, keeping our Elmira branch busy. We wish FARMING and its numerous readers success and a prosperous 1899."

**A Business Education** One of the educational institutions which has been found of great practical value to the young men of one of the most thriving districts in Ontario, and has placed a very large number of them in responsible and lucrative positions, is the Guelph Business College, now under the able superintendence of Mr. J. Sharp. Mr. Sharp is the founder of the Galt Business College and is thoroughly qualified for the position he occupies. At one time he was a newspaper reporter and is consequently an expert stenographer. Guelph possesses the advantage of a central location, healthy surroundings, good water, and unexcelled railway facilities. Being also a manufacturing town and a leading business centre, it has great advantages for the promotion of a business education.

**The Steel King Windmill**—Our issue of the 5th Nov. contained an advertisement of a windmill, in which a cut of the "Steel King" was inserted by mistake, having been inadvertently given to the printers with the copy for the advt. in question. The "Steel King" windmill is made only by the Gould, Shapley & Muir Co., Limited, of Brantford, under patents of their own and, we believe, is entirely different in construction, operation, and the resulting motive power to that mentioned in this advertisement. It is a first class windmill in every respect, and is not to be confounded with any cheap machine. To any one who knows anything about windmills the mistake must be apparent, and these agents and canvassers who would take advantage of it, or attempt to make capital out of it, are people who are well worth watching. They are not to be trusted.

**A Successful Business**—Our Representative having called upon the enterprising firm of T. Iton Bros., of Guelph, was much pleased to learn from Mr. Tilton that they never had better and brighter prospects for business than at the present time. Their far-famed implements have won for them a reputation and a name which some older firms might well look upon with jealous eye. So much we may say as to the facts of this that they have in some cases been forced to take measures in order to protect the patents of the excellent machines they are building, the last case having been contested successfully very recently at London, Ont., which was done in the interest of their far-famed Pea Harvester and Buncher, which they manufacture, all improvements on same being fully covered by patents, and their "motto" being "Not how cheap, but how good," can safely predict a bright future for them.

### Stock Notes.

MR. GEO. H. LEVON, of Kendall, Ont., writes on 24th November, 1898: "Enclosed is three dollars due you for subscription. The paper is well worth the money, and more. Please send me a receipt."

MR. W. W. BALLANTYNE (formerly The Ballantyne & Son), of Stratford, Ont., is offering a choice lot of Ayrshire calves from the best milking strains in Scotland. See his advertisement in this issue.

MR. J. A. GLENHILL, of Petrolia, Ont., writes under date 7th November, 1898: "Enclosed please find one dollar, for which renew my subscription to FARMING. This is the first year I have taken the paper, and am satisfied. I have found many valuable articles in it during the year, and consider it should be in the home of every farmer."

MR. A. C. HALLMAN, of New Dundee, Ont., is making a new departure for advertising Banded Plymouth Rock poultry for sale in addition to his Holstein-Friesian cattle.

## THOSE \$6 ROBES

IT'LL be harder to get one of 'em at \$8 or \$9 a month hence than it is now to get one for \$6. Nothing like 'em ever seen in Canada for the money. Without saying much, we're sending them out in dozens every day to all sections of the country. Orders coming in with every mail. Why wouldn't they? Never be a chance like it again. Think of it! A handsome, long haired Goat Robe, 66 x 72 inches, plush lined, felt edged, selected skins, and entirely our own make for \$6. Not the kind of Robe that's made up in a hurry, but made specially by our own hands. No haste about the work. You get 'em for \$6, but they're being sold at \$8, and even higher. Can't last much longer—so hurry up.

MONEY BACK IF NOT SATISFIED.

**Cummings & Sellers** = 244 Yonge Street, TORONTO, ONT.

Manufacturing Furriers

22 WE PAY CASH FOR FURS

Mr. Hallman has long been known as a successful breeder of pure-bred poultry, but has never offered his stock of them for sale through the medium of the agricultural papers.

The annual meeting of the American Gallopway Breeders' Association took place at Kansas City on November 3rd last. The association is in a very prosperous condition, and has done better work during the past year than any in its history. An article by Col. McCrae, Guelph, on the "History of Gallopways" has been printed in pamphlet form and distributed among the breeders. Frank B. Hearne, Independence, Mo., is secretary of the association.

SPECIAL ATTENTION is called to the advertisement of Messrs. H. Cargill & Son, of Cargill, Ont., in which there are offered for sale a number of young bulls imported by them from Scotland. These animals are said to be a choice lot, and were selected personally by Mr. Cargill with a view to the improvement of Canadian stock. They also offer some very high-class home-bred stock. Anyone interested will do well to write Messrs. Cargill & Son for particulars.

### FARMERS WANTED

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

Alberta's Thomas-Phosphate Powder (Reg.)

Purity and analysis guaranteed. Correspond at once, as fall dressing of the land is important.

### WALLACE & FRASER

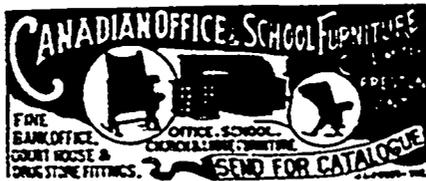
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### THE TORONTO ENGRAVING CO.

20 Bay Street, Toronto

Live Stock Engraving and  
Photographing a Specialty

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



## Ask for Eddy's

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

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,

OLINTON, ONT

MR. SIDNEY SPRAGUE (a well-known breeder of pure-bred Shropshire sheep and American Chester White swine), of Falconer, N.Y., says, 25th November, 1898: "Enclosed please find one dollar in payment of subscription. Your paper is very interesting. I frequently buy rams in Canada, and recently bought of Mr. John Campbell his noted show ram, 'The Cornet,' which has been a great winner at all the leading fairs, and he now has my second order. I consider FARMING a good farm paper, and it always finds a place on my desk."

**ADVERTISERS' OPINIONS.**

On the 25th November, 1898, the Lawrence & Williams Co., of Cleveland, Ohio, wrote: "We are so far much pleased with results."

On the 28th November, 1898, The Waterloo Manufacturing Co., of Waterloo, Ont., say: "We are receiving good results through your paper, especially on food boilers and gasoline engines, enquiries coming in daily."

Mr. R. Y. Manning, the manager of The People's Wholesale Supply Co., Toronto, says: "We are simply deluged with replies to our ad. in FARMING."

Can there be any stronger evidence of the value of a medium than this?

**THE WATERLOO MANUFACTURING COMPANY.**

The twin towns of Berlin and Waterloo possess a number of thriving manufacturing industries, but we do not think any of them excel that carried on by the Waterloo Manufacturing Co., located in the town whose name it bears. The amount of business activity centered in the premises of the Company and the magnitude of the industries operated was a surprise to the writer on his first visit, while on every succeeding visit to the place he was shown such an increasing volume of business as to convince him thoroughly of the popularity and merit of the products of the company's shops. The Waterloo Manufacturing Co. make a specialty of high-class threshing machinery, such as traction and portable engines, separators, etc. The "Champion," "Counter Balance" and "Advance Cham-

**- - BETTER THAN EVER - -**

There is nothing like having the  
Co-operation of the Farmer

The good BUTTER, EGGS and POULTRY which we get every day has over-run us with city trade. Our waggons have not been able to deliver all the orders through the city during the past week. And our country trade is away ahead of any previous year. We make prompt returns in either cash or goods. But send for as many goods as you can.

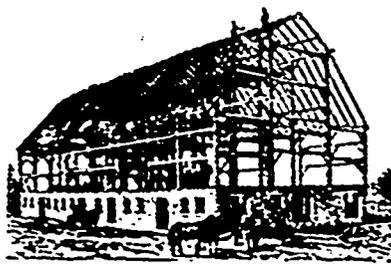
Co-operate with us and we will do you good

**THE FARMERS' CO-OPERATIVE STORE  
THE PEOPLE'S WHOLESALE SUPPLY CO.**

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

R. Y. MANNING MANAGER

**Thorold High in Quality  
Cement 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 Walls, Floors for horses and cattle, Pic Pens, Etc. Write us.

Estate of Jno. Battle Thorold  
Ont.

**THE  
BEST  
RESULTS**

in making Butter or Cheese  
can be obtained only by us-  
ing the best ingredients.

That is why

so many good butter and  
cheese makers always insist  
on having

**RICE'S  
PURE SALT**

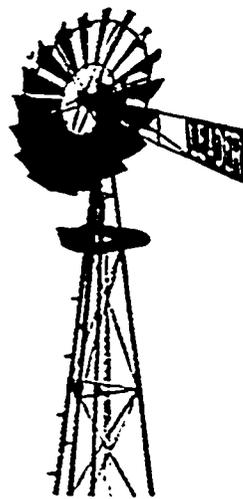
Every Package Guaranteed.

Sole Makers:

The North American  
Chemical Co., Limited

Goderich, Ont.

**The Leader**



We will guarantee this mill to be more durable and run with less wind than any manufactured. It runs on two bearings which gives it a great advantage over other makes. Its lifting is directly over the pump, by an eccentric and friction, thus doing away with the piston shaft, making it a great deal more powerful. Those who have used "The Leader" bear us out in this particular, and what is better than reliable local testimony?

Exeter, April 6th, 1898.  
The Leader Windmill, Ridgeway, Ont.  
The Steel Windmill purchased from you last fall has given good satisfaction. It does its work easy and well as any mill could do. Yours,  
COATES BROS.

"The Leader" has won for itself a famous reputation, and is now being placed in Goderich, Huron Co., Calgary, N.W.T., and throughout the entire Dominion, which speaks for its reputation.

**WHITMAN BROS.**

RIDGETOWN - ONTARIO

**Persianic  
Hen-House  
Spray**

Vermin is the most persistent enemy of the feathered stock. Keeps the fowl in had health, listless and drooping; destroying its good qualities for show, lay or breeding purposes. Not much use in doctoring the fowl until the houses are in shape. Strike at the root of the trouble by keeping them in perfect sanitary condition with Persianic Hen-House Spray. No insects or lice can live after its application and one thorough dose lasts a long time. Keeps the atmosphere pure and healthy, destroying disease germs and the bad effects of gases, vapors, etc. Makes up for insufficient ventilation in the winter months.

If your dealer hasn't it, write us direct.

The Pickhardt Renfrew Co.

(LIMITED)

STOUFFVILLE, ONT.



Trade Mark

tion" threshing machines have had such extensive sales during the past few years that the season of 1898 found the company incapable of filling the many orders that rushed upon them in the beginning of the season. In order to meet the large demand for their machines a spacious brick warehouse was built this fall along the G. T. R. siding, the structure being sixty by two hundred feet in area and two storeys high. This will be filled during the coming winter with engines and threshers ready for shipment in the early spring. Besides giving special attention to the thresher trade, the company manufacture tread powers (for one, two and three horses), ensilage cutters, straw cutters (all sizes), hay loaders (side delivery), hay rakes, grain crushers, root pulpers, plows, cream separators and gasoline engines. All lines of manufacture are guaranteed equal to any of the same class in the market.



## Cargill Herd of SHORTHORNS.

**WE ARE OFFERING FOR SALE EIGHT HIGH-CLASS YOUNG** Imported Shorthorn Bulls, of the best Scotch breeding, together with a few home-bred Bulls and a number of Cows and Heifers both imported and home-bred. Correspondence of a personal visit solicited.

Catalogues on application. Cargill Station and Post Office on G.T.R. within one-half mile of barns.

**H. CARGILL & SON,**  
CARGILL STATION AND P.O., ONT.

### TUBERCULOSIS IN CATTLE

The following letter is addressed by the Department of Agriculture at Ottawa to persons desirous of having their cattle tested for Tuberculosis, and sets forth the conditions under which the Dominion Government undertake to apply the Tuberculin Test

**FREE OF CHARGE**

DOMINION OF CANADA,  
DEPARTMENT OF AGRICULTURE,  
OTTAWA.

DEAR SIR,—In response to your letter of the . . . . . I beg to say that the following are the conditions upon which the Department applies the tuberculin test to cattle:

When a person makes application to the Department to have his cattle tested, for the purpose of ascertaining whether any of them are affected with tuberculosis, a Government Inspector is sent to test, and all expenses in connection with this are paid by the Department. The owner must accept all responsibility for the result of the test. The Government do not order the slaughter of diseased animals. No compensation will be given in cases where owners slaughter of their own free will. If any of the animals are found to be suffering from the disease they will have to be isolated and the shed or corral in which they are kept will be quarantined. The owner will then be prohibited from selling any of them or their raw products. Should he desire of his own free will to slaughter them and dispose of the carcasses for food, he will have to consult the local authorities as to whether he will be allowed to sell them. The premises in which diseased animals have been must be cleansed and disinfected to the satisfaction of the Government Inspector, as recommended on page 11 of the Farmers' Bulletin on Tuberculosis, a copy of which I enclose you. The premises in which the diseased cattle have been quarantined will also have to be disinfected and cleansed, as mentioned above, after the animals have been disposed of. When the Minister of Agriculture receives a certificate from the Inspector that the disinfection has been done to his satisfaction the premises will be released from quarantine. No application will be considered unless the owner agrees to submit all his cattle to the test.

If an applicant refuses to have his cattle tested after having made formal application, he will be charged with and will have to pay whatever expenses may have been incurred by the Department in connection with the sending of a Veterinarian to make the test.

Upon your signing and returning to us the attached form of request a Government Inspector will be sent to test your cattle.

Yours truly,  
W. R. SCARTH,  
Deputy Minister of Agriculture

The Honourable  
The Minister of Agriculture for Canada,  
Ottawa, Ontario

DEAR SIR,—I hereby request that my entire herd of cattle consisting of—

- Bulls,
- Cows,
- Steers,
- Heifers,
- Calves,

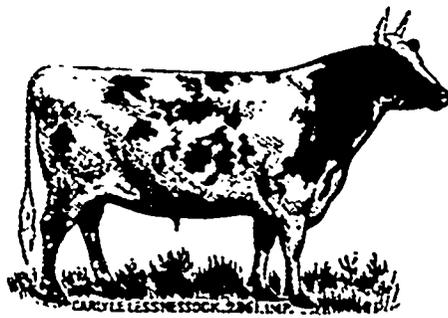
be tested for Tuberculosis with Tuberculin, and I hereby agree to conform to the Government conditions as expressed in their letter dated . . . . . which I acknowledge having received.

The nearest railway station to my premises is . . . . . on the line of the . . . . . Railway Company, and if I am notified when the Inspector will arrive at the Station I will meet him and drive him to my premises, and, when the testing of my animals is completed, will drive him back to the Station, free of charge.

Date . . . . . Signed . . . . .

**Hermanville**  
**Tamworths**  
**Yorkshires**

The Central Idea of the Hermanville Farm is to produce bacon pigs that will give to the swine- raiser the largest constant return at the lowest net cost. Young stock, rich in bacon inheritance, and capable of bringing up your herd to a high standard, generally on hand for sale. Our TAMWORTHS are of the "Parkhill Mab" strain, and are absolutely the finest herd in this country. The merits of our YORKSHIRES and JERSEYS are well known. Orders now looked for spring pigs. Address (P.O. on the farm),  
**Hermanville Farm, P.E.I., Can.**



## 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.

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



## Summer Hill Herd of Yorkshire Hogs

Large Lengthy English Type

Among them being the undefeated prize-winning boar "LOOK ME OVER"—2002—acknowledged to be

as good as any if not the best of his kind on the continent of America to day. Also "ROYAL DUCHESS," a first-prize sow at the Royal Show, Birmingham, England, in 1898, together with a choice lot of other sows, young boars fit for service, and pigs eight weeks old, single or in pairs not akin. Also choice young sows bred to "Look Me Over." We ship to order, prepay express charges, guarantee stock as described.

D. C. FLATT, Millgrove  
Telephone and Post Office

## Golden Link Herd of Large English Berkshires

Six choice young boars for sale, fit for service, among them the boar that won 1st prize for best under 6 mos. at Toronto, 1898, and 1st at the Western. Also 2nd prize boar under 6 mos. at Toronto. 12 first-class young sows from five to eight months old. Twenty-five head of pigs, 6 and 8 weeks old, sired by Perfection, a boar that has never been beaten.

Express charges will be prepaid to any part of Ontario on all orders received before January 1st.

T. A. COX, Brantford, Ont.

## BRONZE TURKEYS.

**FOR SALE**—Fifty head of choice stock from the best strains in America. My Gobbler "Royal Tom" is the best and heaviest on the continent. Won 1st prize at the Kentucky State Fair, at Paris and Covington, Ky., with a score of 98 points; 1st and special for heaviest turkey at Guelph and London poultry shows, 1898. Weight 46 pounds. Prices right. Satisfaction guaranteed.

JAMES FORD,  
DRUMMOIN, ONT.

## Chester Swine a Specialty . . .

Stock for Sale of all ages and both sexes EGGS FOR HATCHING from L. Brahmas, Buff Cochins, Partridge Cochins, P. Rocks, S. G. Dorkings, Black Minorcas, S. White and Brown Leghorns, Rose Comb White Leghorns, B. H. Games, and Cornish Indian Games at \$1 for 12. Mixed eggs if desired; also Aylesbury, Rouen, and Pekin Ducks' eggs at \$1 for 9. A few grand cocks for sale of White and Brown Leghorns, Cornish Indian Game, Pyre Game and R. B. Game stock.

Geo. Bennett & Pardo, Charing Cross, Ont.

**For Sale** 3 First-class Shortborn bulls, red roans, 10 good Yorkshire boars and sows, 6 weeks to 6 months. 20 Lengthy Large English Berkshire boars and sows, 5 months. 1 Shropshire ram lambs, from imported stock. Write

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

**HATCH CHICKENS**  
BY STEAM—with the simple, perfect, self-regulating  
**EXCELSIOR INCUBATOR**  
Thousands in successful operation.  
Lowest priced in-steam hatcher made.  
GEO. H. STAHL,  
114 to 128 N. 6th St., Ontario, Ill.

Circulars free. Send 6c. for 7 1/2c. Catalog.

# 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. HOBSON, Secretary,  
Parliament Buildings Toronto, Ont.

### STOCK FOR SALE.

The next list of stock for sale will be published the 13th of December. Lists, in order to insure insertion, should be received by the 8th of December.

## AN ABRIDGED REPORT OF AMERICAN EXPERIMENTS WHICH ARE OF VALUE TO CANADIAN FARMERS.

### THE GERMS IN MILK.

The New Jersey Station reports some interesting experiments into the increase of germs in milk from the time of milking, during the stages of handling, cooling and bottling, until it was put in cold storage.

In order to ascertain to what extent the germ contamination of milk was increased during the various stages of handling, cultures were made of a drop of diluted milk, in a gelatine culture medium, taking the milk as it passed from stage to stage in the handling, and counting the resultant colonies. Only the best gelatine preparations were used. The test shows the number of germs in a single drop of milk.

When the milk was tested immediately after each cow was milked the number of germs in a drop varied from 70 to 3,332 per cow, nine cows being in the test. When the large can was full its milk was found to contain an average from three samples of 1,575 germs per drop, the germ content having thus doubled. After bottling, the samples taken showed in four bottles 6,580, 5,040, 8,340, and 5,210 germs per drop, respectively. Four samples from a bottle that was to be kept in cool, spring water and delivered next morning at the laboratory, just as regular customers are served,

showed 6,840, 7,704, 8,037, and 7,429 germs per drop. Samples taken from this bottle next morning at the laboratory proved that, in spite of the fact that the bottle had been kept in cold, spring water, the germs had increased to over 11,000 per drop. This bottle was then kept in the laboratory at the ordinary temperature with the result that a test taken at 5 p.m. the same day showed about 300,000 germs per drop. Next morning the germs numbered from 1,000,000 to 3,000,000 per drop. This test was made on May 11th, 1897.

Six days later another successful test was made. Samples from a can of mixed milk taken at 5 p.m. gave an average of 904 germs. After the milk was cooled it was found that 200 germs per drop had been added or about 136,000,000 in all to the whole can of milk, while it was being passed through the cooler. The average milk in the bottles, as they were filled, contained 6,825 germs per drop, but those first filled tested 11,827 per drop, the larger number of germs in these being due to the fact that they received the first milk to pass through the valves of the filler, these being a fruitful source of germ infection.

At 10.30 next morning the milk kept in cold spring water showed 32,960 germs in each drop, which had increased to 80,184 an hour and a half later, in the temperature of the laboratory. At 9 a.m., in the same morning, samples were taken from milk which had not been kept in spring water, with the result that the large number of 247,744 germs were found in a single drop. At the same time a sample was taken from the same evening's milk, after it had been cooled but before bottling, which showed 117,390 germs per drop, a considerable reduc-

tion as compared with the milk that had been bottled, which shows that an enormous quantity of germs are added from the valves of the bottler, even when these are cleaned as completely as possible.

At the laboratory, under ordinary temperature, these various samples, twenty-four hours after milking, contained from 5,000,000 to 10,000,000 germs per drop, and the next morning two of the samples were coagulated. One not yet clotted gave nearly 60,000,000 germs to the drop, another over 40,000,000, and the clotted ones 30,000,000 to 60,000,000. In these latter, however, the colonies came from huge masses of bacteria, and it was impossible to ascertain the exact number.

What further proof can be needed of the importance of the greatest care in guarding the milk from germ infection by the strictest cleanliness of animals, milker and vessels? Here we find that even at the New Jersey Station, with every vessel well cleaned, the milk in its passage through the bottler receives an enormous addition of germs, and that, too, at a season of the year before flies become troublesome. It would be instructive to ascertain how many germs would be found in a sample of milk taken from a dairy where not much care is taken in handling the milk.

### THE INFLUENCE OF SILAGE ODORS ON MILK.

The objection is often made against silage that it imparts a flavor or odor to milk and butter, both when fed to cows, and also when stored in a silo near the cattle. Some experiments to test the truth of this were made at the Wisconsin Station in 1894, when it was demonstrated beyond question that, when silage is fed a short time before milking, a sweetish odor is imparted to milk, by which it may be distinguished from milk from cows not fed with silage. It was also made clear that, if the silage is fed to cows just after milking, milk produced from it could not, in the majority of cases, be separated by the sense of smell from milk from cows fed on other feed. This is pretty much in the line of experiments carried on to test the effect on milk when cows were fed turnips at or before milking, and just after milking.

It should be noted here, however, that while butter made from milk having the sweetest silage odor also possessed the same odor sufficiently marked to enable one familiar with it to classify the butter as being from silage milk, yet Chicago experts gave the silage butter in the Wisconsin experi-

ment a higher score in point of flavor. In 1897 further experiments were made at the Wisconsin Station. A quantity of sweet milk was divided into two lots, one of which was placed inside the silo on the silage for one hour. Both lots were then poured into cans and examined by a number of competent persons to see if they could detect the silage odor in the milk. Out of 120 such examinations the results in 13 cases, or more than 10 per cent., were incorrect. Again two lots of the same milk were taken to the silo, one being merely exposed in the silo for an hour, while the other had the air of the silo forced through it for the same length of time. In 7 out of 24 examinations the milk was pronounced as having no silage odor, and it was agreed that the odors taken up by these lots of milk were much less perceptible than those found in milk from cows which were fed silage just before milking time.

To study the effect of silage odors on the acidity of milk, a quantity of sweet milk was divided into two lots, one being taken to the silo where, with a small hand bellows, air from the silo was forced through the milk 1,000 times. Both lots were tested for acidity with the result that the milk treated in the silo indicated less acidity than the other lot. In other cases aeration of one lot with silo air and the other with outside air showed almost equal decreased acidity.

Sudden changes in the cow's rations usually decrease the milk yield, even when the new ration is better than the old. When it is necessary to make a change in the ration the change should be made gradually, taking at least two weeks to make any radical change.

# 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

**PLANT LIFE**, to be vigorous and healthy, must have

# Potash

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

Crops flourish on soils well supplied with **Potash**.

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

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

## Money Cannot Buy

A better churn than the **MAPLE LEAF**. None better is made. Yet the Maple Leaf Churn is inexpensive. Write for Free Circulars to the Manufacturers.  
 Wilson Brothers, Collingwood, Ont.

# Patchall

THE Twentieth Century Mender bids goodbye to the needle and thread. Welcomed by thousands of women and praised by men. No more dirt in your home from mending bags. **PATCHALL** mends grain bags, binder canvas, and all kinds of cloth. It is a great saver for the farmer. Straw passing through small holes, winding on the rollers of the self-binding harvester breech's evil. A small piece of canvas and a little **PATCHALL** saves time and money. A great success in grain warehouses wherever tried. Thousands of bags are now patched by **PATCHALL**. Eight patches, two inches square, cost a cent. If you cannot obtain it from your hardware dealer, send 25 cents, and we will mail a can to your address prepaid. Manufactured by **Domestic Specialty Co., Hamilton, Ont.**

THE HOME MONEY MAKER



## HOME WORK.

We want the services of a number of families to do knitting for us at home, whole or spare time. We furnish \$20 machine and supply the yarn free, and pay for the work as sent in.

Distance no hindrance. \$7 to \$10 per week made according to time devoted to the work. Write at once.

Name references.

**CO-OPERATIVE KNITTING CO.**  
 TORONTO, ONT.

## Dairymen, Attention!

**OWNERS** of creameries or skimming stations who have experienced difficulty in getting a good reliable pump for handling milk and water need have no further trials on that score. Write to us, and we will put you on to something of advantage to you.

**LANCASTER MACHINE WORKS**  
 LANCASTER, ONT.  
 BOX 113.



**SHOEMAKER'S POULTRY**  
 BOOK on and Almanac for 1900. 140 pages. 100 illustrations of Fowls, Layers, Broilers, Poultry Houses, etc. Tells how to raise chickens successfully, their care, diseases and remedies. Diagrams with full descriptions, Broilers and Poultry Poultry, with Layer Poultry. Price only 12c. C. C. Shoemaker, Freeport, Ill., U. S. A.

## ALL PEDIGREE STOCK-BREEDERS

Should keep in touch with Herd, Flock and Stud movements by reading the

## FARMER AND STOCK-BREEDER

The best, most complete and attractive Agricultural and Live Stock new paper. Enlarged to 35 pages weekly; frequent special issues 40 to 48 pages. Illustrations are a specialty, each number containing many of the leading prize-winners, etc. Brilliant and practical articles on the Farm, Dairy, Horses, Cattle, Sheep, Pigs, Poultry, Veterinary, etc. Unequaled as a medium for advertisements intended to reach the best class of breeders and farmers throughout Europe.

Subscription, postpaid for one year, \$2.50. Intending purchasers of British Purebred Stock should send us particulars of their requirements, large shipments and extensive connections having given our staff of expert buyers that experience which is indispensable in live-stock transactions. Enquiries welcomed. Address—

**FARMER AND STOCK-BREEDER, London, Eng**

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that pleases its readers will please its advertisers. The **Co-Operative Farmer** has the name of being a successful paper that pleased its readers from the start. Fathered by the leading farmer's organization in New Brunswick, it was quickly adopted and endorsed by the other Farm, Dairy and Stock Associations of the Maritime Provinces, and is to-day the Home Farm Paper of Eastern Canada.

Free Sample Copy and advertising rates on application to

**CO-OPERATIVE FARMER,**  
 SAssex, N.B.

FARMING

AN ILLUSTRATED WEEKLY JOURNAL DEVOTED TO FARMING AND THE FARMER'S INTERESTS.

Published every Tuesday by THE BRYANT PRESS,

44-46 RICHMOND STREET WEST, TORONTO, CANADA.

Subscriptions in Canada and the United States, \$1.00 per year, in advance; six months, 50 cents, three months 25 cents. In all countries in the Postal Union, \$1.50 a year in advance.

The date opposite the name on the Address Label indicates the time to which a subscription is paid, and the changing of the date is sufficient acknowledgment of the payment of a subscription. When this change is not made promptly notify us. In ordering change of address, be sure to give the old address as well as the new.

FARMING will be sent to all subscribers until a notice by post card or letter to discontinue is received and all arrears are paid up. Returning a paper is not a notice to discontinue. All arrears must be paid up before a name can be taken from our list. All remittances should be made by P.O. money order, express money order, or registered letter. Sending money in an unregistered letter is unsafe, and will be at the sender's risk.

Advertising rates furnished on application. All communications should be addressed to "FARMING, 44-46 Richmond Street West, Toronto, Canada."

Representative for Great Britain and Ireland, W. W. CHAPMAN, Fitzalan House, Arundel St., Strand, LONDON, ENG.

MARKET REVIEW AND FORECAST.

Office of FARMING,

Dec. 5, 1898.

44 and 46 Richmond street W., Toronto.

The somewhat quiet period in wholesale trade circles which usually precedes the holidays has been entered upon, and things are quieter at the leading centres than they were a week ago. Ontario farmers are beginning to market more of their wheat, which is likely to greatly improve trade in the country. The monetary situation in the United States is a healthy one, and the favorable reports from the Peace Commission have been assuring to the general financial interests of the country.

Wheat.

All the leading wheat-growing countries are beginning to ship more wheat with the exception, perhaps, of Eastern Canada, where there still seems to be a disposition on the part of the farmers to hold. It is difficult to advise in the matter. The largeness of this year's crop should not, however, be overlooked. Careful estimates put the excess of the 1898 crop over that of 1897 at about 300,000,000 bushels. Already five months of the cereal year have passed and only seven are to follow. The Trade Bulletin sums up the situation very concisely as follows: "Fifteen-twelfths of the year's consumptive requirements have already been met, while not three-twelfths of the world's supplies have as yet been drawn upon."

The London market has ruled quiet all week and values receded 3d. per quarter on Dec. 1st on the Baltic for cargoes afloat and spot grain. Stocks, however, are reported light and holders are not forcing sales. Receipts at Montreal, which are for through shipment, have increased very much of late. Prices there are nominal, as there is no business on spot. There has been a good demand for export of late, and the market has been steady at 68 to 69c. west with 68c. bid. Manitoba is steady at 81c. for No. 1 hard grinding in transit and 77½c. Midland. Locally red and white brings 70½ to 71½c., and goose 68½c.

Oats and Barley.

There has been a good demand in London during the week for American and Canadian oats; owing to limited supplies from Russia and light stocks Canadian have advanced 6d per quarter. At Montreal oats have sold at 30 to 30½c. for No. 2 for local requirements. Oats appear to be in good demand here at 27 to 28c. for white west. On the local market they bring 30 to 31½ cents per bushel.

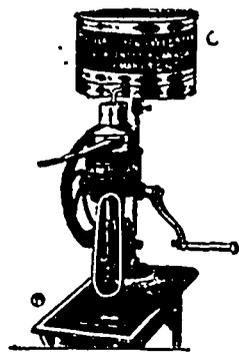
The Montreal barley market is quiet but steady, with choice malting grades quoted at 57 to 58c. It is steady here at 47 to 48c. for No. 1 and 45c. for No. 2 west. It is 3c. easier on the local market at 49 to 50c.

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.

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DEAR SIRS,—Enclosed find settlement for the Separator and oil received from you on May 28th. I placed the Separator on trial with Mr. S. D. Wilkinson, Leamington, and after 4 days he 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

Peas and Corn.

The London pea market is dull. The Montreal market is quiet on spot and quotations are 68 to 69c. The market here is firm at 61 to 62c. west. On the local farmers' market peas fetch from 61 to 64c.

Sales of American corn in car lots have been made in Montreal at 41½ to 42c. The market here appears to be firmer at 33 to 34c. for Canadian yellow west and 41½ to 43c. for American Toronto.

Bran and Shorts.

There is a fairly good demand at Montreal, and Ontario winter bran is quoted there at \$14 to \$14.50, Manitoba bran in bags at \$13 for car lots, and \$15 to \$16 for shorts. Bran is quoted here at \$11 to \$12 west, and shorts at \$14 to \$15.

Eggs and Poultry.

The markets at London, Liverpool and Glasgow continue firm and prices are well maintained, with Canadian fresh eggs in good demand. Strictly new-laid eggs are in good demand at Montreal at 22 to 22½c. in good-sized lots. Held fresh candled stock is quoted at 16c. for No. 1, and pickled stock at 14 to 15c. New-laid eggs are scarce and firm here at about 20c. Fresh gathered bring 18c. and limes 14c. Locally new-laid eggs are quoted at 17 to 18c.

There has been a good demand in Montreal for choice turkeys, which have brought during the week from \$½ to 9c in large lots for best. Straight lots of young chickens bring from 6½ to 7c., with poorer grades a cent or two less. Ducks are steady at 7 to 8c., and geese have been only in fair demand at 5½ to 6½c. The market here is quoted at 8 to 9c. for turkeys, 5 to 6c. per lb. for geese, 30 to 60c. per pair for ducks, and 25 to 50c. for chickens.

Potatoes.

The Montreal market is steady for good sound stock, with sales of car lots reported at 53c. per bag on track. The ruling figures, however, are a little below this price. Potatoes are rather quiet here, with cars on track quoted at 45c. Potatoes out of store bring 65 to 70c. per bag. On the local farmers' market they are quoted at 55 to 65c.

Fruit.

Good sound apples are in good demand on both sides of the water. Sales of choice lots have been made at Montreal at \$3 to \$3.25 per barrel. Poorer quality, however, is not good value. There is reported to be considerable quantities of apples in Western Ontario and several lots sent to the American market at about \$2.75 west of Toronto.

Hay and Straw.

Considerable quantities of hay continue to go forward to Great Britain though prices are low. There is reported to be considerable reduction in the imports of foreign hay at Liverpool with a good demand for Canadian. At Montreal considerable hay is being bought for the export trade, via American ports. The market there for baled hay is steady at \$7 to \$7.50 for No. 1 timothy, \$5.50 to \$6 for No. 2 and \$4.50 to \$5 for clover in car lots. The demand here is slow and the market dull at \$7.50 for cars on track. Baled

straw being \$4.50 in car lots. The prices for timothy and clover on the local market range from \$6 to \$9.50.

Cheese.

The cheese situation continues to show a healthier and firmer feeling all round, which is likely to be continued till the close of the season, with a likelihood of still higher prices. The English dealers, however, do not as yet seem to fully realize the condition of things on this side, and the full extent of the shortage. The total shipments from Montreal for the navigation season just closed were 1,874,990 boxes as compared with 2,099,529 boxes for the same period last year, showing a decrease of 224,539 boxes. The total shipments from New York up to Nov. 26 were 294,442 boxes as compared with 557,126 boxes for the same period last year, showing a decrease of 262,684 boxes, or a total decrease from Montreal and New York of 487,223 boxes. The stocks held in Canada are estimated to be 420,000 boxes, as compared with 650,000 at the same time last year, making a further decrease of 230,000 boxes, or a shortage of over 700,000 boxes on this side, and add to this the shortage in stocks held in England as compared with last year at this time and we have a total shortage of almost a million boxes. When the English dealers begin to realize the real condition of things prices are expected to advance with a rush, though this may not occur till after the holiday season.

The London market is reported firmer with finest Canadian quoted at 47 to 48s. There has been an advance of a shilling at Liverpool. There is an improved inquiry at Montreal, and quotations there are 9½ to 9¾c. for finest Westerns, 9¼ to 9½c. for finest Easterns. The local markets are now closed for the season.

Butter.

The English butter market is very much excited and appears to be rapidly advancing. At London values rushed up 4s. to 5s. during the week. Finest Canadian creamery is quoted here at 102 to 107s. and good to fine at 94 to 98s. with really fancy lots going as high as 108 to 110s. The same condition of things prevails at Liverpool, where finest Canadian is only a few shillings below what it brings in London. The Montreal market is also strong and somewhat excited for fancy creamery, and sales are reported at 19½ to 20½c., an advance of nearly 2 cents over last week's quotations. Stocks seem to be pretty well concentrated and in the hands of one firm. The supplies have been pretty well cleaned up in the country and it is difficult to get anything but the winter creamery, for which the outlook just now is a hopeful one. Choice creamery at Montreal is quoted at 19½ to 20c. in boxes, and 19 to 19½c. in tubs. Creamery quotations here are about the same as last week.

The total butter shipments from Montreal for the navigation season just closed were 283,910 packages, as compared with 222,510 packages for the same time last year, an increase of 61,400 packages; but the shipments from New York for the same time show a de-

crease of 119,330 packages, making a net decrease from this side of 57,830 boxes.

The quotations for dairy roll butter at Montreal are 14 to 15c. which is considered low. The receipts of dairy butter have been large here, and there is a good demand for the best, and the market is steady at 12 to 13c. for good to choice rolls and tubs. Butter rolls on the local market bring 16c. and dairy tubs 14 to 15c.

**Cattle.**

The cattle markets continue active, especially for really good stuff, but poorer grades are slow. In the west, early in the week, there was an active trade, but about the middle of the week there was a drop of 10 cents per 100 lbs. on all grades at Cincinnati and other places. The stecker and feeder trade in the west continues good, with prices well sustained. Prices here for all good quality are the same. The quality of the fat cattle on Friday's market was not very good, but better quality is looked for, as it is in good demand.

*Export Cattle.*—Choice heavy exporters bring from \$4 to \$4.25 per cwt., and light ones \$3.75 to \$3.85. Heavy export bulls bring \$3.05 to \$3.85, and medium ones \$3.25 to \$3.40.

*Butcher's Cattle.*—Choice picked lots of butchers' cattle weighing from 1,000 to 1,100 lbs. each sold on Friday at \$4 to \$4.25 per cwt. Other quality brings from \$3 to \$3.60 as to quality.

*Steers and heifers.*—Buffalo stockers were easy on Friday with prices unchanged, selling from \$2.75 to \$3 for inferior to medium, and \$3.15 to \$3.25 for steers weighing from 600 to 700 lbs. each of good quality. Good, heavy feeders are scarce and bring from \$3.40 to \$3.05 per cwt. Feeding bulls sell at \$2.25 to \$2.75 per cwt.

*Milk Cows.*—Really good cows are wanted. Prices range from \$30 to \$48 each.

*Cakes.*—Prices for these continue the same. The general run bring from \$3 to \$6 each with veals of extra quality and weight selling at \$5 per cwt.

**Sheep and Lambs.**

These have been in liberal supplies at Buffalo, though the general demand has been fairly active and prices strong. Prices for sheep here remain unchanged, ewes bringing \$3.25 to \$3.45 in bulk, with choice picked lots at \$3.50 per cwt. Bucks bring \$2.50 to \$2.75 per cwt. Prices for lambs range from \$3.00 to \$4.10 per cwt. the latter being for ewes and wethers only.

**Hogs**

The market shows some advances over last week's quotations. Choice selections of best bacon hogs, 160 to 220 lbs. each, off cars bring \$4.47 1/2 to \$4.50 per cwt.; thick fat hogs, feitch \$4.25, and light lots about \$4. Too many light hogs are coming forward, and dealers are getting more particular every day. The English market for Canadian bacon remains steady at last week's prices, and quotations are 45c. to 49c. for No. 1, and 40c. to 42c. for fat and stout sides.

# 3 Shorthorn Bulls 3

FOR SALE.

Two of them are over 14 months; are good and fit for service. All are reds.

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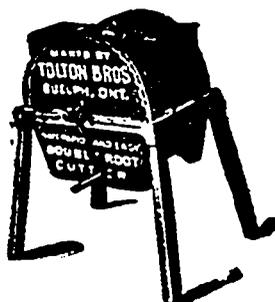
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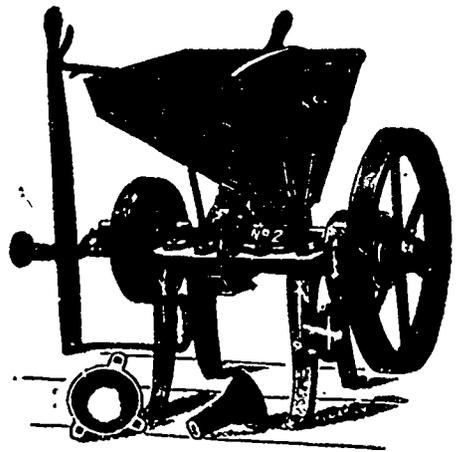
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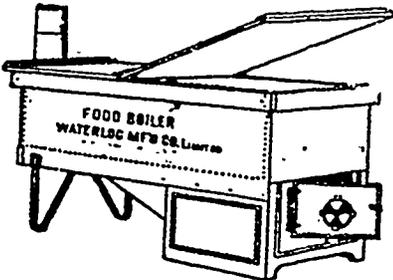
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Extract from Annual Report for 1897

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 manurial 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 fineness of division."

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Progressive Grocers Sell

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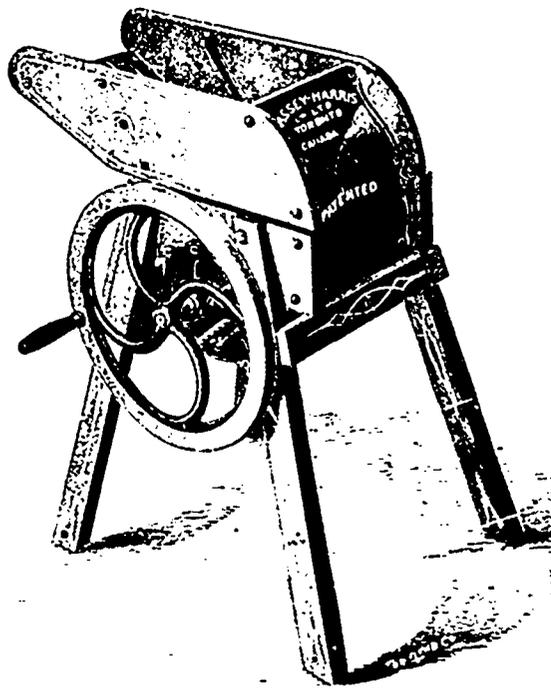
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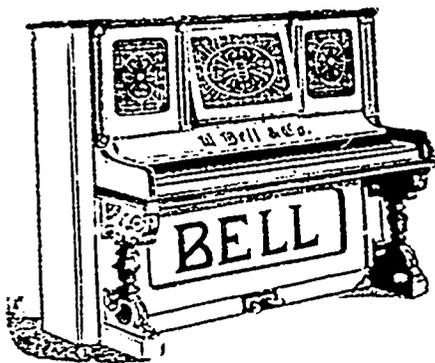
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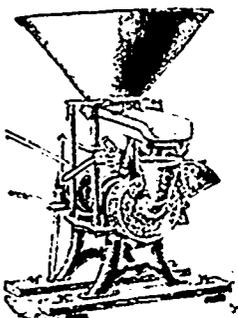
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