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# FARMING

December 13th, 1898.

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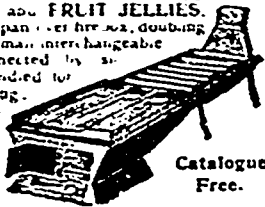
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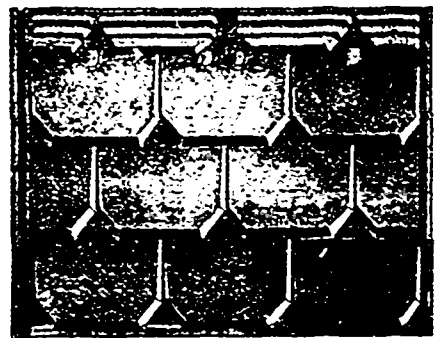
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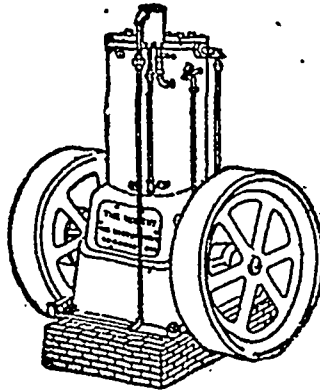
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Stock for Sale of all ages and both sexes

**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. B. Games, and Cornish Indian Games at \$1 for 15. 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, Pyite Game and B. B. Game stock.

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**EAST TORONTO (Coleman P.O.)**

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

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

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

**NORTH BRUCE HERD**

**Large White Yorkshires**

Boars fit for service and young stock of both sexes from eight weeks to six months old for sale.

Write for prices.  
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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 "Paskhill Mab" strain, and are absolutely the finest herd in this country. The merits of our **YORKSHIRES** and **JERSEYS** are well known. Orders now booked for spring pigs. Address (P.O. on the farm),  
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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.

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10 Shorthorn Bulls—good ones—at \$50.00 to \$75.00 each.  
Yorkshire Boars and Sows ready for breeding at \$12.00 each.  
Yorkshire and Berkshire boars and sows from 30 lbs. to 40 lbs. at \$6.00 each. All stock registered and shipped C.O.D.

# FARMING

Vol. XVI.

DECEMBER 13th, 1898.

No. 15

## An Ideal Farm Paper

During an interview with one of our representatives on November 30th last the Hon. Thomas Ballantyne, Stratford, Ont., made the following complimentary reference to FARMING: "FARMING meets my idea of what a farm paper should be." There is no one better known to the farmers and dairymen of this country than Mr. Ballantyne, and no one, perhaps, has done more to further the interests of the agriculturist than he. His work for the past thirty years in building up and promoting the great cheese industry of Canada has given him a place among Canada's public men of which anyone may well feel proud. Mr. Ballantyne's long experience and association with the farmers' interests puts him in a position to judge clearly what the agriculturist of to-day needs in the way of an agricultural paper, and, therefore, his above complimentary remark is given additional value.

## Agricultural News and Comments

Professor Taft, of the Michigan Agricultural College, has discovered that the curl leaf, which has been so destructive among young peaches for a few years, can be cured by spraying with a solution containing one pound of copper sulphate dissolved in twenty-five gallons of water.

To prevent onions from sprouting they should be kept during the winter as near the freezing point as possible without actual freezing. A good method is to tie them in strings three or four feet long and hang these in a dry place, but they should be well dried before being hung up.

In a very few years the export egg and poultry trade of this country will be among Canada's leading industries. Better methods of gathering and preserving the eggs are needed, and better methods of feeding and preparing the poultry for market must be put in force to make the most out of the business.

The Farmers' Binder Twine Co., Plantford, Ont., is reported to have paid a dividend of 60 per cent. to stockholders on last year's business. Though this was due to the purchase of the raw material at a very low rate a year ago, the splendid returns must redound to the skill and business ability of its managing officers.

A badly made horse collar is a very painful thing for the horse to wear. They are responsible for most of the sore shoulders, and are only too common. A well-made collar is made so hard that it yields slightly to pressure, and retains, when used, its rounded form. It is usually the soft, flat collars which make sore shoulders.

A prominent breeder in Eastern Ontario reports the sale of four Shorthorn bull calves at \$100 each. This is a good figure and indicates the trend of events in the live stock trade. The best and the cheapest way for the farmer to improve his stock is to use a purebred bull of the right type and \$100 is none too much to pay for a really good calf of this class.

A movement is on foot in the Royal Agricultural Society of Great Britain to get the Council to ask the Government to compensate in cases of animals confiscated for tuberculosis. This is nothing but fair. It is too much to ask a man to lose the total value of his stock because they have to be sacrificed to the public weal. A modification of the laws here in this direction would have a good effect.

The old method of packing eggs in lime water and salt is as follows: Dissolve 1 lb. salt in a gallon of water; slack 2 lb. of quicklime in three gallons of water, and stir well, then allow to settle for a time, and pour off the milky fluid, and mix with the salt solution. Put the eggs in casks, tins or jars, and cover with the liquid. Eggs preserved in this way will do for frying for two months, and for pastry purposes after three or four months.

It has been decided by the English Shire Horse Society that at the next London show, to be held in February, 1899, the veterinary inspectors shall, in the first instance, examine all animals sent out to them by the judges. Any of the remaining exhibits may, at a later period of the show, and at the request of the owner, be examined on payment of 10s. for each certificate. Two of the inspectors will be required to pass or reject an animal.

## English Sheep-Feeding Experiments

The following graphic account by Professor Dr. Somerville (Durham College of Science, Newcastle-on-Tyne) of some sheep-feeding experiments he is now conducting gives some very important information as regards the efficacy of an application of phosphate to grazing pasturage. The professor had been asked *why* stock showed such preference for grazing on land that had been treated with a dressing of Thomas-phosphate powder:

In most cases stock undoubtedly prefer the herbage grown on land treated with Thomas-phosphate or other phosphate, and this, it would appear to me, for the following reasons: (a) Because when the plants that form the herbage of grass land obtain a supply of suitable phosphate they are able to carry on their vital functions satisfactorily, and to produce large quantities of starch and sugar, and these appeal strongly to the appetites of stock, with the consequence that such herbage is much sought after by animals. (b) Because plants that are properly nourished are more succulent than half starved plants. (c) Because plants that stock relish are greatly stimulated in growth, and soon form a large proportion of the herbage. This, as is well known, is markedly the case with white clover.

It is perfectly astonishing what wonderful results succeed the application of Thomas-phosphate under favorable circumstances. In the spring of 1897 I selected two three-acre plots of ground in a heavy clay field of poor pasture, and applied five cwt. of Thomas-phosphate per acre to one of the plots, leaving the other untreated. Each plot was securely fenced off, and provided with water. Eight sheep were put on to each plot, and grazed for four months, being removed in the middle of October. This season the phosphate plot was so much improved that it has carried twelve sheep for four months, whereas the untreated plot is much barer with only six sheep. In 1897 the sheep grazing the untreated ground increased in weight by 112 pounds, whereas those on the phosphated area gained 232 pounds in live weight.

This year the results are still more remarkable, for, whereas the sheep on the phosphated plot have put on 507 pounds of live weight, those on the herbage in its natural state have gained only 183 pounds. This shows a gain in favor of the phosphate of 444 pounds, which is equal to 146 pounds per acre. If we value this at 4d. per pound we get about 49s.—a sum obtained for an original expenditure of 22s., or, with cartage and application of the phosphate,

say 26s. At the end of the second year we have thus had the original outlay repaid twice over, and the gains of future years will still further swell the huge profit. This is superior to gold mining.

### The Grade Draft Horse

As a rule the favorite farm and family horse is the Grade draft horse. It can do all kinds of farm work, can haul heavy loads, and can walk and trot well in harness. To raise good draft horses active, vigorous draft mares should be kept for breeding purposes. By breeding these to pure-bred sires and handling the offspring properly a horse can be secured that will do all the farm work and serve for driving to town as well. One reason why the Grade draft type is a favorite family horse is because it has a characteristic intelligent disposition and is gentle for the women or children to drive alone, while at the same time it is strong and active and is always ready and willing to do any work suited to it.

In the large cities hundreds of these Grade draft horses are used for the surrey and carriage. They cost less to keep than two small horses and are not overloaded even with four persons in a rig. They command high prices in the American cities when properly broken, and are of the right type and are active. Mares that will raise a good colt of this type every year are worth a small fortune to every farmer, especially now, when the demand for good horses is greater than the supply in some places.

### The Value of Poultry Manure

The excretions from fowls are very valuable as fertilizers. The excretions from pigeons contain more nitrogen than that of any other domestic animal. Hens rank next to pigeons in this regard, and geese and ducks are the poorest in nitrogen. The reason that pigeons and hens stand so high is because they live chiefly on grain, while geese and ducks prefer herbaceous parts of plants, sometimes green aquatic plants, which are poorest in the most important elements of manure. The nutrient principles of plants found in fowls' excrements are chiefly in a condensed form, easily dissolved. It should, therefore, be used in small quantities. It should not be spread in dry weather or on dry ground, because it has a corrosive action, which soon injures the plants. It is particularly useful for garden plants and to fortify weak seedlings.

A French authority places the amount of manure of a fowl per year at an average, 5.5 lbs. for a pigeon; 12.1 lbs. for a hen; 18.7 lbs. for a duck; and 24.2 for a goose. The same authority also gives the following analysis of the manures of fowls:

	Pigeon	Hen.	Duck.	Goose.
Water.....	62	65	53	82
Organic matter ..	31-3	21-26	40	14
Nitrogen.....	1.2-2.4	0.7-1.9	0.8	0.6
Phosphates.....	3-4.2	5	3.5	0.9
Alkaline Salts....	2-2.2	1.2-1.6	0.4	3.1
Ash.....	6-7	9-14	7	4

### The Market Horse to Breed

"As good an object lesson for the breeders of horses of this country as can be had is an attendance at some of the various sales of high-class horses that are being continually held at various cities throughout the country. At these sales can be seen the class of horses that bring the big prices.

"At the special sale of high-class horses last week, prices ruled fair for good horses. Breeders throughout the country will be interested to know the style of horses that were in best demand and brought the most money. The highest priced horse at this sale was a beautiful black gelding, sold to a Philadelphia dealer for \$400. This horse was raised

in La Grange County, Indiana, and was fitted for sale and brought to the sale by P. Michael, of Fremont, Ind. This gelding was what every farmer and breeder can raise by proper selection of sire and dam, and at good prices we do not know what department of agriculture is more profitable. The gelding was 15.3 hands high, 1,100 lbs. weight. Of course he was a breedy, well-made, handsome horse, or he would not have brought that price. Others of about similar style sold at prices ranging from \$125 to \$250.

"Another style of horse that there is and always will be money in breeding is what classes as coach horses. There are numerous pairs of these sold at prices from \$300 to \$600 a pair. They were pairs 15.3 to 16.1 hands high, and weighing 1,150 to 1,250 lbs. each horse. With suitable mares there certainly is no trouble to breed, almost without a miss, with the proper selection of sires, horses that will match in pairs and command good prices as coach horses. French coach and Hackneys bred to large, finely bred trotting mares, the German horses, and other breeds of horses judiciously crossed will produce this style of horses. Good desirable coach horses must be 16 hands or over, well made,—short backs, long hips, fine head, rangy well cut neck, good feet and legs, not leggy—a kind easy enough to raise and good money for raising them."—*Horse Gazette*.

### Fattening Home-Grown and Range Lambs

By Prof. Shaw, University of Minnesota

This paper contains a summary of the facts obtained from an experiment conducted by the writer in the winter of 1897-8 at the Minnesota Experiment Station. The experiment deals with the fattening of lambs, and one of the points emphasized in it should be of peculiar interest to feeders. It shows how easily possible it may be to secure a greater ultimate profit from a lot of lambs that have made less gains and at greater cost than those obtained from another lot, and for the sole reason that the former had a



Four prize-winning Ayrshires, the property of N. Dymont, Clappison's Corners, Ont.

greater average weight when they entered the contest than the latter. In the experiment two lots of lambs were pitted against each other. They were fed and cared for similarly. The lambs in one lot fed more cheaply and also made greater gains, and yet in the final summing up the lot that made the lesser gains, and at a greater cost, gave the greater profit, and for the reason only that they weighed considerably more when the fattening period began. That is really the point brought out in the experiment, although it was not considered when the experiment was undertaken.

The animals selected consisted of home grown lambs in the one instance and of Montana range lambs in the other. The former were very ordinary lambs, that is to say, they were the remnant of the lambs grown on the University

Farm after the choice lambs had either been disposed of early for mutton or had been set aside for breeding. They were from Dorset sires and common grade dams, and were rangy, rather high up from the ground, and were also lacking in width. The range lambs bought from Wm. B. Shaw, of Culbertson, Montana, were from Oxford Down sires, and were good specimens of range lambs.

The two lots were under experiment early in November, 1897, and were disposed of in March. The experiment proper lasted 112 days, and both lots were sold by Col. W. M. Liggett, the Director, to P. VanHoven, of Minneapolis. The lambs were valued at \$3.41 per 100 lbs. at the beginning of the experiment. This valuation was on the basis of the actual cost of the range lambs laid down at the station, and it was not far different from the actual prices being paid at the time. They brought \$5.50 per 100 lbs., shrunk weight.

The food consisted of oil cake, bran, barley and oats in the proportions of 1, 2, 3 and 4 parts respectively; clover and timothy hay, clover predominating; and sorghum ensilage. The food was fed in two feeds daily, except the ensilage, which was fed in the evening only. The lambs were given all they would eat clean of the various foods fed. The hay was not cut, nor was the grain ground, and water and salt were plentifully supplied. They had the choice of a shed or of a yard except in stormy weather.

The food fed was charged at the ordinary market values of the same in Minnesota. This made the oil cake \$22 per ton; bran, \$7.50; hay, \$4; ensilage, \$1.20; barley, 20c. per bu., and oats 17c. These prices are more in some instances than was actually paid for the food in St. Paul and Minneapolis markets, and in other instances less. And they will make it very apparent to the Eastern feeder that he has no easy task to face when, with his much higher priced foods, he undertakes to feed against Western competition.

The range lambs consumed per day of grain 1.68 lbs., of hay .68 lbs. and of ensilage .31 lbs., a total of 2.85 lbs. The home-grown lambs consumed per day of grain 1.96 lbs., of hay 1.09 lbs., and of ensilage .60 lbs., a total of 3.65 lbs. The monthly gains made by the Montana lambs were 9.5 lbs. against 9.3 lbs. made by the home-grown lambs.

The cost of feeding each range lamb was \$1.30, against \$1.42 for each home-grown lamb. Of course the greater age of the home-grown lambs would call for a greater consumption of food to make a given gain. They were, probably, six weeks older than the range lambs. The latter averaged 60.2 lbs. when they entered the experiment and the former 72.5 lbs.

The cost of making 100 lbs. of increase in weight by the range lambs was \$3.67, as against \$4.07 per 100 lbs. with the home-grown lambs. This feature of feeding is peculiar to the west. Years ago it was a generally accepted fact that the actual increase in weight obtained from fattening an animal costs more than could be obtained for the same when sold. But so it does not seem to be in the Mississippi Valley. This, of course, is owing to the bountifulness with which land produces there. Wherever such feeding can judiciously be carried on there will always be a substantial profit. In the present instance the profit was \$1.83 on the home-grown lambs, as against \$1.71 on the range lambs. The figures just given are, of course, averages for each lamb.

Since the question of greater profit with the home-grown lambs turned upon their greater weight when the experiment began, it may be asked, would it not be better to secure animals as heavy as possible for being fattened? No is the answer that should unhesitatingly be given to this question. In the first place, the demands of the market must be studied. If animals over large are chosen they will not bring the price when finished. In the second place, the older they are the more food they will require to make a given gain. And in the third place, the gains are slower as a rule as the birth period is receded from. It is a fact that usually more money can be made from feeding lambs than weathers.

## Fruit Growers' Association of Ontario

The annual meeting of this organization was held at St. Catharines on December 1st and 2nd. Mr. W. E. Wellington, Toronto, president, in the chair. The meeting opened promptly and the programme was well carried out.

Mr. A. M. Smith, St. Catharines, read a paper on "Frauds in Fruits at Fairs," which was interesting and humorous. The text was a good one. The professional fruit exhibitor was shown up and condemned. This man, at some trouble and expense, gathers up the finest samples of fruit in his region, and goes the rounds of the shows in a few counties. He turns an "honest" penny thereby. He discourages the local fruit grower and deceives the visitor, who wishes to understand the capabilities of any particular locality. Though he is useful in a way his suppression is advocated by some.

Mr. F. G. H. Patteson, Grimsby, followed with a very humorous and sarcastic paper, "Is Fruit Growing Conducive to Morality?" He showed that fruit growers, nurserymen and commission men seemed to be liable to moral delinquency. Men before engaging in any business connected with fruit should be required to pass an examination to ensure the needed moral status.

Prof. W. T. McCoun, Ottawa, in his "Observations on Russian Fruits at the Central Experimental Farm, 1898," detailed the results from a large number of varieties tried. Many had perished from blight and many had winter-killed. Very few have any real value. It was claimed that the Russian cherries were especially valuable for canning and that their seasons were very long.

Mr. Burrell made some remarks upon the peach borer and the peach bark beetle. The insect which causes the borer is a blue wasp-like insect. Moths emerge July 20th and later, and hence preventive washes may be put on from July till October. The borer hatches in late summer, and works about twelve months. Hydraulic cement with milk is a good and lasting wash, but requires to be repeated occasionally. Most other washes are soon washed off. Coal tar was spoken of, but was also condemned by some present.

### AFTERNOON SESSION.

Mr. Brodie, of Quebec Province, was introduced, and gave a short sketch of the rise and progress of the Quebec Pomological Society. It started at the home of Chas. Gibb. Mr. Carpenter, of Port Dover was called up. Mr. Bunting, of the Niagara District, and E. Morden of Niagara Falls, made brief reports. Prof. C. C. James, Toronto gave a sketch of his investigations and correspondence in regard to the export of fruit pulp. Harrison Watson, the curator of the Imperial Institute, has been prominent in this connection. Much jam comes from Australia in 11-lb. square tins. That from the continent comes in round tins. No water and no sugar is used in preparing the pulp. It is worth £30 per ton in England. Raspberry pulp is principally referred to. Grape pulp is not in demand. G. R. Lewis, of Collingwood, is the only Canadian exporter of pulp so far. Short crops in England have of late made better prices for pulp—as much as £50 per ton has been paid. Black currant pulp is worth about £25 per ton.

In the discussion which followed, Prof. Robertson showed that the pulp would probably give the growers from 1c. to 5c. per pound for the green fruit. It would only pay when prices in England were very high.

"Prospects for Export of Tender Fruits," by Prof. Robertson, of Ottawa, was the next matter considered. Two and a half million dollars' worth of grapes are imported into England. Pears are largely consumed there. The Canadian exporter must understand requirements. Fruits must have soundness, appearance, keeping qualities and flavor as good as may be. Three thousand, eight hundred and fifteen packages of fruit were sent by the Dominion Department in 1898, being about one-third of the amount sent in 1897. Scarcity of fruit in Canada accounted for the smaller amount for 1898. California pears of much inferior quality sell at higher prices because they keep longer after reaching the Old Country. Pears in cases containing about 1½ baskets, realized about 73c. nett. Prices varied from 46c. to \$1 per case. Other shipments realized similar prices. Samples of pears this year were inferior. Three hundred and twenty-four cases of peaches were sent. Some of these brought less than nothing, and others brought a large price. Some were rotten and others were tasteless. California peaches possess a texture which enables them to reach England safely. Our peaches, as yet, do not safely compete. Tomatoes rarely reach England in a state fit for consumption. Apples like the Duches may be safely sent in cold storage. Grapes arrived in good condition, but did not usually bring paying prices. English men do not like the quality of our grapes.

Transatlantic transportation of fruit was next discussed by Professor Robertson. Apples only ripen at a fairly high temperature. The ripening process develops heat, hence the ripening is accelerated. As soon as possible the barrel of apple should go into a cool cellar or cold storage with a temperature lower than 50 degrees. Ventilated cases are safer than barrels. Five steamship lines from Montreal to different ports in Great Britain are fitted for cold storage.

### EVENING SESSION.

The president, in his address, reported \$4,147.13 paid in fees, with 4,151 paid members. Receipts \$6,585.94, and a balance of \$784.96 on hand. He referred to the affiliated Horticultural Societies, which were organized with the idea of giving equal advantages to all members. He gave credit to the Dominion and Local Governments in dealing with the San Jose scale, and hoped that these measures would

be successful in stamping it out. The work of the scattered sub-Experimental Stations was sketched. The efforts to secure the English markets through a system of cold storage were also eulogized upon, and much useful information was given. About ten millions of apple trees are growing in Ontario.

Dr. Saunders, Director of the Dominion Experimental Farms, Ottawa, gave an address upon "Manitoba and the North-west Territories as Markets for Fruits." The capabilities of a country as a fruit market depend upon its ability to produce fruit locally. Climatic peculiarities make the strawberry crop very uncertain. Raspberries can be produced to a limited extent; so may currants. Tree fruits have not succeeded, although thousands have been planted. Crab-apples and some Russian apples have been grown near Morden by a Mr. S even-o. They have also been produced at a few other points. Wild plums grow in the river valleys. Sand cherries vary much, and some of them have a little value. Saskatoon berries, much like our June berries, grow in the west. Eighty per cent. of the fruit used in the North-west is sent in from the United States. Peaches are grown in British Columbia which sell at 5c. per lb. Near the coast many kinds of fruit can be grown. British Columbia, nearer the east, produces a considerable variety of the larger fruits, which bring good prices in the mining towns.

Dr. Mills, President of the Ontario Agricultural College, gave some notes upon "Horticulture at the O. A. C." at Guelph. At the outset he emphasized the need of educated fruit growers. A knowledge of insect and fungoid diseases is imperative. They should know how to use the microscope. Dr. Mills emphasized the need of securing markets and better and cheaper transportation facilities.

#### FRIDAY'S MEETING.

"Co-operative fruit-growing" was discussed by Mr. McNeill, of Windsor. He claimed that co-operation may be as successful with fruit growers as it has been with dairymen. Co-operation among fruit growers is very general in New Jersey, Ohio, Michigan, California and other parts of the United States, and it has been very useful there. Growers in the vicinity of Windsor propose to place their sales of grapes in the hands of a small committee. The advantages claimed are:

1. They hope to secure better prices.—Buyers had played one grower against another—passing from one to the other and quoting prices.
2. Expenses of sales are less.
3. Could get better accommodation on the railroads.
4. Could open up new markets to better advantage.—One man now opens up a new market and his neighbors use it although they do not encounter the opening up expenses.
5. Grading will be better attended to. Irresponsible individual grading will cease.
6. Fruit will be distributed evenly among the markets. Now we have gluts here and a scarcity there.

Mr. McNeill with his usual facility advocated co-operation which will in time become an accomplished fact in fruit-growing localities.



## Live Stock Meetings at Brantford

### The Opera House Gathering

The joint public meeting held in the Opera House, Brantford, on the Wednesday evening of the Provincial Fat Stock and Dairy Show was a pronounced success. The spacious building was crowded to excess with stock-breeders, farmers, and the citizens of Brantford. The Hon. A. S. Hardy, Premier of Ontario, occupied the chair, and in his opening remarks referred to the splendid exhibit of stock to be seen at the show.

The Hon. John Dryden, in reply to the address of welcome by Mayor Raymond, referred to the show as being the best ever held in the Province. The Fat Stock Show was an educator for quality. There was too much poor beef in the country, and education was needed along that line. It is quality that brings the price, not quantity. The market demands changes. Formerly the large, fat ox brought the highest price, but now smaller animals are wanted. The Fat Stock Show is also an educator for the bacon trade. There must be a discriminating price for quality. If the dealer and the packer wish the farmer to produce the kind of hog the trade requires they must pay him a higher price for it. Dealers pay about the same price for large, fat hogs as for good bacon hogs. Ontario can produce ten times more good bacon than she is now doing, and he would not stay his hand till Canadian bacon was in the same position as Canadian cheese. In the interest of the Province at large he was of the opinion that the show should go around in order to educate all sections. The interest of the whole province should be studied rather than any one section.

Mr. George McKerrow, of Wisconsin, president of the American Oxford Down Record Association, who also replied to the address of welcome, paid a very high compliment to Ontario breeders. He was convinced that in Ontario there was as high a percentage of educated farmers as in any other portion of this continent. The Fat Stock Show is an evidence of this. Every animal shows the trained skill of some farmer, and also that this skill in breeding has been carried on for generations.

The important address of the evening was delivered by the Hon. Sydney Fisher, Dominion Minister of Agriculture. In the course of his address he referred to his recent visit to Great Britain, when he

found Canadians welcomed as they had never been before. There was an evident desire to give us credit. To a large extent prosperity depends upon live stock. The breeding of live stock is a higher science than the tilling of the soil. One of the sure tests of the prosperity of a people is their power to purchase in the markets of the world. In 1895 our total imports amounted to \$105,252,511; in 1896 to \$110,587,480; in 1897 to \$111,294,020, and for the fiscal year ending July, 98, \$130,678,807. We paid for this by exports as follows: For 1895, \$113,638,803; 1896, \$121,013,852; 1897, \$137,950,253, and for the year ending July 1st, 1898, \$164,113,500. This prosperity was still increasing. For the quarter ending October 1st, 1898, our exports reached \$43,000,000. In 1895 we exported of animals and their products \$35,656,394; in 1896, \$37,404,396; in 1897, \$40,368,260, and in 1898, \$46,136,138. Of agricultural products we exported, in 1895, \$18,992,503; in 1896, \$17,974,011; in 1897, \$25,694,267, and in 1898, \$43,727,768. As a further evidence of prosperity Mr. Fisher quoted figures to show that from 1896 to 1898 the value of our farm exports to other countries had increased 23 per cent.; pork, bacon and beans, 82 per cent.; butter, 94 per cent.; cheese, 25.91 per cent.; poultry, 430 per cent.; eggs, 55.53 per cent.; wheat, 200 per cent.; oats, almost 1000 per cent.; flour, 655.22 per cent.; oatmeal, 5.2 per cent, and peas 39 per cent. Mr. Fisher referred to his efforts in having the quarantine regulations abolished between Canada and the United States. The ninety-day quarantine had been in operation since 1893. During the four-and-a-half years of the quarantine Canada shipped to the United States 3,703 head, at a value of \$52,606. In the twenty-one months which have elapsed since the abrogation of the quarantine regulations, Canada had sent to the United States 146,462 head of cattle at a value of \$1,998,229. The outlook for the Canadian farmer was very bright. The great country to the south of us was increasing in population at the rate of one million persons a year. The United States was a great live stock raising country, and yet their live stock was less in value and number than it was five years ago. The horses in the United States numbered, in 1892, 15,498,140, in 1897, 14,364,667, or a decrease of 1,133,473. For the same period the number of cattle decreased by 7,617,455; sheep by over 8,000,000, and swine by about 11,797,743. It was evident, therefore, that the people of the United States would have to go somewhere to buy and the live stock men of Ontario are in a splendid position to meet them, although the increase in the number of cattle in Ontario for the same years as he had quoted for the United States was not very satisfactory. In 1892 there were 2,029,140 cattle in Ontario in 1897, 2,181,326, or an increase of only 153,186 head. There has been a decrease in Manitoba of 8,921 head, the figures being in 1892, 230,696, as against 221,775 in 1897. Mr. Fisher stated that when in England he found Canadian bacon surpassed by none, and the general complaint was that our dealers were not sending enough of it. Another trade that was attracting a great deal of attention just now was the poultry trade. There was an immense market in England for good poultry. The Canadian poultry raiser to get and keep the English market must learn to fatten and raise his poultry in the same way that the farmer raises his hogs. The idea of letting a fowl earn its own living about the barn, and expecting it to bring a good price in the market, would not do.

Prof. Curtiss, who succeeded Secretary of Agriculture Wilson as director of the Agricultural Experiment Station at Ames, Iowa, followed in an admirable address on "Improved Live Stock as a Factor in Agriculture," which was splendidly received. He referred to the work of the live stock associations of Canada as being models for all organizations of a similar character. Careful and intelligent observation of live stock is important. The farmer should be educated to know good stock. The breeder should have the right ideal before him, the right standard of excellence in order to succeed. He must also have his heart in the work. Intelligence is necessary in Agriculture. It is easier to find cabinet ministers than a good judge of live stock. The men who judge live stock are trained experts, and a really trained expert in live stock judging will command a higher salary at the great packing houses than a judge of the Supreme Court. The same good judgment should prevail on the farm as in the packing houses. Men fail in breeding the best stock because they do not know what a good animal is. College students who have had the training are, as a rule, better judges of live stock than the owners. At Omaha a shepherd was showing a sheep that was greatly admired. When asked when he was bred, replied that he was bred before he was born. It had taken fifty years to breed the animal. Systematic effort must be brought to bear on all farm work. The United States expect a good article, but will pay a good price for it. The quality of beef is not always the same. To illustrate this Prof. Curtiss referred to a chart illustrating certain experiments that had been carried on at the Iowa Station in feeding cattle. Do not gauge animals by the record they make while feeding. A Jersey steer, fed for 13 months, weighed at the end of the time 1,300 lbs., making a gain of 2 lbs. per day. A Hereford steer, fed for 14 months, weighed at the end of the time 1,600 lbs., making a gain of 2 3/100 lbs per day. The two animals consumed the same amount of feed and made practically the same gain per day. To stop here the experiment would show that the one steer paid as well as the other. The steers were sold, and the Hereford brought 10 cents per cwt. more than the highest current price quoted at Chicago, while the Jersey sold for 2.12 1/2 cents below. The Hereford killed out 67 1/2 per cent net carcass, while the Jersey killed out only 57 1/2 per cent. net weight. The Jersey killed out 32 1/2 per cent. in fat, and the Hereford only 15 per cent. The Hereford steer sold for 49 per cent. more than the Jersey steer. The animal which produces the cheaper is not always the better. It is quality that counts.

The address of Mrs. Hoodless, of Hamilton, on "Woman's Agri-

cultural Interests," was well received. She contended that as much care should be given to the care and food which the children in the home get as to the live stock on the farm. How to preserve the home life is the important point. There should be a course in domestic science established at the Agricultural College, where the girls could receive a training for usefulness on the farm as well as the boys. Education and organization are necessary along these lines. There should be a woman's department in connection with the Farmer's Institute system. A Woman's Institute had been organized in Saltfleet Township. After its organization better bread and butter were produced. Domestic science should be taught in our public schools. We want both a practical and theoretical education. In the large United States cities there were Classical high schools and Industrial high schools, and we should have the same division in Ontario.

The proceedings were enlivened throughout by charming and appropriate songs.

#### American Oxford Down Record Association.

The annual meeting of this association was held in Brantford on the afternoon of November 30th. President Mills, of the Ontario Agricultural College, was invited to take the chair temporarily, while Mayor Raymond welcomed the visitors on behalf of the city, and Jno. I. Hobson, president of the Fat Stock Association, welcomed the visitors on behalf of the show. Mr. Geo. McKerrow, Madison, Wis., then took the chair and opened the meeting proper. He referred to the hopeful condition of the trade in Oxford sheep and they were rapidly rising in public estimation. The good qualities of the breed is shown in the fact that it was an Oxford ram which won the championship at the Centennial Exposition in 1876, the Columbian Exposition in 1893, and the Omaha Exhibition in 1898. As a result of exhibiting at Omaha, an American breeder had sold sixteen head of Oxfords for \$1,600, an unprecedented figure. Colonel Birch, of the *American Sheep Breeder*, then addressed the meeting, referring particularly to the display of Oxfords at the Trans-Mississippi. After the reading of the minutes of the last annual meeting by the secretary, W. A. Shafar, of Ohio, a discussion took place as to whether the association could hold its meeting outside of Ohio, in which state the charter was obtained. It was pointed out that, as the association was not a money-making institution, the meeting could be held wherever the Board desired. A new volume of the records will be issued shortly, and a grant of \$75 will be made to each state and provincial fair for prizes where a separate class for Oxfords is promised. It was recommended that the state fairs be insisted upon to use expert judges recommended by the association. Mr. McKerrow was instructed to prepare a cut of a typical Oxford Down sheep for use in the herd-book and for diverting purposes, if necessary. The treasurer's report showed the receipt for the year to be \$2,198.46 and the expenditures, \$842.14, leaving a balance of \$1,356.32. The total membership of the association is 130. The old officers were re-elected. The Ontario representatives on the Board of Directors are James Tolton, Walkerton, vice-president for Ontario, and Henry Arkell, Arkell, Ont., director. Mr. W. A. Shafar, Middleton, is the secretary.

#### American Leicester Breeders' Association.

The annual meeting of this association took place at Brantford on December 1st, Mr. D. C. Graham, Michigan, in the chair. Mr. James Tolton, president of the Dominion Sheep Breeders' Association, welcomed the visitors to the show, after which the president referred to the importance of this meeting in Canada. He had visited Canada twenty-six times, and every time but two had taken back with him some Leicester sheep. Previous to 1878 there was no duty on animals imported into the United States. In that year a law was passed placing a duty on all animals imported except those for breeding purposes. Referring to the important part Canadians took in the association he stated that in the first herd book John Kelly had 200 sheep registered. The association was formed in 1888, and the first volume of the herd book will soon be ready. Don't want anything but what is genuine in the herd book, and a new standard is necessary. Col. Birch then addressed the meeting, and, referring to the work of the association, stated that Leicester sheep were very little known in the west, and there were no purebred Leicesters at Omaha. A sheep boom was opening up in the United States such as they had never had before. There was less than one-half a sheep per capita of the population. The secretary's report showed the association to be in a flourishing condition financially. The sheep recorded were from twenty states and provinces. At the last annual meeting, held in 1893, there was a cash balance on hand of \$239. The total receipts for the five years were \$1,520.50, and the total expenditures \$470, without any allowance for secretary's time. Mr. A. W. Smith, of Maple Lodge, advocated a higher standard for registration, and moved that the standard be as follows: All sheep at present registered shall be accepted for registration, as well as their progeny. Likewise, all imported sheep registered in any authorized Leicester flock-book in Great Britain, or from any reputable flock not registered, three months' time to be given to those not now registered to do so. After considerable discussion, in which a disposition was manifested to leave the matter over for another year, Mr. Smith's resolution finally carried. It was arranged to meet annually in the future, and to hold the next annual meeting in Ontario at the time and place for holding the Provincial Fat Stock and Dairy Show. The old officers were re-elected with some additional ones. The Ontario representatives on the board are A. W. Smith, Maple Lodge, vice-president; John Kelly, Shakespeare; James Snell, Clinton; C. E. Wood, J. M. Gardhouse, and John Gaunt. It was decided to allow the secretary, Mr.

A. J. Temple, Cameron, Ill., thirty per cent. of the receipts for his work.

#### Hereford Breeders' Association.

The annual meeting of the Dominion Hereford Breeders' Association, was held on November 30th, when the following officers for 1899 were elected: President, H. D. Smith, Compton, Quebec; vice president for Ontario, Walter McDonald, Toronto; for Quebec, R. H. Pope, Cookshire, Que.; for Manitoba, James Shearman, Toddburn, Man.; and for Nova Scotia, W. W. Black, Amherst, N.S. Directors: George Brent, Warwick, Ont.; A. Rawlings, Forest; J. A. Fleming, Toronto; John Statts, Forest; Alf. Stone, Guelph; I. Rigby, Allandale; and Isaac Wiser, Prescott. Mr. Henry Wade, Toronto, was re-elected secretary-treasurer. A resolution was passed authorizing the secretary to make a third call of \$2 membership fee for 1899, and that the first volume of the Hereford Herd Book, when printed, be given to the 1899 and succeeding members free, and also that the secretary proceed at once with the publication of the Herd Book. The secretary-treasurer presented a very complete and full report of the work of the association for the year, in which he referred to the important honors won in the show ring by the Herefords. At Omaha they numbered more than any other class of cattle. At Toronto last fall the Herefords were out in large numbers, principally from the herds of H. D. Smith and A. & F. W. Stone. Sales had been particularly good both in Canada and the United States. At the great Armour sale, held in Kansas City on October 25th and 26th last, four of the best females sold for \$4,025, the imported one, True Lass, bred by the Queen, bringing the top price of \$1,075. During the past year there were recorded 200 females and 118 males, an increase of 109 over 1897. There are now recorded 1,445 pedigrees ready for the first volume, and 855 missing through the fire. Seventeen new members have added their names during the year, making a total of thirty-eight paid members at the present time. The total receipts for the year amounted to \$436.74 and the expenditures to \$102.52, leaving a balance of \$334.22.

#### Guelph Fat Stock Show

The Fat Stock Show for 1898 held last week under the auspices of the Guelph Fat Stock Club was a decided success, and the management have reason to feel proud of the exhibit of live stock which for three days occupied the rink. There was a really fine display of cattle, many of the best animals from the Provincial Show being present, including John Campbell's famous steer, "Perfection," the champion animal at Brantford. One of the most novel sights of the show was the exhibit in the ring of ten white animals at one time, something that one might not see again for a lifetime. The animals were pure white, without the least trace of any color, and, being fed and fitted up for the show, the whole group formed one of the special features of the show. The display of poultry was a fine one, there being over 1,200 birds on exhibition, and the ability of the judges was put to the highest test in making the awards.

The attendance at the show was good considering the condition of the roads after the recent snow blockade. More of the citizens than usual turned out to see the Smithfield of Canada. The 100th anniversary of the first great Smithfield show of England took place last week. The directors of the Guelph show sent a cable message of congratulation, to which the following reply was received from the Prince of Wales, president of the Smithfield Show: "The president and the members of the Smithfield Club, in meeting assembled, return thanks for your kind congratulations on a centenary anniversary."

#### CATTLE.

The display in this class was good, though the quality of some of the exhibits competing for the township and county prizes was somewhat inferior. This was, however, a good feature of the show, and served to bring out exhibitors who would otherwise not have shown. It is these to bring their animals alongside of some of the splendid beasts to be seen at the show would be a very valuable lesson to them, and induce them to fit their animals better for next season's show. In the pure-bred classes some good animals were shown, among them being Lord Minto, the white steer which won first in his class at Brantford and also at Guelph. He is owned by M. Wilson, Fergus, and was bred by J. & W. B. Watt, Salem. Other exhibitors were J. Oke & Son, Alvinston; F. W. Stone estate, Guelph; J. & W. B. Watt, H. Smith, Hay; W. J. Rudd, Eden Mills; H. McDougall, Guelph; D. McCrae, Guelph; Jas. Bowman, Guelph; and J. W. Brown, Galt. For steer one year and under two 1st went to H. Smith for a beautiful white steer ripe and ready for the block. This steer came in for 1st at Brantford when J. Oke & Son's steer was thrown out for being over age. W. J. Rudd got 1st for his Devon cow as best pure-bred cow three years and over. As at Brantford there was a good show of grade cattle, the principal exhibitors being Jno. Campbell, Woodville; James Leask, Greenbank, and M. Wilson, Fergus. Campbell's steer, Perfection, won 1st for steer two years and under three, and also the Shorthorn Breeders' Association prize for best grade Shorthorn steer any age. Leask won 2nd for nice roan steer, and also 1st and 2nd for best steer one year and under two years, with Campbell 3rd. The awards in the various township and county competitions went to local exhibitors. Some very good animals were shown, among them being the steer which came in for 2nd place at Brantford when Oke's steer was thrown out under protest. For the best pair of export cattle, steers or heifers to weigh over 1,200 lbs. each 1st went to James Bowman, Guelph, for a fine pair, one a purebred Filled



Angus and the other an Angus grade; 2nd went to T. Russel, Exeter, for a pair of Shorthorn grades. For the best pair of butch r's cattle under 1,200 lbs. weight, each owned and fed by exhibitor at least two months before show, 1st went to A. Hales, Guelph. There was considerable rivalry in the sweepstakes classes. For the best fat animal on the ground any age or breed, the purebred or grade of every beef breed but Gallows was represented, 1st went to Lord Minto one of the best animals at the show, a pure white finished heave. The keenest competition of the lot was for the coveted Holiday Cup, valued at \$75, and presented by Thos. Holliday, of Guelph, for the best animal of any age or breed, bred and led by exhibitor to be won at the Guelph Fat Stock Show two years in succession by a different animal. Though five animals faced the judges the contest was between Campbell's steer, Perfection, and a roan steer bred and fed by J. Oke & Son. Perfection was the champion animal at Brantford, and it was expected that he would carry off the cup at Guelph. But to the surprise of many the judges placed Oke's steer first. He is a good type of steer, blocky, well-finished and considered by the judges to be a better killing steer than Perfection, whom they considered would stand a little more feeding. For Jno. S. Pearce & Co.'s special prizes of Canadian calf meal and Canadian stock tonic, T. Russel and Jas. Leask were the winners. The judges were A. Rawlings, Forest, and W. Crealock, Toronto.

#### SHEEP.

A goodly lot of sheep faced the judge, Mr. John Kelly, Shakespeare, who pronounced the exhibit as a very good one. Nearly all the leading pure breeds were represented with such representative breeders as John Campbell, Woodville; R. Gibson, Delaware; Smith Evans, Gourcock; Orr & Lillico, Galt. In the Leicester, Cotswold and Lincoln class, Orr & Lillico, G. & R. Laird, Guelph, and White-law Bros. were the chief winners. For other pure breeds, R. Gibson, who won first for pair of wethers one year and under two; John Campbell, who got first for best pair ewes one and under two years, and second for ewe lambs; and Smith Evans, who won first for pair of ewes under one year and second for yearling ewes, were the principal prize winners. In grades there was a good show, with Campbell, Gibson, and Orr & Lillico the principal winners. A number of specials were given by the local municipalities in this class also. For the heaviest ewe or wether first went to James Hume, Arkell, for a sheep weighing 302 lbs. The lightest sheep in the competition weighed 228½ lbs.

#### SWINE.

The display of swine was not as good as the other classes and was the weakest part of the show. T. A. Cox, Brantford, Ont., was the principal exhibitor, who had out a number of his fine long Berkshires, and won a number of the best prizes in his own class. A. J. Watson, Castlederg, was also an exhibitor, and won 3rd for best sow any age or breed, with R. Agnew 1st and 2nd. For the best pair of singers, not to weigh more than 200 lbs. or less than 160 lbs. each, 1st went to G. B. Hood, 2nd to F. W. Oke, and 3rd to W. Arkell. For best four singers not over 200 lbs. nor less than 180 lbs., 1st went to G. Barber and 2nd to H. Dedels. For the best barrow Agnew was first, Dedels second and T. A. Cox third.

#### POULTRY.

The poultry exhibit was the best ever seen at Guelph. There were 1,200 entries, with very few culled birds. The display of dressed poultry was a fine one. One large turkey, shown by A. Hales, weighing upwards of 40 lbs. when dressed. A novel exhibit was 12 dressed sparrows, prepared for the oven.

Another exhibit that attracted more attention perhaps than any at the show was that of five live bears, two racoons, and a ground hog. No prizes were offered in this department, the reason, perhaps, being that the exhibitor could not furnish pedigrees as to whether the animals were purebred or not. The animals in this class were not turned out in the ring to be judged, the judge preferred to have iron bars between him and the beasts.

John S. Pearce & Co., London, Ont., had on exhibition in the poultry department a fine display of their live stock and poultry foods, including the electric lice-killer, tonic poultry food, Pearce's Canadian calf meal and stock tonic, and "The Best" incubator. James Hewer, Guelph, made a fine display of his seeds.

#### THE BANQUET.

The annual banquet of the Fat Stock Club took place at the Wellington Hotel on the evening of December 7th, and was a really enjoyable affair. President Miller presided, and addresses bearing chiefly upon the live stock interests of the country were delivered by the Hon. J. M. Gibson, Hon. John Dryden, Dr. Mills, Professor Curtiss, Iowa; Prof. Robertson, John I. Hobson, Guelph, and a number of others. A feature of the banquet was the presentation of the Holiday Cup by Mr. James Innes, on behalf of the Club, to the winner, Mr. James Oke, of Alvinston.

## Oxford Fat Stock Show

The annual show under the auspices of the Oxford Fat Stock Club took place at Woodstock on December 6th and 7th last. The big snowstorm seriously affected the show and prevented many exhibitors from getting out. There were, however, 145 entries, or only 23 less

than last year. The attendance of visitors was not large owing to the almost impassable condition of the roads owing to the snow blockade.

The show itself was very fair considering everything. The display of cattle was good, as was that of sheep, but the show of swine was very small though the quality was good. J. E. Brethour, Brantford, Ont., was the chief exhibitor in the swine department, where he won for the second time the silver cup for the best swine exhibit, which now becomes his property. But as there was very little competition this year Mr. Brethour generously decided to return the cup and have it competed for next year, when it is to be hoped better weather will prevail.

## Provincial Fat Stock and Dairy Show

At the time of going to press we had not been able to get the full report of the milking competition at the Brantford Show. We are sorry for this, as we know those who competed and others interested have been anxiously looking for the results. There have, however, been so many meetings, and other things to take the time of those in charge of the test, that they were compelled to delay the matter longer than they expected. We will publish a complete tabulated statement of the results in next week's issue, giving a full list of the prize-winners in the various classes and the points made. All that we can definitely report just now is that the sweepstake's prize was won by Messrs. A. & G. Ric. for their Holstein cow, Calamity Jane, who made a total score of 163.52 points. The lowest score was 63.536 points. Thirty-six cows in all competed, among them being a number of good grade cows. The majority of the cows were a long time in milk, and consequently did not show up as well in the quantity of milk given as they otherwise would.

In the fat cattle section the first prize for the best Shorthorn steer, one year and under two, was awarded to J. Oke & Sons, Alvinston. It was learned afterwards that this animal was over age and he was consequently thrown out, when the first was awarded to H. Smith, Hay, with J. Fried & Sons second, and Wm. Cowan third.

#### LEICESTER AND SHROPSHIRE SPECIALS.

The special prize offered by the American Leicester Breeders' Association for the best display of Leicester sheep at Brantford was awarded to A. W. Smith, Maple Lodge. In the Shropshire specials D. G. Harmer & Sons and R. Gibson were the winners in Sections 2, 3, 4, and 5, Harmer winning two firsts and two seconds, and Gibson the same number. In Section 6 for grade wether under one year, first went to Harmer, and second to John Campbell, Woodville, Ont.

## Ontario Experimental Union

The twentieth annual meeting of the Ontario Agricultural and Experimental Union was held at the Ontario Agricultural College, Guelph, on Thursday and Friday of last week, and was largely attended by ex-students and a number of visitors from a distance. The special features of the meeting were the addresses of Mr. S. T. Rorer, Director and Principal of the Philadelphia Cooking School for training teachers, and Professor C. F. Curtis, Director of the Agricultural Experiment Station, Ames, Iowa. Another feature was the presence, at one time during the meeting, of three Ministers of Agriculture, viz., Hon. Sydney Fisher, Ottawa; Hon. John Dryden, Toronto; and the Hon. F. G. M. Duchene, Quebec. Other notable visitors at the meeting were Professor Robertson, Agricultural and Dairy Commissioner, Ottawa, and Hon. Mr. Duffy, Minister of Public Works, Quebec.

On Wednesday evening, December 7th, a public meeting, under the auspices of the Union, was held in the Convocation Hall of the college, at which Dr. Mills presided. Special music was supplied by Harold Jarvis, Miss Della Zeigler and others. The first speaker was Prof. Curtis, who talked on "Agriculture as a Branch of Public Instruction." He paid a high compliment to the work done at the Ontario Agricultural College, and referred to the fact that in their own college they had four men from Ontario, three of them from the college, all of whom were doing good work. The greatest danger of our educational system was not that we would give too much education, but rather that we would educate unwisely. In the United States by far the larger amount of the money spent in education went to the high schools, chiefly attended by city students, while the balance, a paltry sum in proportion to the work, went to the country schools in educating the remaining 70 cent. of the population in the rural districts. We taught practically everything except agriculture, the business in which three-fifths of the population are directly engaged, and nine-tenths directly or indirectly dependent upon for their living. He referred to the influx of new blood from the country to the city, and the important place which the agricultural districts occupied in this regard. Conditions fully justified a young man who was engaged in agriculture as a life-work in making a thorough preparation for that work. If we look at the immediate prospects open to students in agriculture and to those in other colleges we would find that the opportunities for the agriculturists were equally good. Thoroughness in training for agriculture is one of the most essential things under present conditions. At his college they frequently had requests for young men able to take charge of large farms, young men with a scientific and practical knowledge of farming. The average salary of the 28,000 teachers in Iowa was less than half the average salary of the short-

term graduates of his college. He made a strong plea for the teaching of agriculture in the public schools. The farmers were particularly dependent upon the public schools, and there was where agricultural education should begin. The benefits resulting from its study are great, and not only the boys but the girls in the schools should be taught it. He hoped that the day would soon come when there would be co-education at the Ontario Agricultural College.

Mrs. Rorer followed with an address on "Rational Dietary to Produce the Best Physical and Mental Results," in which she strongly advocated a more rational method of cooking and preparing food. She strongly insisted upon the necessity of training in domestic science for all women. By the women of the country understanding how to cook and what to cook, the cost of living could be greatly reduced, and the health and longevity of the race better preserved.

Mrs. Rorer differed from Professor Curtiss as to the best blood in the city coming from the country to the city and contended that the brightest intellects in the cities do not always come from the rural districts. Mrs. Rorer's address was listened to with interest by a large audience of ladies and others interested.

The annual re-union supper was held in the college dining-hall at 6 p.m., when an interesting time interspersed by addresses from ex-students and others was spent.

The attendance at Thursday's meetings was good, a great many ladies being present at the morning session, chiefly to hear Mrs. Rorer. The President, Mr. Geo. Harcourt, B.S.A., Winnipeg, who was not present, sent his address, which was read by the secretary. He referred to the excellent work which the Union was doing, not only in Ontario, but elsewhere, and he pointed out that in some places successful results could not be obtained owing to the frost so early in the season.

Mrs. Rorer then addressed the meeting on "Cooking as an Art," in which she showed how foods should be cooked and laid down principles by which every one engaged in doing domestic work could carry it on in the very best way. The work necessary to cook properly and prepare a meal depended largely upon the size of the kitchen and how it was arranged. Everything should be so conveniently arranged that the person doing the work would not have too much walking to do. A kitchen 10 by 12 feet was large enough to supply food for eighteen people. No person cooking or preparing a meal should be called upon to walk eight or ten miles in so doing, as many of them have to in some of the kitchens of the present day. All albuminoid foods, such as eggs, etc., should be lightly cooked. Green vegetables should be so cooked that they will be the same color when done as when they were put on to cook. She took cabbage as an illustration, and pointed out that when put on to boil there should be enough water in the vessel to completely cover the cabbage, and this water should be at boiling hot. Cabbage should not be allowed to boil after the first boil, and should not be covered. Most everything will cook better a little below the boiling point, which is 212 degrees. A thermometer should be used, and vegetables should be kept at about 200° after cooking and meat at about 180°. She gave the following receipt as a skeleton for making all kinds of sauce: one tablespoonful of fat (butter),  $\frac{1}{2}$  oz. of flour and  $\frac{1}{2}$  pint of liquid (milk). Should there be more fat than flour it will rise to the top. Underground vegetables, such as turnips, should be boiled in unsalted water. Potatoes, and, in fact, all starch foods, should be well cooked. Potatoes cooked with the skins on are more tasty, but are more healthy when cooked with the skins off. Baked potatoes are more digestible than boiled ones, because they are longer in cooking. All meats should be put on to roast or cook on a hot fire, the object being to cause a rind on the outside that will preserve the juices of the meat. In making oatmeal porridge five tablespoonsful of the meal to a quart of water are the proportions that should be used, and they should be put on to cook the afternoon previous to the morning when the porridge is to be used, the object is to thoroughly cook the meal. To furnish a cooking school in a city would require \$200, and, in the country, \$50.

#### SMALL FRUIT.

Mr. H. L. Hutt, horticulturist, gave a report of the experiments in small fruits. Four varieties each of currants, strawberries, raspberries, black raspberries, blackberries and gooseberries were tried. The Van Deman is the best early strawberry. One year from the time when a plant is set out is the best. In raspberries the Cuthbert is a good variety. Marlboro is one of the best of the early varieties. In black raspberries the Palmer is one of the best for production. In black berries the Taylor is a good variety. Fay's prolific is one of the best varieties of currants, though it does not yield as well as some others. Victoria is the standard variety. American gooseberries do better than the English varieties as they are not so much subject to mildew.

#### COMMERCIAL FERTILIZERS, ETC.

Mr. C. A. Zavitz, experimentalist and secretary of the Union, gave a report on the work in these experiments. Before doing so he pointed out that the work of the Union reached 3,000 farmers in Ontario, many members were in the other provinces. There was a larger number of experiments this year than ever before. In the province grasses and clovers are ahead as to area. The area of oats was not as large as in 1897, while wheat was much larger. The Union started work in 1886 with 1 experiment, 12 experimenters and 8 satisfactory reports. In 1898 there were 19 experiments, 3,028 experimenters and 667 satisfactory reports. The experiments with corn showed that, with no fertilizers, the yield was 5.56 tons per acre, with nitrate of soda 5.59 tons, with muriate of potassium 6 $\frac{1}{2}$  tons, with superphosphate 6 tons

and with mixed fertilizers ( $\frac{1}{2}$  of the three mixed) 6 $\frac{1}{4}$  tons. Potassic fertilizers do best with corn. With mangels the nitrate of soda did the best and made a gain of 5 $\frac{1}{2}$  tons per acre over the non-fertilizer. Fertilizers cost about \$3.50 per acre. Experiments with leguminous crops as green foddors, grass peas gave the largest yield (8 tons per acre); tares and vetches 7 tons, and crimson clover 5 tons. With mixed grains for green foddors, oats 1 $\frac{1}{2}$  bush., peas  $\frac{1}{2}$  bush. and tares  $\frac{1}{2}$  bush. per acre, gave the largest yield 9 $\frac{1}{2}$  tons per acre, largest for one year; oats 1 $\frac{1}{2}$  bush. and peas 1 bush. gave 8.9 tons per acre, largest for two years; oats 1 $\frac{1}{2}$  bush. and tares 1 bush. gave 8.2 tons per acre. Peas and oats are the most popular among experimenters. With grasses for hay, tall oat grass gave the largest yield, 3 tons per acre; timothy 2 $\frac{1}{2}$  tons; meadowfescue, 2.1 tons and orchard grass 2 tons. With clovers for hay, mammoth red gave 3 tons per acre; common red, 2 $\frac{1}{2}$  tons; Alsike, 2.4 tons, and Lucerne, 2 tons. Lucerne is a very successful fodder crop, and other crops have been grown after it with good results. With millets the 3 Japanese varieties stand highest, from 7.9 to 8.4 tons per acre. Hungarian grass yielded 5.6 tons per acre. With corn no variety was found suitable for all lands. The large varieties, as a rule, are late and the smaller ones early maturing. The Mastodon Dent gave the largest yield (14 $\frac{1}{2}$  tons), but only reach the doughy condition of ripeness; mammoth Cuban yielded 12.8 tons and reach the doughy stage; Wisconsin earliest white Dent, 11.6 tons, firm doughy stage; Saltzer's N. Dakota, 10.8 tons, ripe; Early Butler Firm, doughy, 10.2 tons; Kendal's Early Giant, 6.3 tons, ripe. Mastodon Dent and Wm. White Dent gave the largest number of ears, 3.1 tons per acre. The Wisconsin Earliest White Dent is one of the best varieties for Ontario as a whole.

#### CHEESE AND BUTTERMILK EXPERIMENTS.

Prof. Dean reported on these. The chief faults found by butter-makers with the past season's work were over-ripeness, dirty cans, lack of aeration, and milk not cooled enough. With the cream-gathering stations the milk furnished in hot weather caused much trouble, and should be cared for better by the patrons. The temperature for separating was reported from 90 to 100 degrees. The cream was cooled chiefly in the vats, or in a can used as a cooler. The per cent. of fat in skim-milk varied from a trace to two-tenths of one per cent., which is too high. The per cent. of starter used varied from 7 to 30, and the degree of temperature for churning from 50 to 60 degrees. Most of the butter-makers wash the butter twice, where the separator is used the butter is worked once, and where the cream is gathered it is worked twice. Most of the butter is put up in 56-lb. square boxes, and held in cold storage at from 32 to 50 degrees. Creameries paid the patrons from 13c. to 17c. per lb. for butter. The chief faults found by the cheesemakers were bad flavors and lack of care of the milk by the patrons. Aeration of the milk is usually done by dipping and stirring. Where the milk is paid for by test the per centage of fat varies from 2.8 to 4.6. From 4 to 5 pounds of starter is used. Temperature of curing-room varies from 60 to 80 degrees. The lowest price per lb. received for cheese was 6 $\frac{1}{2}$ ¢., and the highest 9c., as compared with 7 $\frac{1}{2}$ ¢. to 10c. in 1897. The cost of making varies from 9-10c. per lb. of cheese to 2 $\frac{1}{2}$ ¢. Makers get from 54c. to 90c. per cwt. for making the cheese. From 2c. to 10c. per cwt. of cheese is paid for hauling the milk.

#### CURING CHEESE EXPERIMENTS.

Experiments were carried on at the Kingston and Guelph Schools to find out the effect of different temperatures in curing cheese. The test was conducted at Kingston for 18 days. At a temperature of 65° there was a shrinkage of 2.5 per cent.; at 68° 2.55 per cent.; and at 80° 3.53 per cent. The quality was 98 points at 65°, 97 points at 68°, and 90 points at 80°. At Guelph the test was conducted for 20 days, and the shrinkage was 3.4 per cent. at 60°, 3.8 at 66°, and 4.31 at 68°, while the points scored were 90 at 60°, 88 at 66°, and 85 at 68°. Prof. Curtiss read an excellent paper on "The effects of feed on the quantity and quality of the milk," which we hope to be able to publish in full in some future issue.

#### ILLUSTRATION STATIONS.

In a short address Prof. Robertson outlined his plan for the establishment of Illustration Stations. He pointed out that most of the experimental work carried on is for the purpose of research. Every experiment has two uses—research and illustration. The Canadian farmer is not being served in an illustrative sense as much as in an experimental sense. Experiments may be made of use to the farmer in several ways. To publish them in report is not sufficient. Farmers, as a rule, cannot take things in from a report so as to be able to apply them to their own work. Experiments would be more useful if they could be seen and understood. By making them simple and direct, and by not trying more than two things at a time. In connection with the growing of the grain illustrations in the best methods of cultivation could be carried on, and the whole experiment be made attractive and to catch the eye of the passer-by. Professor Robertson's scheme was outlined in full in our issue of May 3rd last.

The addresses of the visiting Ministers of Agriculture were listened to with much interest. Hon. Mr. Fisher stated that he had visited the leading Agricultural Colleges in Europe during the past summer, and came to the conclusion that for an all-round institution of its kind the Ontario Agricultural College stands at the head of the list. The officers elected and the balance of the report of the meeting will be given in next week's issue.

### ST. MARY'S CO-OPERATIVE CREAMERIES CO.

The first annual meeting of this company, which was held in the Opera House, St. Mary's, Ont., on Nov. 30th last, was one of universal interest to the farmers of South Perth and surrounding country. The St. Mary's Creamery Co. was organized a year ago for the purpose of manufacturing butter on a large scale. The plan adopted, and which has been carried out, was to establish skimming stations at central points, from which the cream could be carried to the central creamery to be made into butter. In addition to the central station at St. Mary's seven skimming stations were operated during the year with most satisfactory results to the stockholders and patrons alike.

The reports of the directors and the treasurer show that the venture has been a marked success, and prove that this system of carrying on the creamery business is one that commends itself to dairymen everywhere. The management made an effort to capture the British market, which met with a large measure of success. All the product was shipped direct to Great Britain. The price per lb. charged for making was  $3\frac{1}{2}$  cents per lb. to shareholders, and  $\frac{1}{4}$  cent. more to non-shareholders. The total investment of the company in real estate and equipment is \$17,641.64. The first annual statement which was presented at the meeting covers the business done from Dec. 15th, 1897, to Oct. 31st, 1898. During that period 10,888,407 lbs. of milk were received, which made 442,863 lbs. of butter. The average number of lbs. of milk to a lb. of butter varies from 21.24 to 25.5, or an average of 23.58. The average net price of butter-fat to patrons per lb. was 17.7 cents. The average of the highest tests each month of butter-fat was 4.6, and the lowest 3.2 per cent. The average net rate to patrons per 100 lbs. of milk for the highest tests was 82 cents and for the lowest tests 55.3 cents.

### ENGLISH REMEDY FOR GAPES.

Gaping alone does not necessarily mean anything; the only thing is to take one of the birds and make a careful examination, feeling gently about the throat as well as looking down it, and if necessary comparing with the feel of a healthy bird. If you find any white substance the birds should be isolated and treated for diphtheria, as often directed. There may more likely be some internal swelling of the larynx, which the wet may bring out in a rheumatic constitution; if such is found, it is probable 1 grain iodide potassium, and 5 grains salicylate soda, twice a day for a week, may give relief. (2) Early pullets often moult; a cockerel is far more rare, and the bird is simply pulled down by it. Bread and

milk will not help him much; but a raw egg daily in a little meal, with a small teaspoonful of Fellowes' or other syrup of hypophosphites, will probably pick him up soon. Stop when the work is done.—*Fowls.*

### DOES POULTRY PAY?

Does it pay to keep poultry on the farm? This is a question asked by many and it can be answered in both the negative and affirmative. One person will make a success of it while another will fail. The one who succeeds will not necessarily have the most expensive buildings nor will he scorn the day of small things. He will not hesitate to look after the small details. He will know the right thing to do and will do it. Not only will the right thing be done, but it will be done in the right time. The hens will not be permitted to be eaten up with vermin before they are treated and the house cleaned of lice. A judicious warfare will be kept up, with all kinds of ammunition, during the term when the lice are threatening an invasion. Plenty of food will be supplied of the right kind. Grit will be provided also of the right kind, and it may be well to say that the owner himself will be required to have some grit. Poultry seems to be a small kind of stock, but if it is managed to make plenty of money the management must be liberal. It will be heroic at times. If you have a liking for the business and are adapted to it, you will want the right kind of fowl for your locality, and you are ready to make sales that will prove profitable to you. Too much feed and too much expense, with no eggs coming in, will not make a profitable business even though the best fowls are kept. Good quarters, good care and good feeding are starters, and then a good market for what you produce will be a help in making it profitable.—*The Homestead.*

Willie: "I think old Moneybags is the meanest man I ever knew." Millie: "What has he done?" Willie: "Bought for his daughter a musical parlor clock which plays 'Home, Sweet Home' at 10 o'clock. 'Tramp, Tramp,' at 10.15, and 'Johnny, Get

Your Gun,' at 10.30."—*Jewellers' Weekly.*

Market only eggs that you know to be strictly fresh. High quality of any product increases the consumption. In selecting your breeders look for those which have a bright, active look about them, those which work the hardest to get a full crop to go to roost with. Size is also one of the principal features of a profitable flock, for a pound or two counts up considerably when the entire flock is considered, and the ultimate end of our feathered friends is either the market or family table.

### Publishers' Desk.

Messrs, John S. Pearce & Co., of London, Ont., are offering poultry supplies in this issue and every poultry keeper will do well to note some of the bargains included in their announcement. A green bone mill guaranteed at \$7 is surely a sufficiently attractive offer and there are a number of other things needed by every poultry breeder and keeper at equally reasonable prices. See their advertisement.

**Leaky Roofs are Costly.**—You cannot afford them. Comfort takes wings from a leaky house. Wet ceilings, falling plaster, spoiled furniture, damp bedding, rheumatism anxiety and discomfort result. Leaky barns means loss and ruin. But this evil can be easily avoided by those who build aright. The Metallic Roofing Co., 1192 King street west, Toronto, issue a book telling how to build, and will send it free to any address on application.

**Don't Waste Your Time.**—There are a great many people who have an abundance of spare time on their hands during the winter, who would gladly turn it to good account if they only knew how. We tell them how in our premium announcement, which includes cash prizes from \$10 to \$60 besides a large number of specially valuable and useful articles needed in every household. Anyone who desires to profit by the opportunity thus offered should write for an agency. We give subscribers and their families the preference in apportioning territory.

**Still They Come.**—A firm known everywhere as being the largest paint manufacturers in the world is about to open a depot and offices in Toronto. The Sherwin-Williams Co., of Cleveland, Chicago, New York, Boston, and Montreal, have taken the warehouse No. 86, York street. Their ever-increasing business here and throughout Western Ontario has rendered this action imperative. Three years ago the Sherwin-Williams Co. came to Canada and started two factories in Montreal for the manufacture of high-grade paints for railway and steamship companies,

## Cash Prizes

Of from \$10.00 to \$100.00  
Will be given

For securing New Subscriptions for FARMING

With additional prizes of \$20.00 and \$15.00 respectively for the largest and second largest lists sent in. Our premium announcement for 1899 is the most attractive and liberal yet published, containing a large number of valuable and useful articles besides the cash prize list. Sent free to any address on application.

Address FARMING

44-46 Richmond St. West  
TORONTO, Can.



**BETTER BUTTER**

Cleanliness, Ease and Money-making use the

**MAPLE LEAF CHURN**

Circulate Free on application.

**WILSON BROTHERS**

Collingwood, Ont

ONE of Ontario's younger breeders, who has come rapidly to the front in recent years, is Mr. Henry Harding, Thorndale, Ont. Mr. Harding is a breeder of Dorset Horn sheep and Chester White swine, and has recently added to the number Shropshire sheep and Ayrshire cattle. His flock of Dorsets consists of fifty head, including thirty five breeding ewes of the very best type. He has made several importations recently, notably among them being a ram imported direct from the flock of Hugh McKelmont, Bi-hopswood, England. This ram was bred by the same breeder as the Dorset sheep which won the champion-hip at Omaha. He won 2nd prize at Toronto and 1st at London this year, the only times shown. His herd of Chester White swine just now consists of forty head. He has recently made two valuable importations of Che-ters from the noted herd of S.H. Todd & Son, Ohio. Mr. Harding's sheep and swine figured prominently in the prize list at the Branford Fat Stock Show.

GUERNSEYS at Alva Farm, Knowlton, Que., the property of the Hon. Sydney Fisher, are doing well. Mr. Fisher has recently made some notable sales of stock for Manitoba, among them being an excellent Guernsey heifer sold to D. G. Robertson. At the head of the Alva Farm herd is Mr. Fisher's noted imported bull bought by him in the United States. This bull is a son of the cow sent by Mr. Fisher to the branch Experimental Farm at Nappan, N.S. Mr. Fisher did not show at any of the exhibitions last fall, and consequently the herd did not figure in the prize list as on former occasions. Mr. Fisher has some nice young stock for sale, and parties desiring good Guernsey blood cannot do better than write him. Mr. Fisher next summer contemplates going into sheep grazing on a large scale. His object is not so much to make a profit out of the sheep-feeding, but to increase the fertility of his farm and eradicate all weeds. His plan is to put enough sheep on the land to eat up everything clean, weeds and all. He has great faith in the renovating and restoring power of sheep, and hopes in a year or two to have his land in better condition for the production of crops and every weed destroyed.

MR. W. J. BELL, of Angus, Ont., writes under date 2nd December, 1895: "I notice two statements in Mr. James Ford's advertisement of Bronze turkeys which I think are not in accordance with facts. First he states: 'My gobbler, Royal Tom, is the best and heaviest on the continent.' Now, considering that he was beaten at London Poultry Show, 1895, by a yearling, would it not have been better to have left out that word 'best'?" Second, he states: 'First and special for heaviest turkey at Guelph and London poultry

**Who is the Sinner? A Fair Question**

The publishers of the FAMILY HERALD and WEEKLY STAR lately put the above straight question to their subscribers, some of whom sometimes become indignant when they receive notice that their papers have been stopped owing to their own failure to renew in time. We can understand how it is impossible for a large paper like the FAMILY HERALD and WEEKLY STAR to allow subscriptions to continue beyond the expiry date, unless a renewal is received in good time. The publishers of the FAMILY HERALD pay great attention to their old subscribers, but they justly claim the right to cut off promptly all names not renewed on time. This is business and the only business-like plan with a metropolitan paper of such wide circulation. New subscriptions from every post office in Canada are simply flooding into the FAMILY HERALD, and this country seems to be in line, because the FAMILY HERALD and WEEKLY STAR is to be found in a large percentage of the homes. The FAMILY HERALD is undoubtedly the biggest and best dollar's worth to be had.

# Talk about Fowl

They come to us by the box, by the barrel, by the basket, and the farmers bring them in when they come to town. Every day our trade is increasing. You never hear a farmer say he had to wait for his pay. We make prompt returns, and do our best to gain the confidence of our customers.

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

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

R. Z. MANNING, MANAGER.

# CURES CATTLE

For cattle coughs, sore throat, sprains, sore or caked bag and a score of accidents that might befall the herd, Griffith's Menthol Liniment is the greatest of external applications—proved the success that is claimed for it a thousand times—good in an emergency—quick to cure.

"We have used Griffith's Menthol Liniment with great satisfaction and success on our ranches, and believe that for horses and cattle there is nothing to equal it." P. R. Ritchie & Co., ranchers, Vancouver, B.C.

## GRIFFITH'S VETERINARY MENTHOL LINIMENT

Relieves the instant applied

At all Druggists—75 Cents



in making Butter or Cheese can be obtained only by using 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.

## FARMERS WANTED

To take orders in their section for the famous lead reawer,

Alberts' Thomas-Phosphate Powder (Reg.)

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

### WALLACE & FRASER

58 Canada Life Building, - TORONTO

## 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.

### OFFICE OF CHARGE

DOMINION OF CANADA,  
DEPARTMENT OF AGRICULTURE,

OTTAWA.....1895

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 does 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 cleaned 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 cleared, 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 testing 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. B. SCARTH,  
Deputy Minister of Agriculture.

To.....

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.....  
Address.....

shows, 1898.' There was no prize of any kind given at London Poultry Show, 1898, for heaviest turkey, and none of the turkeys were weighed there at all. I do not know who is responsible for the account of this bird in 'Stock Notes' of November 29th is ue, but they make the same mistakes, and, farther, give the impression, I think, that this bird weighed 46 lbs. in the show-room. I challenge this statement, and desire that Mr. Ford furnish you with the proof. If the statement 'only one ever exhibited in Canada weighing over 46 lbs.' is meant to convey the idea that he has been exhibited at a show and weighed 'at home' over 46 lbs., I submit that it is still not correct. I sold a bird to Mr. John Pletsch, Shakespeare, Ont., which he exhibited at Toronto, and which weighed at home 47 lbs. Mr. Pletsch is prepared to back up this statement, if necessary. And further note that this bird of Mr. Pletsch's was only a yearling when he made this weight."

MESSRS. WILLIAM STEWART, JR., & SON, of Menie, Ont., the well-known breeders of Ayrshire cattle, report that their herd has gone into winter quarters in fine condition. They have purchased the splendid (imp.) cow Primrose of Harperland, bred by Mr. H. M. Todd, of Harperland, Scotland, and imported by Messrs. D. Morton & Sons, of Hamilton. Messrs. William Stewart & Son have made a great many sales of young stock this fall, including Jock of Hazeldean, the first prize bull calf at Toronto, which has been secured by Mr. J. B. Carruthers, of Kington, Ont. Mr. Carruthers is to be congratulated on his purchase, as the calf is full of quality, out of the best milk stock obtainable on his sire's side, his dam being White Floss, the winner of the first prize at the World's Fair, Chicago, out of Glencairn 3rd, imported by Mr. R. Reford, of St. Anne's, Que. On his dam's side is Red Rose (imp.) sire, Robin Robin, dam,

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

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



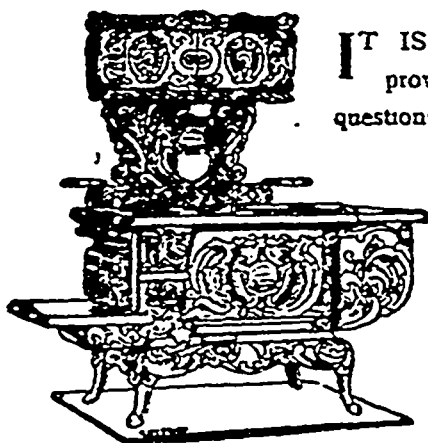
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THE GEM PIN CO., Freehold Building, Toronto, Ont.

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IT IS THE OLD FRIENDS WHO HAVE proven true, of whom we have to ask no questions, who, after all, are the best friends.

This is the secret of SOUVENIR'S success. It has undergone all the tests—been weighed in the balance, of sternest criticism and experience, but is never found wanting. They're a perfect stove, and never disappoint users.

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### 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 can not 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.

Dandy (imp.), which goes to show that Jock of Hazeldean is one of the best bred bulls in Canada. There are still a number of young bulls in the herd of equally good quality and breeding which Messrs. Stewart & Son are offering for sale in this issue. Amongst them is their splendid stock bull, Dainty Lad of Elm Shade, a prize-winner, and a good one all round. Their stock of poultry, of which they have a large number for sale, is also doing well. They have also secured a fine pair of imported Scotch Collies from the best stock in Scotland, and at some future time will be able to offer puppies to those desirous of possessing a first class dog.

HERMANVILLE FARM, P.E.I. is one of the largest purebred swine breeding establishments in the Maritime Provinces. The breeds of swine kept on this farm are Tamworths, Yorkshires, and Duroc-Jerseys. All the brood sows on the farm are either themselves prize-winners at Canadian fairs, the daughters of prize-winners, or by prize-winners. The same can be said of the stock boars. In Tamworths Hermanville Farm is particularly strong. The leading matron on the farm of this breed, by the great \$100 sow, Parkhill Mab, absolutely the finest yearling Tamworth sow in Canada. Her two daughters, Parkhill Mab II. and Parkhill Mab III., now rising six months, our grand young matron, are almost typical specimens of the breed. On several occasions, while these young sows were two to three months old, Mr. McDonald refused \$25 each for them, Mr. McDonald's object being to breed typical Tamworths of the Parkhill Mab strain. The young sows will be bred in January for May litters. Parkhill Mab herself will be bred this month for an April litter. April is considered soon enough to have the litters come, as experience shows that April litters do as well as March litters. All the young Tamworths have been sold at prices ranging from \$10 to \$15, at 7 weeks old, some half dozen of these having been shipped to the United States, even as far west as Ohio. Mr. McDonald has already several orders booked for spring pigs of Parkhill Mab stock, at a straight price of \$10 each, ready to wean, and will receive orders right along from parties who may want Parkhill Mab blood for the improvement of the Tamworths. In Yorkshires, there are four thoroughbred sows on the farm. Three of them are first prize winners at P. E. Island Fairs. Dachs, of Hermanville, Duchess of Hermanville 2nd, and Princess of Hermanville, besides one or two younger sows of great individual excellence. In the hands of purchasers, for the last few years, Hermanville Yorkshires have done well, and are in good demand. The Duroc-Jerseys are all prize-winners. The Duroc-Jersey stock boar, Emperor of Hermanville, is grand specimen of the breed, and has proved a splendid stock-getter. He will be two years next March. This farm has experimented with a cross of the Yorkshire sow and the Duroc-Jersey boar with great success, and considers the Duroc-Jersey-Yorkshire cross an ideal bacon pig, and much superior to the purebred Yorkshire as an easy feeder and ideal bacon pig. Several Yorkshire sows will be bred to the Duroc-Jersey boar this fall from the Duroc-Jersey-Yorkshire cross. At present there are nine brood sows on the farm, but it is not certain on account of the shortage of the root and grain crop this season whether this number of sows will be kept or not, and purchased feed is quite high. The past season has been very successful, everything for sale has been sold, and orders are now received for spring, April, May and June pigs.

**BERKSHIRES** In my herd there is such blood as Baron Lee, Dorset Chieftain and Windsor Supreme and other noted strains.  
GEO. N. HARRIS, - - - Lynton, Ont.

...FOR SALE...  
**8 SCOTCH SHORTHORN BULLS**  
From 10 to 18 months old. 1 BULL 2 years old, bred by O. & W. D. Watt, Salem. Also a number of  
**COWS AND HEIFERS**  
DAVID MILNE, - - - Ethel, Ont.

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**Incubators and Brooders**

ARE THE  
**BEST MANUFACTURED**  
We have won three out of four First Prizes at Toronto Exhibition during 1895 and 1896.  
**SEND FOR CIRCULAR AND PRICE LIST;**  
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Silver and Bronze Medals  
These are the highest Awards.  
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**Experienced Farm Manager**  
Wants engagement. Over twelve years' experience as manager of stock farms. Two years at O.A.C., Guelph, and three months training at Provincial Dairy School. Very highest recommendations and testimonials from well known farmers and stock breeders, from the staff of the O.A.C., and former employers.  
Address,  
"MANAGER,"  
Care of FARMING,  
Toronto Ont.

**Barred Rock Cockerels...**  
A choice lot of birds, well barred, with nice yellow legs and beaks. Prices right.  
**Other Leading Features—**  
Hatchlings and Tamworths of best quality. Pigs ready to wean.  
**A. C. Hallman, New Dundee, Ont.**

**STRATFORD BROS.**  
BRANTFORD, ONT.  
Tamworth Boars, Dorset Rams, Shetland Ponies, Light Brahmas, Houdans, Cornish, Indian Games, Black Langshans, White Langshans, White Plymouth Rocks, Buff Plymouth Rocks, Barred Plymouth Rocks.  
Prices Right.

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**EXCELSIOR INCUBATOR**  
The best in successful operation. Lowest priced first-class hatch made.  
GEO. H. STANL.  
212 to 222 St. Catharines, Ont.

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to any address. That's the way we send our  
**CYPHERS INCUBATOR.**  
It is the best quality of incubator and the result of some of the best and Guide to poultry culture in all about the laws of incubation, and how to raise, feed and market poultry. It is the best and most perfect incubator in use. It is the best and most perfect incubator in use. It is the best and most perfect incubator in use.  
THE CYPHERS INCUBATOR CO. Box 112, Markham, Ont.

**BIG MONEY FOR AGENTS**  
**THE STAR RIVETER**  
For MENDING HARNESS, BELTING, etc. Indispensable to Farmers, Druggists and Tailors. **STAR RIVETER**—price \$1.50 in silver, \$1.00 in steel. Sent by mail. Never introduced. Agents will get special prices and territories.  
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**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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Railroad station: Markham G.T.R. 4 miles. Locust Hill, C.P.R. 3 miles.

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**FIVE AYRSHIRE BULLS**  
Ranging from six months to two years. First-class animals, fit to head any herd.  
Also, **BIRDS**  
of thirty varieties of land and water fowl  
**WILLIAM STEWART & SON**  
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**BRONZE TURKEYS**  
...FOR SALE...  
In order to reduce my flock, will sell **FIRST-CLASS BRONZE TURKEYS** of this year's batch up to Nov. 15th at \$4.50 per pair, or Gobblers at \$2.50. Hens, \$2.00 each. Can furnish them not akin, if desired.  
**JAMES TOLTON**  
WALKERTON, - - - 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 99 points; 1st and special for bravest turkey at Guelph and London poultry shows, 1895. Weight 46 pounds. Prices right. Satisfaction guaranteed.  
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Buy an incubator and pay for it before you use it a trial.  
Many people have lost faith in incubators because they bought one that was never intended to hatch chickens—made merely to sell.  
**The Von Cullin Incubators** are sold on trial subject to your approval. Simplest machine made. A child can operate it. The biggest catalogue and "poultry pointers" book published, sent for 25c. Plans for brooders, for try houses, etc., sent on receipt of 25c.  
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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**

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

## LIST OF STOCK FOR SALE.

### THE DOMINION CATTLE BREEDERS' ASSOCIATION.

#### Shorthorns.

Bonycastle, F. & Sons... Campbellford... Bull, 4 years; 5 bull calves; cows and heifers.  
Chapman, John G. .... St. Thomas... 5 bulls, 1 to 12 months; female, 2 years.  
Jeff, E. & Sons... Bond Head... Yearling bull; 6 bull and heifer calves; stock 1 year and upwards.

Rankin, S. .... Fairview... 4 bulls.  
Smith, A. W. .... Maple Lodge... 10 young bulls; females.

#### Ayrshires.

Stewart, W. & Son... Menie... 5 bulls, 6 months to 1 year; bull, 2 years.  
Yuill, J. & Sons... Carleton Place... 22 bulls and heifers, under 2 months; cows and heifers.

#### Polled Angus.

Hurt, J. W. .... Coningsby... Bull, 10 months; heifers.

#### Jerseys.

Hull, B. H. & Sons... Brampton... 6 yearling bulls, 5 bull calves.

#### Herefords.

Stone, Alf. .... Guelph... Stock all ages.

### THE DOMINION SHEEP BREEDERS' ASSOCIATION.

#### Shropshires.

Govenlock, J. .... Seaforth... shearing rams; ewe, 2 years, ewe lamb.  
Yuill, J. & Sons... Carleton Place... Ewes and ewe lambs.

#### Leicesters.

Smith, A. W. .... Maple Lodge... 10 ram lambs; 20 ewes and ewe lambs.

#### Cotswolds.

Bonycastle, F. & Sons... Campbellford... Ram and ewe lambs; ewes.

### THE DOMINION SWINE BREEDERS' ASSOCIATION.

#### Berkshires.

Bonycastle, F. & Sons... Campbellford... 25 head, 2 to 7 months.  
Ball, G. H. & Sons... Brampton... 13 sows and boars, 3 months; 23 sows and boars, 3 months.  
Ferguson, J. J. .... Smith's Falls... 11 sows and sows, 6 weeks to 6 months.  
Jeff, E. & Sons... Bond Head... 8 young sows and boars; 20 fall pigs.  
Yuill, Jos. & Sons... Carleton Place... Sows, all ages.

#### Tamworths.

McCutcheon, H. .... Glencoe... Stock, both sexes.  
Trevorton, Chas. .... Belleville... 2 boars, 3 and 18 months; sow, 3 months.

#### Duroc-Jerseys.

McCutcheon, H. .... Glencoe... Stock, both sexes.

#### Chester Whites.

Hirdall, F. & Son... Birdsall... Pigs, both sexes, 6 weeks.

#### Yorkshires.

Hart, David, Jr. .... Renfrew... 6 young sows.  
Maylooney, F. .... Chapeau... 3 sows and boars, 6 and 10 months; stock, 3 months.

## ANNUAL MEETING OF THE DOMINION SWINE BREEDERS' ASSOCIATION.

The annual meeting of the Dominion Swine Breeders' Association was held in the Grand Trunk Reading Room, Brantford, on December 2nd, 1898, the President, Mr. Geo. Green, Fairview, in the chair.

The following officers were elected for the ensuing year:—President, Geo. Green, Fairview; Vice-President, Wm. Jones, Mt. Elgin; Secretary-Treasurer, F. W. Hodson, Toronto. Directors: Berkshires, Thos. Teasdale, Concord; Yorkshires, G. B. Hood, Guelph; Chester Whites, R. H. Harding, Thorndale; Poland Chinas, W. M. Smith, Fairfield; Duroc Jerseys, W. E. Butler, Dereham Centre; Tamworths, Andrew Elliott, Galt; Suffolks and Essex, Jos. Featherston, Streetsville; Ontario Agricultural College, G. E. Day, O.A.C., Guelph; General Director, J. E. Brethour, Burford; Auditor, J. M. Duff, Guelph. Representatives to Fair Boards: Toronto Industrial, Thos. Teasdale, Concord; J. E. Brethour, Burford; Ottawa, Jos. Featherston, Streetsville; Jos. Yuill, Carleton Place; London, Geo. Green, Fairview; D. DeCourcy, Bornholm; Montreal, Joseph Featherston, Streetsville; Quebec, O. E. Talbot, Bellechasse, Que.; Peterborough, Robert Vance, Ida; Guelph, G. B. Hood, Guelph; Jas. Anderson, Guelph; Brantford, T. A. Cox, Brantford; Geo. Thompson, Bright; Belleville, J. M. Hurley, Belleville; Kingston, J. M. Hurley, Belleville.

### COMMITTEES.

Executive and Transportation: President, Vice President and Secretary.

Delegates to the Board of the Provincial Winter Fair: Geo. Green, G. B. Hood and J. E. Brethour.

### EXPERT JUDGES.

Berkshires.—H. J. Davis, Woodstock; J. C. Snell, London; Thos. Teasdale, Concord; George Green, Fairview; Robert Vance, Ida; T. A. Cox, Brantford; James Quarrie, Delaware; Jos. Featherston, M.P., Streetsville; R. P. Snell, Snelgrove; Malcolm McArthur, Lobo; C. R. Decker, Chesterfield; Charles Youngs, Brooksdale; William Jones, Zenda; D. DeCourcy, Bornholm; Geo. Thompson, Bright; Robert Gibson, Galt; R. H. Harding, Thorndale; Joseph Yuill, Carleton Place; W. C. Edwards, Rockland; Joseph Barnett, Rockland; J. J. Ferguson, Smith's Falls; Henry

## GRAND TRUNK AND LEHIGH VALLEY FOR NEW YORK.

Leaving Toronto at 9 a. m. daily (except Sunday). Passengers arrive in Buffalo at 12, noon, connecting with Black Diamond Express for New York, arriving at 9.53 p.m., giving

passengers a daylight ride from Toronto to New York.

Observation car operated on this train affords an opportunity of viewing the scenery along the route, which is said to be the "finest in America." This train is also equipped with café and library cars, and is the most hand-



Glendinning, Manilla; E. E. Mattin, Canning; Beverley Jeffs, Bond Head; William Linton, Aurora; Jas. Leach, Toronto; Wm. Howe, North Bruce; Charles Yapp, Brantford; Prof. G. E. Day, Guelph.

Tamwoths.—N. M. Blain, St. George; A. Dunn, Ingersoll; J. H. Simenton, Chatham; G. North, Marden; A. Elliott, Galt; L. F. Master, Haysville; A. C. Hallman, New Dundee; J. Bell, Amber, D. G. Hammer, Burford; John Nichol, Hubrey; Jos. Brethour, Burford; H. Caldwell, Orchard; W. Elliott, Hamilton; C. C. L. Wilson, Ingersoll; F. C. Fearman, Hamilton; Andrew Laurie, Wolverton; Wm. Davies, Toronto.

Yorkshires.—Richard Gibson, Delaware; Henry Dedels, Kossuth; J. E. Brethour, Burford; G. B. Hood, Guelph; Joseph Featherston, M.P., Streetsville; H. E. Shapre, Ida; A. F. McGill, Hillsburg; J. G. Muir, Howick, Que.; J. M. Hurley, Belleville; George Gier, Grand Valley; James Stephen, Trout River, Que.; R. McLellan, Harriston; Joseph Fletcher, Oxford Mills; Robt. Nichol, Brussels; A. & F. Foreman, Collingwood; J. Y. Omsby, Woodstock; F. C. Fearman, Hamilton.

Suffolks and Essex.—S. Butterfield, Windsor; Wm. Jones, Zenda; Jos. Main, Milton; David McCrae, Guelph; Jas. Anderson, Guelph; S. Lemon, Kettleby; T. C. Douglas, Galt; Wm. Elliott, Milton; James Millar, Guelph.

Duroc Jerseys.—Jos. Featherston, M.P., Streetsville; Wm. Jones, Zenda; Geo. Green, Fairview; Thos. Teasdale, Concord; Jos. McGarvin, Chatham; R. H. Harding, Thorndale; D. De Courcy, Bornholm; Wm. Smith, Burford, Harry Jones, Zenda, Wm. Tape, Ridgetown; Herbert George, Crampton; F. W. Terhune, Brantford; I. O. Fraser, Fellows; W. E. Butler, Dereham Centre; Jacob B. Sibley, Harrow-smith.

Poland Chinas.—Thos. Teasdale, Concord; Jos. Featherston, M. P., Streetsville; J. H. Snarey, Croton; Jas. Main, Milton; Capt. A. W. Young, Tupper Lake; Geo. Green, Fairview; Wm. Smith, Fairfield Plains; Wm. Jones, Zenda; Omer Drury, Fargo; C. W. Yapp, Brantford; R. Willis, Glen Meyer.

Chester Whites.—Wm. Jones, Zenda; J. C. Snell, London; Geo. Green, Fairview; D. De Courcy, Bornholm; R. Dorsey, Burnhamthorpe; R. H. Harding, Thorndale; W. E. Butler, Dereham Centre; G. B. Hood, Guelph; G. E. Day, Guelph; Thos. Teasdale, Concord; S. H. Todd, Wakeman, Ohio; Gideon Synder, Jarvis; Henry Jones, Zenda; Jos. Cairns, Camlachie; Jos. Featherston, M. P., Streetsville; Thos. Brooks, Brantford; J. L. Jarvis, Paris; T. A. Cox, Brantford; Herbert George, Crampton.

After the routine business was concluded, Prof. Robertson addressed the meeting. He treated the subject of the care, breeding and feeding of hogs very fully, and the production of animals suitable for the bacon trade with great Britain. He then took up

the subject of preparing poultry for the British Market, and described experiments he had been conducting at Ottawa in the fattening of chickens for market. For this purpose he employed during the last two weeks of the fattening period a forcing machine such as is used extensively in England and France. By its means suitably prepared food is pumped into the chicken twice a day, and the gain in flesh kept up until the end. Prof. Robertson stated that there was a good market in England for chickens fattened in this way.

He concluded his remarks with a few words of advice to speakers at Farmers' Institutes as to how to prepare and present their subjects.

Prof. Day, of the Ontario Agricultural College, read a clear and carefully prepared paper on the Bacon Hog, giving amongst other things the results of his experiments to determine the cause of soft bacon. Then followed the somewhat lengthy discussion of the bacon hog from the standpoint of the packer and of the farmer. On behalf of the packers it was stated that a great mistake was made in marketing so many hogs during the early winter months. The packers wanted more hogs in the summer months. The hot weather did not matter and prices were better. Great trouble was experienced by the packers on account of many of the hogs shipped to market being small and light. It was not necessary that a hog should be thin in order to possess lean meat. A number of carcasses of bacon hogs from the Fat Stock Show were made to serve as a practical object lesson of what was required.

**P**lant 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.

33 Nassau St., New York.

## 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 breeds 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.

### EXCELLENT FARM FOR SALE

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

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

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

### ALL PEDIGREE STOCK-BREEDERS

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## MARKET REVIEW AND FORECAST.

Office of FARMING,

44 and 46 Richmond street W., Toronto,  
Dec. 12th, 1898.

A big Christmas trade is looked for in all retail circles. In wholesale circles the conditions of trade are good and a big spring trade is looked for. All the American trade reviews speak of encouraging features and growing industrial activity in the country. Though the bulk of last year's crop is in the farmers' hands, yet country business is very good. Greater activity is looked for as soon as farmers begin to bring out their wheat a little more freely.

## Wheat.

The wheat situation is not nearly so good as it was a week or two ago. During the past two weeks wheat has declined 5c. per bushel in Chicago, 4 to 5c. in Ontario, and 6 to 7c. in Manitoba. The statistical position does not seem to be favorable to higher prices and unless there is a big war or some unforeseen thing such as a L-iter boom that will affect the market present prices are not likely to be increased very much. The shortage in the Russian crop seems to be dwindling away and estimates are already being made as to the possibilities of the crop for 1899. In the United States the area of fall wheat sown is estimated at over 30,000,000 acres, the largest on record, and if conditions are favorable as the splendid fall growth promised a big crop may be looked for. The visible supply of wheat in the United States and Canada has increased by 727,000 bushels during the week and is now 24,098,000 bushels. The total world's supply in sight a week ago was 50,818,000 bushels, showing an increase of 3,049,000 bushels in the week, and a decrease of 17,947,000 bushels as compared with the same time last year.

A special cable to the *Trade Bulletin* of Dec. 8th says that the London market is dull and prices are unsettled. Prices in England have declined 1s. per quarter during the fortnight. Ontario farmers are beginning to market their product more freely though the bulk of the crop is still in their hands. The local Manitoba market has been weak and dull of late. Manitoba No. 1 hard is reported 3c. lower than a week ago at Fort William. The market here is dull and easier, with quotations from 66 to 67c. bid for red and white west. The demand for good wheat seems to have ceased for a time, and quotations are 65 to 66c. west. Manitoba is quoted at 76 to 77c. for No. 1 hard Midland. Locally red and white wheat brings 68 to 70c.

## Oats and Barley.

The London oat market is reported firmer and higher with a good demand for Canadian at 3d. to 6d. per quarter advance. Considerable business has been done in oats on this side during the past ten days, and farmers are beginning to market them more freely. The Montreal market is firmer though business there is for the local trade. Car lots in store there are quoted at 30½ to 31c. for No. 2, and 30 to 30½c. for No. 3. The market here has been fairly steady at 27 to 28c. for white west, and 27½ to 28½c. east. A great many oats are going forward via St. John and Portland and the prospects for a good winter export trade are good. On the local market here oats fetch 30 to 31c.

Choice malting barley is quoted at Montreal at 55 to 57c. The market here is steady at 47c. for No. 1 and 45c. for No. 2 west. Locally it brings from 48 to 50c.

## Peas and Corn.

The Montreal market for peas is quiet at 57 to 65c., but they could hardly be laid down there for that, as the market has advanced 1c. in the west. The market here is firmer at about 63c. west. From 58 to 63c. are the quotations on the local farmers' market.

Car lots of Chicago mixed corn are quoted

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at Montreal at 43 to 44c. on track. Canadian yellow is quoted here at 33½ to 34c. west, and American at 42c. Toronto.

## Bran and Shorts.

Bran is steady at Montreal, and receipts are light. Car lots of Ontario bran are quoted at \$14 to \$14.50, and shorts at \$15. All mill feed is firm here at \$14 to \$16 for shorts, and \$12.50 for bran west.

## Eggs and Poultry.

The London egg market is firm, and an advance of 6J. per 120 is reported. There is a good demand at Glasgow for pickled and fresh eggs. The Montreal market is firm under continued light receipts, with quotations for good-sized lots of new laid 22 to 22½c. Held fresh are quoted at 15½ to 16c. There is a scarcity of strictly new-laid eggs here, and the market is firm at 20c., with fresh-gathered quoted at 17 to 18c., and limed at 14c. New-laid eggs bring 19 to 20c. on the local market.

The outlook for the export poultry trade is very good, and, instead of closing at Christmas, it is likely to be continued till spring. The exports so far show large increases over other years. Several large companies are talked of for fattening poultry for the export market. Several representatives of British firms have been operating at country points this fall, and the prices paid for choice stock of live turkeys have been from 7½ to 7¾c. per lb.; geese, 6c. per lb.; ducks, 7 to 8c.; and chickens, 5½ to 6c. per lb. There has been a good demand for dressed poultry at Montreal, at from 7 to 8½c., as to quality, for turkeys; 5½ to 6c. for geese; 6 to 7c. for young chickens; and 7½ to 8c. for ducks. The receipts here have not been heavy of late, and quotations are 7 to 9c. for turkeys; 5½c. to 6c. per lb. for geese; 30 to 60c. per pair for ducks, and 25 to 45c. for chickens.

## Potatoes.

Choice cars of potatoes bring 53c per bag at Montreal, where a good demand exists. Jobbing lots bring about 60c. There is still some business being done east for shipment to Ontario. Cars on the track are quoted here at 55c, and potatoes out of store at 65c. per bag, which is the quotation locally.

## Hay and Straw.

There has been a good demand at Montreal for hay for the local trade. The Liverpool market for Canadian clover remains firm. Considerable clover hay has been bought near Montreal at \$3.50 to \$4.75 per ton for shipment to New York. No. 2 is quoted at Montreal at \$5 to \$5.50, and No. 1 timothy at \$6.50 to \$7.50 per ton. The market here for baled hay is dull at \$7 to \$7.50 for cars on track. Baled straw brings \$4.50 in car lots. Timothy hay on the local market brings \$8 to \$9.50, and clover \$6 to \$7. Straw is quoted at \$7 to \$8.

## Fruit.

Considerable business is being done in the fruit trade. The Montreal apple market is

reported good at \$2.50 to \$3.50 per bbl. in car lots, and \$2.75 to \$4 in a jobbing way.

## Cheese.

The improved demand for cheese continues and prices continue to advance. There is a firmer feeling on the London and Liverpool markets, and prices have advanced from 1s. to 1s. 6d. per cwt. Sales have been made during the week at Montreal at 48s. to 48s. 6d. c.i.f. on the other side, which means 50s. London or Liverpool terms. English buyers are beginning to manifest more anxiety about getting in their winter's supply and are sending over orders more frequently than they usually do at this season of the year. Factory men who have cheese to sell, and have the facilities for keeping it properly till after the New Year, may likely get 10c. for it. Montreal quotations are now 9½ to 10c. for finest western and 9½ to 9¾c. for finest eastern. The total exports from Canada and the United States, May 1st to December 9th, show a falling off of 502,596 boxes, as compared with the same period last year.

## Butter.

The total shipments of butter from Canada and the United States from May 1st to December 9th show a decrease of 49,317 packages as compared with the same time last year. The London market is up another shilling, and finest Canadian creamery is quoted there at 103 to 108s., and good to fine at 95 to 99s. The Old Country market is considered by dealers on this side to be too high to speculate on, and consequently prices here have not made an advance corresponding with the rise on the other side. Prices at Montreal have advanced, however, and sales of finest creamery have been made at 20½ to 21c. Quotations there are 20 to 21c. for choice, and 18½ to 19½c. for good to fine. The advance is causing an increase of the make in the winter creameries, and there will likely be a good supply during the winter, and it is to be hoped that prices will keep at least above the 20-cent limit. Creamery is steady here at 20 to 21c. for prints, and 19 to 20c. for tubs.

Roll butter is coming in more freely at Montreal, where quotations are 14½ to 15c. for the best lot. Western dairy is quoted there at 14½ to 15½c., with choice selected lots at 15½ to 17c. Prices here are 12 to 13c. for the best large rolls, and dairy tubs at 11 to 12c. for common to good. On the local market pound rolls bring 17 to 22c., and tubs 14c. per lb.

## Cattle.

The cattle situation is about the same. Reports from Chicago and Western markets indicate a scarcity of really fine stuff, which is in demand. There appears to be too many poorly fed or badly bred cattle coming forward, for which the market is easier. Choice to extra choice steers were selling at Chicago during the week at from \$5.40 to \$6 per cwt., while the common stuff would hardly bring \$4. The same scarcity of really good cattle exists here, and for which dealers are willing to advance prices.

**Export Cattle.**—Cable reports show considerable improvement in the English market. Heavy choice exporters are firm at \$4 to \$4.35, with 10 to 15c. more for choice picked lots. Light exporters bring from \$3.75 to \$4.12½ per cwt., heavy export bulls \$3.65 to \$4, and medium export \$3.25 to \$3.40 per cwt.

**Butchers' Cattle.**—Choice picked lots of these are scarce on the market and are firm at \$4 to \$4.37½ per cwt.. Good steers bring \$3.60 to \$3.85, medium \$3.35 to \$3.50, and common \$2.85 to \$3.10 per cwt.

**Stockers and Feeders.**—These are in good demand at western markets. Buffalo stockers were a little easier here on Friday, selling all the way from \$2.75 for inferior to \$3 for medium, and \$3.15 to \$3.10 for steers of good quality. Good heavy feeders of good quality are scarce and bring from \$3.40 to \$3.65 per cwt. Feeding bulls bring \$2.25 to \$2.75 per cwt.

**Calfes.**—The demand at Buffalo is lighter, and good to extra are quoted at \$6.25 to \$7 per cwt. Good veals of choice quality are in demand here and bring from \$3 to \$6 each, or about \$5 per cwt.

**Milk Cows.**—Fresh milkers bring from \$30 to \$50 each, and strappers from \$16 to \$20 apiece.

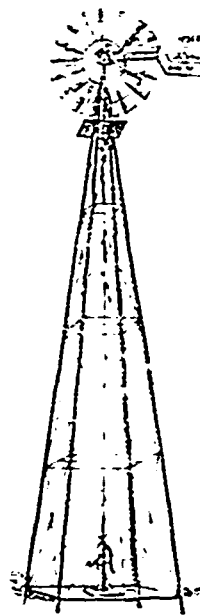
**Sheep and Lambs.**

These have been in good supply at Buffalo of late with the general demand slow on Friday and prices easier. In the West the demand for feeding sheep has been moderate. Prices for sheep here are about the same. Ewes bring \$3.25 to \$3.40 for the bulk, with choice picked lots bringing \$3.50 per cwt. Bucks bring from \$2.50 to \$2.75 per cwt. Lambs sell for from \$2.60 to \$3.10 per cwt. the latter being for ewes and wethers only.

**Hogs.**

Western markets have been fairly steady during the week. Deliveries were large here on Friday, and prices were a shade lower. Choice selected bacon hogs, weighing from 160 to 200, sold from \$4 to \$4.25 per cwt. Heavy fat and light hogs bring about \$4, but light ones are not wanted. There is a feeling that prices will go still lower. A drop of 1c. per cwt. has taken place during the week in London for bacon, but at the decline consumption has increased and more is doing. Canadian bacon is quoted at 44 to 46s. for No. 1, and 39 to 41s. for fat and stout sides.

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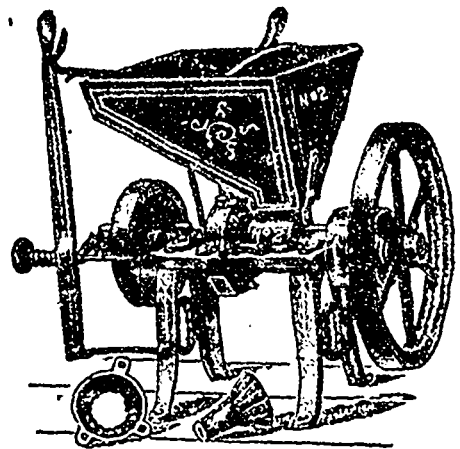
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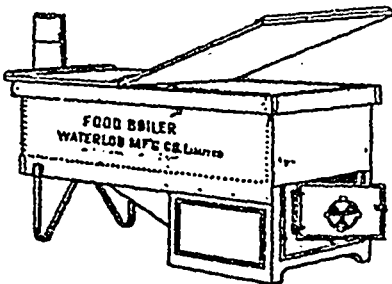
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of the Consulting Chemist of the ROYAL AGRICULTURAL SOCIETY OF ENGLAND, published in their Journal, 31st December, 1897, page 732:

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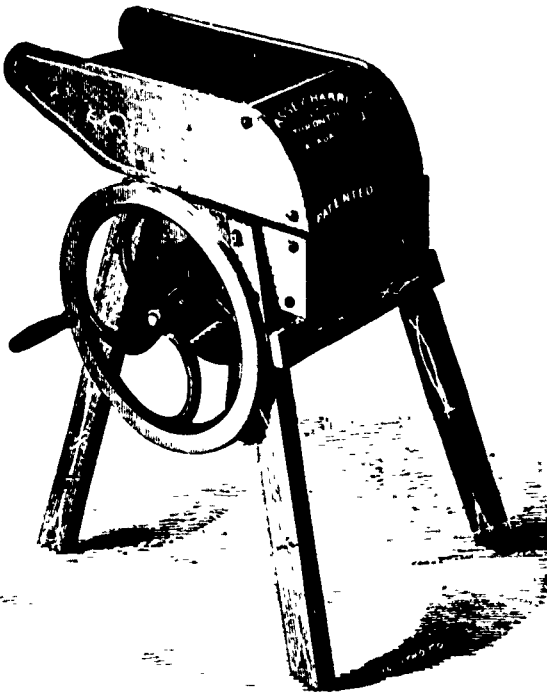


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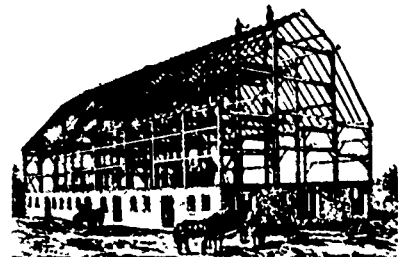
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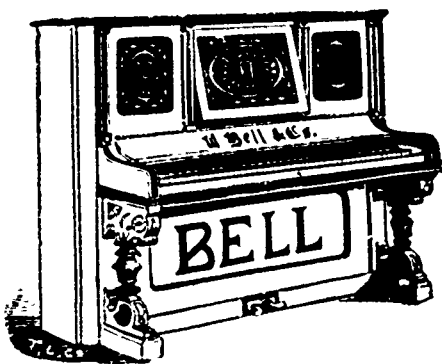
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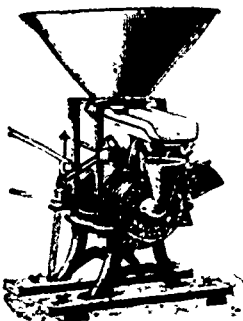
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