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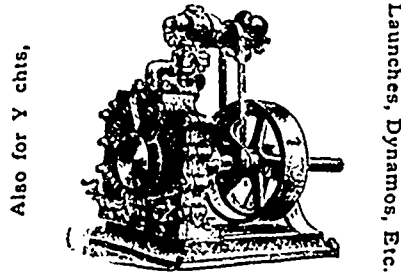
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### ...LEADING TOPICS FOR THE WEEK...

Agricultural Items and Comments. The Canadian Bacon Trade. Poultry Industry of Canada. Agricultural Exports from Argentine. The Egg Industry. Manitoba Agriculture. Boracic Acid in Butter. The British Live Stock Trade. Hogs for Export. Pasteurizing for Butter Making. Market Review and Forecast. Stock, Implement, and general Advertisements of value to our readers.

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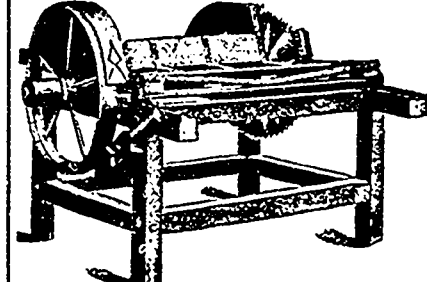
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# FARMING

VOL. XV.

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No. 33.

## FARMING

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

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## TOPICS FOR THE WEEK

### Our Clubbing List.

	Regular price.	With FARMING.
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Toronto Weekly Globe.....	1.00	1.50
Toronto Weekly Mail and Empire.....	1.00	1.40
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Montreal Daily Witness.....	3.00	3.00
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Ottawa Semi-Weekly Free Press.....	1.00	1.60
Hoard's Dairyman.....	1.00	1.75
Rural New Yorker.....	1.00	1.85

### Agricultural News and Comments.

It is always poor policy to keep a large number of cows on the feed that will properly support only half the number. It is a losing business from the outset, and is a straight road to bankruptcy. Too many farmers are carrying on dairying in this way, and wonder why they are not making a profit.

A movement is on foot in Victoria, Australia, for the formation of a wheat trust with the view of obtaining higher prices. It is expected that the colony will have 100,000 bags of wheat to export after supplying the local demand. It will be the work of the trust to send this wheat to London, England, and sell it for the benefit of the producer.

The Australians are experimenting in shipping frozen beef to the East. Three new steamers have been placed on the route between Sydney and Japan. It is proposed to ship the goods to Japan and distribute them from there among the Chinese ports. One of the objective points for opening up this trade is Vladivostock, the Russian fortification on the Pacific.

The San Jose scale has made its appearance in Australia. The district most affected is that around Sydney. Recently fruits shipped from this district to other parts of the colony have been found to be badly affected.

There is a movement in the British Columbia Legislature for cheaper money for the farmer. Nothing definite has been decided upon yet. The aim of the promoters seems to be to supply the farmers with money at a low rate of interest in order that they may be able to develop the agricultural resources of the country and make the most out of them.

The lambing season this year in Great Britain is one of the best the British farmer has experienced for several years. Especially is this so in the north. On one farm eighty-nine lambs from forty five ewes are reported.

The traffic in old horses from England to the continent has grown wonderfully of late. No fewer than 70,000 horses have been shipped to Belgium and Holland alone since 1895. The horse which is unfit for work in England, and for working which a man there would be fined, can be shipped to Belgium, where so long as it can stand on its legs at all, it is made to do duty.

About 1,400,000,000 gallons of milk are produced in Great Britain every year, and of this quantity 505,000,000 gallons are consumed in its natural state. Milk sold last year at about 6d. per gallon in summer and about 9d. in winter. These were the prices received by the farmer. If this milk were made into butter the farmer would realize about 4½d. per gallon in the summer and about 5½d. per gallon in the winter.

The Persian sheep is noted for its fat rumps, but there is a breed in Syria more remarkable for its fat tail. These sheep carefully fattened will sometimes reach 150 lbs., the tail composing one-third of the weight. The sheep of Great Tartary are also known for their extraordinary fat buttocks.

Experiments have been made in France to concentrate wine into tablets for transportation. After the grapes are pressed the juice is pumped into an apparatus where it is evaporated and the vapor condensed. When it has the consistency of a syrup it is mixed with the grape pulp, producing a marmalade that contains 80 per cent. of grape sugar. To make wine, the cakes are mixed with the right proportion of water.

The Americans have been endeavoring for some time to develop a butter trade with China. The American Consul at Hong Kong reports that the butter consumed there is imported from Denmark, Australia and France, with small quantities from California. The Danish butter is the most popular. American exporters have been laboring under the delusion that anything is good enough for the Asiatic coast, whereas, the demand is for the highest grades.

The English farmer is very much agitated over the fact that milk is being sent to London from France. Of late years many dairy farmers have transferred their energies from butter and cheese making to supplying milk to large towns and cities, and now it would appear as if this trade would fall into the hands of others.

### Cheap Money for the Farmer.

The British Columbia Legislature has appointed a special committee to devise a scheme for securing loans for farmers at lower rates than can be secured at present. The premier and other members of the legislature expressed themselves as in hearty sympathy with the scheme. When a government can borrow money at less than 3 per cent. it would be a paying investment to loan it to needy farmers at from 4 to 5 per cent. Even if there were no profit to the government in the transaction it would be an excellent investment for the country. As we pointed out in last week's issue, what this country needs at the present time more than anything else is the development of its vast agricultural resources. We cannot afford to

leave these undeveloped at this juncture. Of course it is the farmer in the newer districts who needs the money most. Many of those who have gone to the newer sections have in many instances not had sufficient capital to carry on their farming operations in the best way. This has been a serious drawback. If these farmers could borrow money, say at 4 per cent, they would be in a position to stock their farms and make them pay.

### Agricultural Exports from Argentina.

The following tabulated statement of the agricultural exports from Argentina in 1896 and 1897 will be interesting as showing the possibilities of that country in supplying the markets of the world with food products:

	1897.	1896	1897 compared with 1896.	
			Increase.	Decrease.
Live cattle... ..	Head. 238,121	Head. 382,539	—	144,418
Live sheep... ..	504,128	512,016	—	7,888
	Tons.	Tons.	Tons.	Tons.
Frozen mutton... ..	50,894	45,105	5,789	—
Frozen beef... ..	4,241	2,997	1,244	—
Jerked beef... ..	36,239	45,907	—	9,668
Wool... ..	205,571	187,619	17,952	—
	Lb.	Lb.	Lb.	Lb.
Butter... ..	1,319,364	1,986,791	—	667,427
Cheese... ..	25,540	50,235	—	24,689
	Tons.	Tons.	Tons.	Tons.
Wheat... ..	101,845	532,001	—	430,156
Maize... ..	374,942	1,670,517	—	1,195,575
Linseed... ..	162,477	229,675	—	67,198
Hay... ..	103,700	104,773	—	1,073

The fact that the exports of live cattle have decreased 37 per cent., of maize 71 per cent., and of wheat 80 per cent., would not seem to bear out the contention of many that Argentina is likely to be the great rival of North America in the exportation of food products to Great Britain.

### The British Live Stock Trade.

Live stock breeders in Great Britain are realizing more and more the necessity of keeping the quality of their purebred stock at the very top. For years breeders from the United States, Canada, Australia, and, of late, Argentina, have been purchasing the best blood and taking it out of the country, though the demand has fallen off in one or two instances during late years, notably from Canada. This blood, and we speak more particularly of the Shorthorn strain, imported into the several countries named, has been the means of raising the general standard of the stock, and now the English farmer has to compete in his own market with beef from the countries that his good blood has been the means of improving. A few years ago, when prices were good, he did not feel this competition so keenly, and, besides, the quality of beef brought in from these countries did not compare with that produced at home, and so he had the lead in the market, and could command the top price, no matter what it was. But these conditions are gradually changing, and to-day the British farmer finds beef from other countries as good as his own product coming in and competing with him for his own market.

To make the very best out of these conditions is the problem that now confronts the British farmer. He realizes that he will have to continue to meet this competition from abroad, and to do so successfully will either have to produce at a less cost so as to be able to undersell the outsider, or to so improve the quality of the home product that it will continue to lead in his own market. He is, very sensibly too, looking to the latter as a

means of improving the situation. The British consumer is, so to speak, very fastidious about his food, and will pay a good price whenever the quality is at the top, and, realizing this, the British producer is adopting the wiser course.

But the British live stock breeder is also looking to another source for the disposal of more of his stock. England has been the source for many years from which the purebred herds of live stock in other countries have been replenished and is likely to continue to be so. The supplying of this trade has been a profitable business, and will likely remain so. With the revival of the live stock trade in America, an increased demand for new blood may be expected, and the British farmer seems somewhat inclined to pay more attention to developing this trade than endeavoring to hold the home market for himself. The farmer of the United States, Canada, etc., with the abundance of cheap feed at his disposal may be able to produce beef and land it in England at a cost less than the British farmer can produce it. But to produce a quality of beef that will command the price in the British market, the outsider must have good stock, and to keep up his herds he must go back to the original source of good breeding stock, viz. the live stock herds of Great Britain.

English exchanges just now are giving considerable attention to this side of the British live stock trade, as being one that is capable of further development. In this connection, however, it is a notable fact that during the past few years the home market has been the best one for pedigreed stock, and English breeders have not depended so much upon the foreign trade as an outlet for their young stock. With the revival of the live stock trade in other countries, the demand for pedigreed stock will increase, and the British farmer will not feel the competition in the home produce market so keenly.

### The Poultry Industry of Canada

By THOMAS A. DUFF, Toronto, Ont.

(Continued from last week)

#### BREEDING, FEEDING, AND MATING OF GESE.

The following notes are from the pen of Mr. Samuel Cushman, late poultry manager of the Rhode Island Agricultural Experiment Station, and should be of great service to those who keep geese:

Although old geese lay a greater number of larger eggs, and are more reliable breeders, it is not always best to attempt to buy old geese. Owners are unwilling to part with well-tried breeders that are really profitable, as it says better to keep them than to sell them at what would be considered a reasonable price. Quite often the old geese offered for sale are those found to be unprofitable. It is, therefore, usually better policy, and saves time, to buy young geese before they are killed for market, rather than to attempt to secure any number of old geese.

Young ganders are better for breeding than young geese. Ganders not over five or eight years old, mated to old geese, give the best results. Young geese do not lay as many fertile eggs and produce as many goslings the first breeding season as they do the second season. If geese, whether young or old, are changed from one place to another after January 1st, they are liable not to breed well that season, and they breed better the third season they are on a place than they do the second season, all other conditions being equal. Therefore, breeding geese should be secured as early in the fall as possible, not later than October, to ensure the best results. This gives them sufficient time to become acquainted with their new surroundings and feel thoroughly at home before the breeding season. It is also well to have, at this date, all birds which are to be mated penned or yarded by themselves. Breeding geese should be kept active and moderately thin in flesh through the winter by light feeding, and by allowing them free range, or such facilities for swimming as will induce them to take much exercise. If deprived of the latter, they

must not be fed such fattening food. They require no houses or protection from cold or storm, and seem to prefer to stand out exposed to the wind in midwinter rather than seek the protection of an open shed, except during a heavy snow storm.

Geese are grazers as much as cows, and can be spoiled by too much grain. To ensure the fertility of eggs, access to a pond, puddle, or tub of water, set level with the ground, as well as an abundance of green food, is of the greatest importance.

Very early laying is not desirable, as goslings hatched before grass is plenty do not do well, and cost more than they bring. Goslings do best when put out during the day on short grass with water to drink, no other food but grass being given for two days, and then a light feed of scalded cracked corn three times daily in addition to the grass. The supply of grass should always be ample, and the water dish should never become empty. They should always have an opportunity to get into the shade, or they are liable to be overcome with the heat of the sun. If huddled on fresh green sward daily, and kept in a rat proof house at night, they grow more uniformly, and less are lost than if brooded by geese or hens. They should be managed so that they will be active and eager for their food most of the time.

### The Canadian Bacon Trade.

In the issue of the journal of the Royal Agricultural Society of England for the quarter ending March 31st, 1898, Mr. L. M. Douglass gives a comprehensive and exhaustive treatise on the subject of "Bacon Curing." The article is very profusely illustrated with cuts of typical sides of bacon so arranged as to show the size and style of cut that will bring the most money on the British markets. The writer quotes a number of statistics to show the possibilities of different countries in supplying the English bacon trade. He admits that it is impossible for the British farmer to supply this trade, and that he will have to compete with the farmer of Canada, Denmark and elsewhere. He points out that the success of the Danish bacon trade is largely due to the fact that the Danes have recognized the close association between dairying and bacon curing. This is also the case in regard to the Canadian bacon trade. The bacon-curing countries are given in the order of their producing capacity as follows. (1) United

to none, and all that is necessary to keep up the quality and retain and enlarge the market is for our farmers to grow the right kind of hogs for the bacon trade. This is of most vital importance to the country at the present time, and it will depend upon what attention our farmers give during the next few years to the growing of hogs suitable to the trade whether our export bacon trade will go forward as it should.

The English and Danish and United States farmer is beginning to feel Canadian competition most keenly. The following extract from Mr. Douglass' article shows how the bacon trade situation is viewed by one living outside of Canada.

It is safe to say that the coming rival of all other countries in the production of bacon is Canada. The attention given to the breeding of pigs by the agricultural authorities and the enthusiastic co-operation of the farmers are alike contributing to this result. "Pea-fed Canadian" is fast displacing Danish meats and taking the leading place in the English market. No doubt the supplies from Canada will continue to increase with the same leaps and bounds as of late years so long as the Dominion farmer devotes as much attention to the quality of hog produced. It is said now that one house alone in Canada often kills as many hogs in one week as the whole of the Danish slaughteries.

In another paragraph the writer says:

Denmark has undoubtedly been our chief source of supplies of high-class bacon till within a year or two. Canada has so rapidly come to the front that there is but little doubt that the supplies from thence have injuriously affected the market for Danish meats.

Later on the writer shows that the production of bacon in Denmark is declining. The number of pigs slaughtered for bacon averaged in 1894 about 22,000 to 25,000 weekly; while the average of 1897 was not over 17,000 weekly.

From all this it will be seen that the growing importance of the Canadian bacon trade is being recognized abroad in no insignificant manner. What then is the duty of the Canadian farmer? It is, as we have already pointed out, to raise a quality of hog that will produce bacon suitable for the British market. To do this it is necessary to have the right type of hog and to provide for it a suitable kind of food. According to Mr. Douglass, "pea-fed" bacon seems to meet the requirements of the market. We will have more to say on this point later on. The kind of hog required is one that will produce a long and deep side of bacon. Too many of the hogs kept for bacon purposes in Canada are too short and do not give a long enough side. Then the position and amount of fat distributed through the side of bacon have considerable effect on its quality. The value of grow-

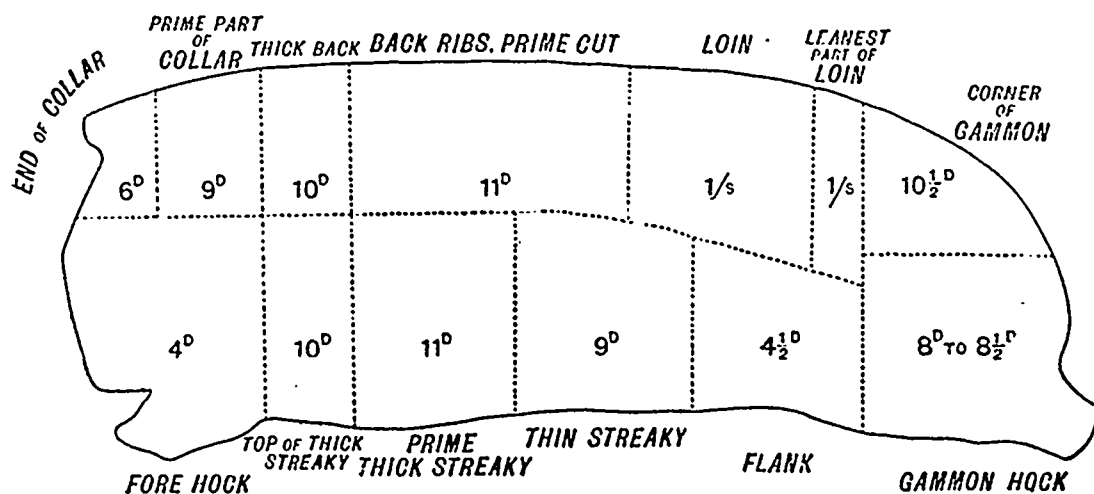


FIG. 15.—Diagram showing various cuts of a side of bacon, and the average prices realized for each during 1927.

States; (2) Canada; (3) Denmark; (4) England; (5) Sweden.

It will be interesting to know that Canada ranks second in importance in this particular. If the scale were based upon the favor with which Canadian bacon is meeting in the British markets, Canada would lead, or at least would be a long way ahead of the United States. Canadian bacon has been growing in favor in England during the past few years. The quality of bacon which our pork packers aim at producing is the kind that will command the highest price in the British markets. Our system of curing bacon is second

ing a pig that will give a good length of side will be seen by reference to the accompanying diagram taken from Mr. Douglass' article. It will be seen that the loins and the prime cuts sell for the highest prices. In fact the whole centre of the side is of considerably more value on the whole than either end.

Do You Want Eggs for Hatching from Thoroughbred Stock? If so, read our premium announcement in another column. It will prove to be profitable reading to any one desiring to improve their breeding fowls or to raise first-class poultry either as a business or for pleasure.

### The Egg Industry.

Messrs. D. Gunn Brothers & Co., provision merchants, Toronto, have recently issued their seventh annual egg circular. It contains a fund of valuable information of practical value to every poultry raiser. The importance of the egg trade is not sufficiently appreciated. No definite statistics have been prepared as to the extent of the egg industry in Canada. American statisticians place the total value of the eggs produced in the United States in excess of that of dairy products, cotton, wheat, the mineral output or other staple industries of the country. Eggs are valuable as an article of food. Their value in this respect is more appreciated in Great Britain than anywhere else, as the following quotation from the circular will show:

The inhabitants of the British Isles appreciate more than any other people the value of eggs as food. In addition to the enormous consumption of domestic laid eggs, nearly \$15,000,000 is spent each year in purchasing foreign supplies. France, Belgium and Denmark contribute more than two thirds of this supply, and the monies received in the trade represent a great deal to the farmers and peasants of those countries. Although the consumption of eggs in Canada is capable of vast expansion, there will always be, as there is to-day, a surplus available for exportation. In competing for the egg trade of the United Kingdom it has always to be borne in mind that scrupulous care and pains must be exercised if the trade is to succeed. A fast steamship service and cold storage carrying facilities will do much to offset the advantage which continental producers have over Canadians. But something more is required to win a good place for Canadian eggs in British markets, viz., the unanimous co-operation of producers, merchants and exporters in marketing eggs in the best possible condition.

The circular points out that it is the little things that often make or unmake an industry. By selecting the best breeds and feeding the hens in the proper way the production of eggs may be largely increased. It is possible by this means to raise the egg production per hen from 150 to 250 eggs per annum. The average yield in Ontario is only about 100 eggs per hen, so there is room for great improvement along this line.

There is a great loss of eggs from improper handling. The slightest crack renders the egg valueless for pickling or cold storage purposes, and causes a loss of from two to three cents per dozen. Proper egg carriers should be used for transporting eggs. Egg cases can be purchased for about 25 cents for a thirty-dozen case. Then the eggs should be kept clean.

In regard to prices for the export trade the present season, Messrs. Gunn Brothers have this to say:

We do not pretend to be able to prophesy as to the course of the egg trade in Great Britain this coming season. It, however, does not require any prophetic gift to make a forecast of large receipts and comparatively low values the season through. The prospects are that in the British Isles the production of eggs will be larger than ever, while in addition to the usual supplies from France, Belgium and Denmark, a phenomenal movement of eggs from new sources in Russia is predicted. Although these eggs are inferior to those of Canada and cannot be shipped to Great Britain under as advantageous conditions, they must be counted as entering into competition with our product and will, beyond doubt, have an adverse effect upon market values. Last year, it will be remembered, the Americans made a somewhat spirited bid for the export trade, and it is estimated that they sent more than a million dozen eggs to Great Britain. This year it is reasonable to expect very large shipments from the United States, as last year's operations were in the nature of an experiment. Egg dealers in that country have suffered serious losses for a number of seasons by the cold storage of eggs, and now prefer to divert a portion of their stocks to British markets.

The prices for eggs at New York and Toronto at the end of March during the past eight years are given as follows:

	1891	1892	1893	1894	1895	1896	1897	1898
Toronto,	16c.	14c.	17c.	16c.	15c.	16c.	11c.	10c.
New York,	24½c.	14½c.	18c.	14½c.	12c.	11½c.	10½c.	10c.

### The Export Trade in Winter Butter.

For the two months ending Feb. 28th, 1898, 542,386 cwt. of butter was imported into Great Britain. Of this amount Canada only contributed 4,725 cwt., while Denmark shipped 216,647 cwt., Australia 109,271 cwt., and the United States 8,410 cwt. Some in the trade look upon these figures as an indication that the winter creamery business in Canada is not doing what was ex-

pected of it in the way of developing the butter export trade. Perhaps it has not come up to the expectations of those particularly interested in the export trade. We know, however, that the number of winter creameries has gone on steadily increasing since the first one was operated in Oxford county in 1891. Besides, the quantity made has increased each year and we venture to state that during the past season the production of winter creamery butter has increased almost one-third.

There is therefore absolute proof that the production of winter creamery butter is increasing every year. The question then comes, why has not our export trade in winter butter shown a corresponding increase? The answer is, we think, quite clear. The demand for fresh made winter creamery butter in our towns and cities has increased much faster than the supply, and the result is that our dairymen have found a good market at home without seeking one abroad. During the past two months especially the supply of fresh winter creamery butter in Toronto and Montreal has not been more than would supply the local demand. Besides, it is only during the past winter that the export market has afforded as good prices to the dairymen as the local markets, and in fact during March factorymen could do better by selling locally, though one or two good factories which have been shipping regularly realized as good values abroad. There is therefore no ground for alarm in regard to the future of winter dairying in Canada. As soon as the local markets are supplied the winter-made butter will go forward to England in greater quantities and we are sure, as has already been demonstrated, it will command a good price and please the consumer.

However, notwithstanding the unfavorable comparisons above mentioned, the exports of butter from Canada during the two months already quoted made a gain of 1,482 cwt. as compared with the corresponding period last year. This is encouraging and leaves no room for doubt in regard to the future of the winter butter trade. After a few years, when more of the farmers who are engaged in winter dairying have adapted themselves to the conditions necessary for carrying on winter dairying in the most profitable way, there will be a much better showing.

### Manitoba Agriculture.

The report of the Department of Agriculture for Manitoba for 1897 has been issued. It shows that in nearly every branch of the work there has been progress. The yield of wheat was not up to the usual average. But this was more than compensated for by the higher prices obtained and by the favorable weather for harvesting and threshing. The prices for cattle were good, a large number of stockers being sold to go to the United States. This should induce a boom in the stock business the coming season and be an incentive to the Manitoba breeders to improve their stock, and we believe that many of them are now making large purchases of stock from Ontario and elsewhere for the purpose of replenishing their herds. However, as we pointed out in last week's issue, this selling of stockers so largely may have an injurious effect upon the live stock trade in that province during the next few years. It will, at least, take three or four years to raise cattle for the export trade, and if the young stockers now in the country are sent out of it, this trade is likely to suffer.

The sales of lands to settlers during the past year greatly increased. Over 1,000 homestead entries were made during 1897. The development of mining has given a great impetus to the Manitoba trade. The prevalence of contagious diseases among stock is reported as decreasing, owing to measures put in force by the local government to keep them in check. Dairying has made good progress. Twenty-seven creameries produced 987,179 lbs. of butter valued at \$177,692, and the cheese factories reported 987,000 lbs. of cheese valued at \$83,895, making a grand total of \$261,581. The other departments of agriculture are shown to have done good work,

and on the whole the Manitoba citizen has great reason to rejoice over the success of the past year along agricultural lines.

Success in agriculture means more perhaps to Manitoba than to any other province in the Dominion. Farming is the mainstay of the country, and should be fostered in every possible way by both the local and Dominion Governments. The success of last year will induce an increased emigration from the older provinces to Manitoba this summer. In fact the exodus from Ontario is beginning to be noticed already. Ontario farmers are complaining of the scarcity of farm help, and the explanation is that the young man has "gone west."

### Boracic Acid in Butter.

The Montreal Butter and Cheese Association has petitioned the Hon. Mr. Fisher, Minister of Agriculture and the ministers of Agriculture for Ontario and Quebec, asking them to warn butter-makers against the use of boracic acid in butter. Boracic acid is an adulterant under the English law, as has been shown by some recent prosecutions against retailers in England, which resulted in fines being imposed because of the butter containing boracic acid. In view of this, exporters on this side have been requested by their English correspondents to give certificates guaranteeing that the butter they ship is absolutely pure and free from boracic acid. All butter entering the United Kingdom will be examined by analysts appointed for that purpose and anyone making importations containing this adulterant will be heavily fined. "Preservative" is said to contain boracic acid and consequently dairymen are advised not to use it.

It is hardly necessary to mention this matter further. If the use of boracic acid or any other preservative prevents the sale of our butter in the British market the duty of every buttermaker is quite clear. No preservative of any kind, except salt, should be used under any consideration. There may have been a time when the use of a preservative was advisable, but there is no need for it at the present time. With the cold storage facilities provided on board the cars and boat all butter, if properly made, can be landed in England in a perfect condition without the use of boracic acid.

### CANADA'S FARMERS.

T. D. McCallum, Danville, Que.

We have pleasure this week in presenting the readers of FARMING with a short sketch of Mr. T. D. McCallum, manager of the Isaleigh Grange Farm, Danville, Quebec. The Isaleigh Grange Farm contains 900 acres of land, and is owned by Mr. J. N. Greenshields, of Montreal. It has been successfully managed by Mr. McCallum for several years past, and who by his knowledge of purebred stock and skill in breeding has succeeded in making the Isaleigh Grange herds second to none in Canada.

Mr. McCallum is yet a young man. He was born at Danville, Que., in 1866, and received his education at the Danville Academy and at St. Francis College, Richmond, Que. When only seventeen years of age Mr. McCallum commenced the breeding of purebred Ayrshires on his father's farm at Danville, and thus when quite young he acquired the training which has been so helpful to him in his present position.

The Isaleigh Grange herds comprise Yorkshire and Berkshire swine, Shropshire sheep, and Guernsey and Ayrshire cattle, and include some of the highest types of animals of these breeds. Several important importations have been made by Mr. McCallum since he assumed the management of the farm. Mr. McCallum sailed for Europe in March last, and will make a large importation, consisting of Shropshire sheep, Yorkshire swine, and Guernsey and Ayrshire cattle, this spring. Knowing something of what Mr. McCallum has done on former occasions, we can safely state that every animal of this importation will be of the highest type in its class. When this importation is added to the large herd already at Isaleigh Grange, which consists of 100 purebred Ayrshires, 40 Guernseys, 20 purebred Shropshire sheep, and about 100 Yorkshire swine, Mr. McCallum will have under his care one of the largest purebred live stock herds in the Dominion.

The Isaleigh Grange herds have been particularly successful at the leading fairs. Last fall their winnings amounted to \$1,400. Purebred stock from these herds are shipped to all parts of Canada and the United States. In fact we are safe in stating that sales from the Isaleigh Grange Ayrshire herd are larger than those made by any other Ayrshire breeder in Canada.

## HOGS FOR EXPORT.

A few weeks ago a representative of the *Weekly Sun* interviewed Mr. J. W. Flavelle, managing director of the Wm. Davies Packing Co., in regard to the kinds of hogs most suitable for the export bacon trade. Mr. Flavelle's practical knowledge of the bacon trade makes his remarks of value to every swine breeder.

In reference to the breeds of hogs best adapted for this trade, Mr. Flavelle said:

We are not breeders and do not wish to say anything either for or against a certain hog because of its breed; but as exporters we know that certain breeds produce qualities which enable us to market their products at the best possible rate, and these exceptionally good qualities which prevail in some hogs have a tendency to increase the value of the whole stock.

The thoroughbred Tamworth gives us a very desirable class of bacon hogs. We find, however, when these hogs are crossed with what are, from an "exporter's" standpoint, objectionable types, such as Poland Chinas, Duroc Jerseys, Chester Whites, Essex, Suffolks, Jerseys, or some types of Berkshires, that the result is not so good from a packer's standpoint. The product shows too much of the type of the inferior breed and not enough of the Tamworth.

In contrast to these, we find that the Improved Yorkshire White has a tendency to assert its own individual characteristic in a cross even with the objectionable types I have just mentioned. The Improved Yorkshire is an excellent hog for the packers, and, when crossed with inferior breeds, it develops in the progeny its own peculiarly excellent features, viz., a lengthy, deep side, an abundance of lean, and a thick belly. One of the greatest needs of the trade, from a breeding standpoint, is the introduction of thoroughbred Yorkshire males, for the purpose of crossing with other breeds not so suitable for the packer's purpose.

At the present time a thoroughbred Tamworth from 165 to 190 pounds, if properly fed, makes an admirable bacon hog. The same can be said of the thoroughbred Yorkshire. The difference between the two is that the Tamworth is not so desirable to cross with objectionable hogs. Generally speaking, what exporters require is a lengthy, smooth, deep-sided hog, with well developed hams, and moderate shoulder and head. If this hog is fed wisely, so as to produce plenty of flesh and a moderate quantity of fat, it will ensure the production of bacon for which the best price can be made in England.

Mr. Flavelle's remarks on feeding are right to the point and should be particularly noted by farmers. Though it is necessary to have the right type of hog for the bacon trade, it is quite as necessary that a proper system of feeding should be followed. No haphazard system will suffice. On this point Mr. Flavelle said:

The importance of proper feeding cannot be too strongly impressed upon your readers. Last night's cable shows a difference of 10s. per cwt. between No. 1 selection (lean) and No. 2 selection (fat). That is \$2.40 on each 112 pounds. The average hog will weigh alive about 170 lbs., and will produce about 96 lbs. of export bacon; for that 96 lbs., if it were not of No. 1 quality, \$2 less was secured in the English market this week than could have been secured for No. 1. The delivery of hogs this week in Ontario will amount to say 20,000. Six thousand of these will be too fat and their product, if sold in England this week, would bring \$2 a hog less than it would bring if the hogs were of the proper class. In other words, there is a loss to the country of \$12,000 on one week's delivery of hogs, because of improper breeding and feeding, resulting in the production of hogs which made bacon too fat to secure the best price.

Every farmer is interested in this matter. The producers of the best class of hogs lose more or less as well as the producers of the poorer classes. I will show you how. Every packer, in arriving at a conclusion what price he will pay for hogs, has to measure up the whole situation. He recognizes that no matter how carefully he selects his hogs, the selection is always against him. When the

hogs he buys are killed, he finds many hogs have been paid for as lean which turn out fat, many which have been paid for as firm, well-fed hogs, turn out soft or slightly tender, and the product must be sold in England at 5s., 7s., 10s. per cwt. less than best sides. Many, far too many, have been handled roughly, causing loss from bruised sides. Therefore, when the packer is fixing his buying price, he has to strike an average, keeping in mind the above conditions. If we were sure all the hogs sent in would be of first-class quality, as to breeding and feeding, and free from bruises, the average price all round would be put at a higher point. A producer of objectionable hogs, therefore, not only lessens his own profit but lessens as well that of his neighbor who produces a first-class article. Unfortunately, we do not come in direct contact with farmers. We receive practically all our hogs from drovers, and hence can only reach the original producers through second hands.

Our people are becoming fairly well educated in the matter of breeding. Marked improvement in that line has been made of late years. There is, however, a retrograde movement in the matter of feeding, and the point to be most strongly impressed is the necessity of proper care in this latter matter. Proper feeding at the present time is of equal importance with breeding. We find the most objectionable feeding is done by our best farmers, such as those in the counties of Oxford and Middlesex. In these counties farmers have good pens in which their hogs spend most of their lives. Farmers there also force their hogs in order to get returns in the shortest possible time. We want more of the principle of "root, hog, or die." If hogs are heavily fed and kept confined they will give the proper weight in five months, but they will be altogether too fat to make proper export bacon. Hogs should not be finished in less than six or seven months. A good ration for young hogs is roots and mixed grain, care being taken not to force the animal too quickly, but on the contrary to take time in which to develop a long, strong body.

Mr. Flavelle very strongly deplored the practice of heating or abusing the hogs. This often causes a loss of from 2s. to 10s. per cwt. when the bacon is sold. From one to five per cent. of the hogs received by the Wm. Davies Co. show bruises. He also objects very strongly to the feeding of corn. Where corn is used in connection with the whey at the cheese factories the results will be disastrous. The

whey is all right, but with it should be used oats, barley, peas and middlings, and not corn. By using barley, oats and bran with a small amount of peas to harden on towards the end of the feeding, the bacon hog can be produced at as low a cost as the fat hog.

As we point out in another column the Canadian bacon trade has taken leaps and bounds during recent years. We have now obtained a standing in the British markets for our bacon and it would be suicidal on our part not to put forth every effort in the way of breeding and feeding hogs that will supply the right kind of bacon. It is just as easy for the farmer to breed the right kind of hog as to breed one unsuitable to the trade and likewise a system of feeding as indicated above that will produce the right kind of bacon can be carried on just as cheaply and with as much profit as a system of feeding totally unsuited to the needs of the trade. So why not adopt the best system and one that will assure success in developing our export bacon trade?

## PASTEURIZING FOR BUTTERMAKING

Part of an address by H. E. SCHUCKMANT, at the National Buttermakers' meeting, Topeka, Kansas

From a creameryman's standpoint there are three principal reasons why I am in favor of pasteurization:

- 1st. If properly handled it insures uniformity of product.
- 2nd. It improves the flavor of butter.
- 3rd. It greatly improves the keeping quality of butter.

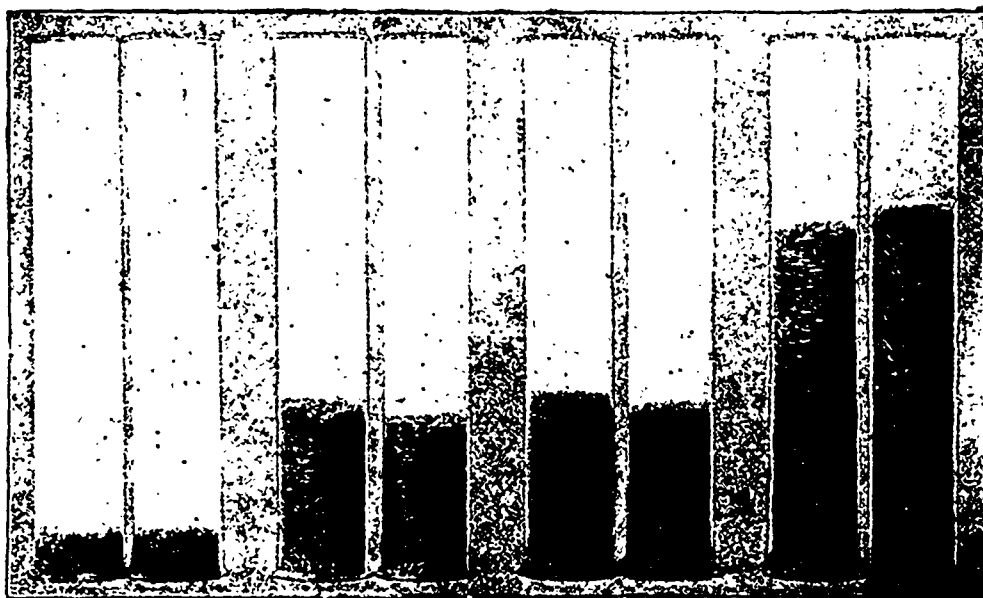
I have been asked many times why simply pasteurizing insures uniformity of product. Pasteurization alone does not bring about this result, and five years ago it would have been a difficult problem on a large scale, as we had no pure culture starters in the land, except what were imported.

To illustrate: The conditions are comparable to the growing of a wheat crop in a field. The pasteurizing process corresponds to the thorough preparation of the ground which destroys most of the weeds and foreign growth in the field. No one will for a moment claim that there are no weeds left in the field after it has been thoroughly ploughed and harrowed, but if we sow in this prepared soil the pure selected wheat and the conditions are favorable for the growth of this crop, the weed seeds, even though they be present, will be choked out by the wheat and prevented from developing. Just so in a vat of cream. By pasteurizing we clean the cream of weeds, that is, we destroy the undesirable bacteria, that are in a growing state, leaving but little except the spores, which compare to the seeds, and these are by far in the minority. Into this prepared cream we add the selected starter, which contains bacteria in an actively developing condition, and which grow and develop in the pasteurized cream before the spores are able to germinate and grow, thus choking out the spores which insure a good, clean crop of butter flavor without taints of any kind. From this any one can see that by using the same kind of starter every day, the result must be a more uniform product than it is possible to obtain from raw cream.

It improves the flavor of the butter. I do not think it produces any higher flavored product than the old method, but it does make a cleaner, sweeter flavor, which, to the majority of butter consumers, is a most desirable characteristic.

It improves the keeping quality of butter, and in saying this we touch upon the weak point in raw cream butter and the strong point in pasteurized butter. Under average conditions, it will easily keep double the length

## PHOSPHORIC ACID MANURING WITH OATS ON HUMUS SOIL. YIELD OF THE CROP.



No Phosphoric Acid.  
Crop, 1 oz. oats.

Manured with Phosphoric Acid in form of Superphosphate. Crop, 4.3 ozs.  
Increase, 3.3 ozs.

Manured with Phosphoric Acid in form of Alberts' Thomas-Phosphate Powder. Crop, 4.4 ozs.  
Increase, 3.4 ozs.

Manured with double quantity of Phosphoric Acid in form of Alberts' Thomas-Phosphate Powder. Crop, 9.2 ozs. Oats.  
Increase, 8.2 ozs.

Equal quantities Phosphoric Acid

Therefore, also on a humus sand soil the phosphoric acid as Alberts' Thomas-Phosphate Powder has shown itself equivalent to phosphoric acid as superphosphate for the cultivation of oats. Is it advantageous to purchase phosphoric acid in the form of Alberts' Thomas-Phosphate Powder, or is it more advantageous to get it in the form of superphosphate?

(This illustration should have accompanied Mr. Wallace's article on "The Solubility of Phosphates," in last week's issue.)

of time that the raw cream butter keeps, which is bound to make it the coming storage butter of America. Extremely delicate flavors and high aromas are incompatible with long keeping quality, so that, generally speaking, the raw cream butters having that "nosy" bouquet flavor, soon lose this characteristic. Pasteurized butter does not have so much of this evanescent, high flavor, and therefore holds up and retains its original flavors for a much longer period of time.

Then, too, we know just what kind of fermentation we have introduced into the cream, and know by experience that it is a species of bacteria that will not cause detrimental fermentation in butter. Another reason is that by chemical analysis pasteurized butter is shown to contain less curd, together with a tendency towards containing less water, and a more uniform content of water from day to day, all of which is in its favor. But while the tendency is towards a lower water content, we can readily retain from 10 to 12 per cent., which you all will agree is sufficient.

From a buttermaker's standpoint I am decidedly in favor of pasteurization for several reasons. The best buttermakers that we have to-day will admit that they have control over every detail of making butter except the most important step, namely, ripening the cream. We can separate at will, as we have a separator to control it. We can cool the cream at will. We can churn properly if we choose, and we can work the butter as we please. All these things are under control. Not so in ripening raw cream.

That raw cream may contain any number of species of bacteria, and that it does contain several different species no one will pretend to deny, but a buttermaker has no means of knowing what species it does contain, and it is only when he has his butter made that he finds out whether the cream did contain a good or bad species, if he is a good judge—and most men are not—in which case he finds it out from his commission house, and you will admit that the amount of satisfaction in that way of doing is precious little. Many will at once say that they had not thought of it in that way, and I believe that it is true that they have not, and yet these are the very conditions confronting every maker of raw cream butter, and there exists no argument in favor of this being so. You may use a pure starter in the raw cream like you may sow selected wheat in the unprepared field, but in each instance you have no reason to expect to, and you never will, reap a harvest of pure clean butter flavor from the cream, nor a harvest of wheat without

weeds in it from the unprepared field.

Having learned to appreciate the value and virtues of pasteurized butter it is no mystery to me that the English people will buy a clean article, when they can get it, in preference to the conglomeration we are daily producing and which we call butter. It behoves the creamerymen of the U. S. to keep an open eye on the butter business. Canada is alive, and from the dozens of enquiries which I have received from there regarding pasteurization during the past four months, it is plain to me that our northern cousins are making a commendable effort to shut us out of the English butter market as they already have shut us out of the cheese market.

Pasteurize and use a pure culture starter, and you effectually do away with any chances in buttermaking, and place every condition under your immediate control. No worrying about what our butter will be to-morrow, for we will get just what we want. Our results are exactly in accordance with our efforts. "What we sow that shall we also reap," which is one way of telling you that the starter is about 75 per cent. of making pasteurized butter.

It's easy, yes, it's easy—it's a most delightful satisfaction to make butter when you know you have everything under control, but the making of pasteurized butter demands so much attention to small details, and scrupulous care that the average buttermaker of to-day will find it hard to bring himself to appreciate the minuteness of detail, and, though you may show him all about it, he will soon lose sight of and forget the little things, one by one, until, before he is aware of it, he has lost his grip, and down the plank of failure he slides.

A word as to our method of pasteurizing and I am done. As most of you know, we pasteurize the whole milk, and skim it at the pasteurizing temperature, this temperature being from 154 to 157 degrees F. As before stated we began under very unfavorable circumstances, the most unfavorable being that we could not at that time purchase a pasteurizing machine of sufficient capacity to handle our milk. We have no live steam connections to the pasteurizer at all.

Some few have said that this was all a mistake, that we could not skim clean this way, that it took too much steam and too much ice, that there was a loss all along, etc., but to such men I wish to say, that every time they have made such assertions they have only exposed their ignorance on the subject, and have given an intelligent public an opportunity of learning how little they really knew about the business.

# Premiums.

## All Lovers of Music

Should take advantage of this extraordinary opportunity to obtain one of the most delightful musical instruments

## Absolutely Free of Charge

The APOLLO HARP, No. 72, E, renders 72 chords, is fitted with 6 bar Adjustable Symphonic Side. In range and compass is equal to the piano, harp, or violin, while in richness and quality of tone and in simplicity of execution it is unexcelled by any other instrument.

HERE IS THE WAY TO GET IT. To any one who will send us between now and the 15th of May next Eight New Yearly subscriptions to FARMING at \$1.00 each, we will send Absolutely Free one of these instruments the regular retail price of which is \$8 50. Our friends should see to it that this rare opportunity is not allowed to pass. It is the chance of a life-time. There are only a very few of the instruments available and it will be utterly impossible to repeat this offer after the 15th of May.

### FREE SEEDS.

In making up our selection of Seed Premiums we have endeavoured to include in it some of the best varieties obtainable from the collective products of Ontario's leading seedsmen. The selection has been made with a due regard to the special requirements of our readers and to the production of the best results.

### SPECIAL SEED OFFER

For one New Yearly Subscription at \$1.  
 Pkge. Beet, Early Intermediate..... 5c  
 " Cabbage, First and Best..... 10c  
 " Carrot, Half Long, Scarlet..... 5c  
 " Cucumber, Long Green..... 5c  
 " Lettuce, Selected Nonpareil..... 5c  
 " Onion, Yellow Globe Danvers..... 5c  
 " Parsnip, Intermediate, Half L. eg..... 10c  
 " Radish, Olive Gem..... 5c  
 " Squash, Hubbard..... 5c  
 " Asters, New Giant Flowering, Mixed..... 15c  
 " Sweet Pea, Selected, Finest Mixed..... 10c  
 " Wild Garden Flower, Mixed..... 5c.  
 85c

### COLLECTION A.

10 Packets Vegetables. Price, 50c.

- |               |                  |
|---------------|------------------|
| 1 Packet Beet | 1 Packet Parsnip |
| 1 " Carrot    | 1 " Cabbage      |
| 1 " Cucumber  | 1 " Radish       |
| 1 " Lettuce   | 1 " Squash       |
| 1 " Onion     | 1 " Tomato       |

Given for one new yearly subscriber at \$1.

### COLLECTION B.

10 Packets Flowers. Price, 50c.

- |                           |                |
|---------------------------|----------------|
| 1 Packet Phlox Drummondii | 1 Packet Pansy |
| 1 " Stocks                | 1 " Nasturtium |
| 1 " Petunia               | 1 " Dianthus   |
| 1 " Portulacca            | 1 " Balsam     |
| 1 " Mignonette            | 1 " Aster      |

Given for one new yearly subscriber at \$1.

### COLLECTION C.

20 Packets Vegetables and Flowers. Price, \$1.00.

- |                 |                 |
|-----------------|-----------------|
| 1 Packet Aster  | 1 Packet Squash |
| 1 " Pansy       | 1 " Watermelon  |
| 1 " Stocks      | 1 " Musk Melon  |
| 1 " Balsam      | 1 " Lettuce     |
| 1 " Phlox       | 1 " Celery      |
| 1 " Sweet Peas  | 1 " Carrot      |
| 1 " Chullflower | 1 " Beet        |
| 1 " Cucumber    | 1 " Radish      |
| 1 " Onion       | 1 " Tomato      |
| 1 " Cabbage     | 1 " Vine Peach  |

Given for two new yearly subscribers at \$1 each.

### COLLECTION D.

20 Packets Vegetables. Price, \$1.

- |                  |                 |
|------------------|-----------------|
| 1 Packet Beet    | 1 Packet Carrot |
| 1 " Parsnip      | 2 " Cabbage     |
| 2 lb. " Cucumber | 1 " Lettuce     |
| 1 " Musk Melon   | 1 " Watermelon  |
| 1 " Citron       | 1 " Onion       |
| 1 " Radish       | 1 " Squash      |
| 1 " Tomato       | 1 " Vine Peach  |
| 1 " Parsley      | 1 " S. Savory   |
| 1 " Sage         | 1 " Thyme       |

Given for two new yearly subscribers at \$1 each

## Seed Grains

### Barley

For one new yearly subscriber at \$1, and 18 cents added to pay for bag, we will give one bushel of Mandscheuri Barley.

### Oats

For one new yearly subscriber at \$1, and 18 cents added to pay for bag, we will give one bushel of Siberian White Oats.

### Peas

For one new yearly subscription at \$1, with 18 cents added to pay for bag, we will give one bushel of the famous Prussian Blue Peas.

### Potatoes

For one new yearly subscription at \$1, and 18 cents added to pay for bag, we will send one peck of the Great Divide Potatoes or one bushel of Empire State " Ross of Erin Potatoes. These seeds are advertised by Mr. Bowman in another column.

### PUREBRED POULTRY

One pair of any of the following breeds of Fowls, from prize-winning stocks: Silver and Golden Wyandotte, Barred Plymouth Rocks, Black Langshans and Single Comb White Leghorns, for six new yearly subscribers at \$1 each.

### EGGS FOR HATCHING.

One setting of 13 eggs of any one of the following varieties: White and Barred Plymouth Rocks, S. L. Wyandottes, Golden Wyandottes, B. Minorcas, S. J. White and Brown Leghorns, for two new yearly subscriptions at \$1 each.

### BOOKS.

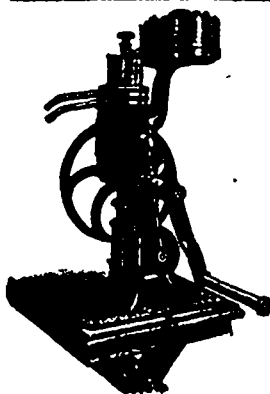
OGILVIE'S GUIDE TO THE KLONDIKE. The tentation of the year. Price 50 cents. Free for one new yearly subscriber at \$1.

FEEDS AND FEEDING, by Prof. W. A. Herre, Dean of the College of Agriculture, etc., of the University of Wisconsin. The latest, the best, and most comprehensive work on animal nutrition ever issued. Price \$2.00, 657 pages. For three new yearly subscribers at \$1.00 each.

Any one of the following books, recommended in the Report of the O.A.C. for 1897, will be given for two new subscriptions at \$1 each, or the whole set of six books for eight new subscriptions at \$1 each.

First Principles of Agriculture, by Voorhees..... \$1 00  
 Soils and Crops of the Farm, by Morrow & Hunt..... 0 90  
 Milk and Its Products, by H. H. Wing..... 0 90  
 Fertility of the Land, by Roberts..... 1 10  
 The Soil, by King..... 0 65

\$5 55



## "Alpha" DeLaval Separators

Capacity from 175 to 2,500 lbs. per hour.

Retail Prices from \$65 to \$500 each.

The closest skimmer and best machine on the market. Gives perfect satisfaction wherever used. Send for Catalogue and full particulars.

Canadian Dairy Supply Company,

or to The Ballantyne Dairy Supply Co.,  
 Stratford, Ont. 327 Commissioners St.  
 T. A. McLean & Co., Charlottetown, P. E. I.  
 T. L. Walworth, Vancouver, B. C. MONTREAL, CAN.

Address, FARMING, 44-46 RICHMOND ST. WEST, TORONTO



# 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 Swine 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 25th 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.

## THE DOMINION CATTLE BREEDERS' ASSOCIATION.

### Shorthorns.

Bonnycastle, F. & Son ..... Campbellford ..... Cows, heifer calves, bull calves.  
Fried, John & Sons ..... Roseville ..... Bull, 2 years; 3 bulls, 7 to 9 months.  
Russell, D. H. .... Sturville ..... Bull calf, 7 months; 2 young cow; 1 heifer.  
Smith, H. & W. .... Hay ..... 2 young bulls; 6 heifers.

### Ayrshires.

Caldwell Bros. .... Orchard ..... 4 bulls, 7 to 10 months.  
Hume, A. & Co ..... Burnham ..... Calves, both sexes, 1 week to 6 months.  
Guy, F. T. .... Bowmanville ..... Bull, 9 months; bull, 2 years; heifer, 2 years; young calves, both sexes.

### Polled Angus.

Kaufman, A. E. .... Washington ..... Bull, 1 year; 2 bulls, 10 months; 2 yearling heifers.  
Sharp, James ..... Rockside ..... Bull, 14 months; 2 bulls, 9 months.

### Galloways.

McCrae, D. .... Guelph ..... 2 yearling bulls; 30 cows and heifers.

### Devons.

Rudd, W. J. .... Eden Mills ..... 6 bulls, 1 to 2 years; calves and heifers.

### Guernseys.

Caldwell Bros. .... Orchard ..... Bull, 11 months.

### Jerseys.

Caldwell Bros. .... Orchard ..... Bull, 10 months.

## THE DOMINION SHEEP BREEDERS' ASSOCIATION.

### Cotswolds.

Bonnycastle, F. & Son ..... Campbellford ..... Yearling ram; ewes and ewe lambs.  
McCrae, D. .... Guelph ..... 5 shearing rams.

### Leicesters.

Armstrong, G. B. .... Teeswater ..... 2 shearing rams.

### Suffolks.

Rudd, W. J. .... Eden Mills ..... Stock, all ages, both sexes.

## THE DOMINION SWINE BREEDERS' ASSOCIATION.

### Berkshires.

Bailey, H. C. .... Cookshire, Que ..... Boar, 3 years; sow, 2 years; sow, 6 months; young pigs, both sexes.  
Boyes, J. J. .... Chur. Hill ..... 2 sows and 2 boars, 6 weeks; 3 young stock, both sexes.  
Bonnycastle, F. & Son ..... Campbellford ..... 11 head, boars and sows, 5 months.  
Cook, P. .... Parkhill ..... 3 boars and 4 sows, 5 months; boar and 7 sows, 2 weeks.  
Fahner, C. .... Crediton ..... Boar, 2 sows.  
Ferguson, J. J. .... Smith's Falls ..... Boar, 2 years; boar, 1 year; fall and spring sows and boars.  
Graham, D. A. .... Parkhill ..... 2 boars and 4 sows, 5 to 7 months; 50 pigs, 4 to 8 weeks.  
Harris, G. N. .... Lynden ..... Boar, 17 months; aged boar, 4 sows, 3 to 5 months; 20 sows, 6 weeks to 2 years.  
Hodson, F. W. & Co. .... Myrtle ..... Young sow; boar.  
Holds-worth, R. L. & Sons. .... Port Hope ..... Boar and sow.  
Lahmer, J. .... Cayuga ..... 30 pigs, both sexes.  
Mutch, J. F. .... Pilot Mound, Man. .... Boar, 11 months.  
Murray, G. H. .... Inverkip ..... 3 young boars; 2 young sows; pigs, 1 month.  
Nell, F. H. .... Lucan ..... Sow, 2 years; sow, 6 months; 13 pigs, 1 month; 29 pigs under 1 month.  
Teasdale, T. .... Parkhill .....  
Thompson, W. .... White Rose .....  
  
Bell, J. .... Amber ..... 50 pigs, 5 to 8 weeks; 5 sows, 4 months; 5 sows, 5 months; 2 sows, 2 to 10 weeks; 10 boars, 5 months; 6 boars, 6 months; 3 boars, 4 months.  
Brown, W. .... Paisley ..... Boar, 4 months; 2 boars, 1 month; 2 sows, 4 months; 4 sows, 1 month.  
Caldwell Bros. .... Orchard ..... 11 boars, 3, 4, and 7 months; 3 sows; young pigs.  
Fahner, C. .... Crediton ..... 4 sows, 2 boars.  
Fulton, J. Jr. .... Brownsville ..... Spring pigs; boar, 4 months; boar, 2½ years.  
Golding, H. .... Thameford ..... Young pigs, both sexes.  
Hord, J. & Son ..... Kirkwall ..... 4 boars and sows, 4 months.  
Johnson, F. P. .... Moscow ..... 2 sows, 1 year; 3 sows, 5 months; young stock, both sexes.  
Majors, W. .... Whitevale ..... 7 sows, 6 months; boar, 5 months; boar, 16 months.  
Nichol, J. C. .... Hainey ..... 2 boars and 3 sows, 6 months; pigs, 1 month.  
Odell, W. H. .... Belmont ..... 6 sows, boar; 6 sows, 6 months; 25 pigs, 1 month.  
Row, F. .... Belmont ..... Stock, both sexes, 1 month and under.

### Tamworths.

Bell, J. .... Amber ..... 50 pigs, 5 to 8 weeks; 5 sows, 4 months; 5 sows, 5 months; 2 sows, 2 to 10 weeks; 10 boars, 5 months; 6 boars, 6 months; 3 boars, 4 months.  
Brown, W. .... Paisley ..... Boar, 4 months; 2 boars, 1 month; 2 sows, 4 months; 4 sows, 1 month.  
Caldwell Bros. .... Orchard ..... 11 boars, 3, 4, and 7 months; 3 sows; young pigs.  
Fahner, C. .... Crediton ..... 4 sows, 2 boars.  
Fulton, J. Jr. .... Brownsville ..... Spring pigs; boar, 4 months; boar, 2½ years.  
Golding, H. .... Thameford ..... Young pigs, both sexes.  
Hord, J. & Son ..... Kirkwall ..... 4 boars and sows, 4 months.  
Johnson, F. P. .... Moscow ..... 2 sows, 1 year; 3 sows, 5 months; young stock, both sexes.  
Majors, W. .... Whitevale ..... 7 sows, 6 months; boar, 5 months; boar, 16 months.  
Nichol, J. C. .... Hainey ..... 2 boars and 3 sows, 6 months; pigs, 1 month.  
Odell, W. H. .... Belmont ..... 6 sows, boar; 6 sows, 6 months; 25 pigs, 1 month.  
Row, F. .... Belmont ..... Stock, both sexes, 1 month and under.

## Yorkshires.

Howe, W. .... North Bruce ..... Boar, 2 years; pigs, both sexes, 3 months.  
Gadard, C. E. .... Cobourg ..... Aged boar.  
Hord, J. & Son ..... Parkhill ..... Young sow pigs.  
Hood, G. B. .... Guelph ..... Boar, 4 months; boars and sows, 2 to 7 weeks.  
Hume, A. & Co ..... Burnham ..... Boars and sows, 5 months; stock, 6 weeks.  
Johnson, J. W. .... Underwood ..... Aged boar; 2 boars, 1 year; 2 sows, 6 months; aged sow, 1 year; 2 sows, 6 months.  
Little, T. Jr. .... Kirkwall ..... Boars and sows, 4 to 9 weeks.  
Meylons, F. A. .... Chapeau, Que ..... 4 boars and 6 sows, 7 months; 2 boars and 3 sows, 9 months; 4 boars and 3 sows, 6 weeks.  
Taylor, J. & H. .... Richmond Sta., Que. .... Boar pigs.

## Chester Whites.

Brown, Wm. .... Paisley ..... Boar, 23 months.  
Chute, H. J. .... Somerset, N.S. .... 5 young sows, 6 months; 2 young pigs, all ages.  
Clark, J. B. .... Hlenheim ..... 7 boars, 9 sows, 3 to 9 months.  
Fahner, C. .... Crediton ..... 2 sows; 3 boars.  
Gestard, C. E. .... Cobourg ..... Aged boar; 2 boars; young stock, both sexes, under 1 month.  
Gidding, H. .... Thamesford ..... 6 sows, 5 months; young pigs, both sexes.  
Henson, H. .... Avon ..... Aged boar; 15 spring pigs.  
Holds-worth, R. L. & Sons. .... Port Hope ..... 2 young sows; aged boar.  
Neil, F. H. .... Lucan ..... Boar, 9 months; 2 boars, 6 months; sow, 12 months.  
Rw, F. .... Belmont ..... 5 sows, 6 months; 30 pigs, 3 weeks, both sexes.  
Taylor, A. J. .... Glenoe ..... Stock under 1 month.  
5 sows; 3 boars, 2 months.

## Duroc-Jerseys.

Fahner, C. .... Crediton ..... Boar; 3 sows.  
Fixser, I. O. .... Fellows ..... Stock boar; boar, 8 months; 2 boars, 6 months; aged sow; sow, 8 months; 6 sows, 6 months; young stock.  
Taylor, J. & H. .... Richmond Sta., Que. .... Pigs.

## Poland-Chinas.

Fahner, C. .... Crediton ..... Boar; 2 sows.  
McKay, J. F. .... Parkhill ..... Aged boar; boar, 3 months; sow, 20 months; stock, both sexes, 7 months.  
Taylor, J. & H. .... Richmond Sta., Que. .... Boar pig.

## Suffolks.

Hord, J. & Son ..... Parkhill ..... Young pigs.

## Victorias.

Fahner, C. .... Crediton ..... 4 sows; boar.

## LIVE STOCK FOR THE WEST.

A car load of live stock was recently shipped from Ontario to Alberta. The car was started at Guelph. Two Galloway bulls were shipped by David McCrae, Guelph, to W. C. Cochrane, High River. The remainder of the car load was made up at Brampton and Myrtle, and the animals were for A. E. Cross, Calgary. Mr. Cross purchased from the following gentlemen: John Crozier, Meadowdale, two bulls; Fred. Clark, Alloo, one bull; A. J. Watson, Castlederg, two bulls and two heifers; Wm. Lindsay, Caledon East, one bull; J. G. Snell, Snelgrove, one bull; John Bright, Myrtle, two bulls; Job White, Ashburn, one bull; Arthur Johnston, Greenwood, one bull; David Birrell, Greenwood, four bulls. All the animals purchased by Mr. Cross were Shorthorns with the exception of one Hereford purchased from Mr. J. G. Snell. The car was in charge of Mr. R. M. Hood.

## CENTRAL CANADA FAIR.

The committees on cattle, sheep, and swine, in connection with the Central Canada Exhibition Association, met and revised the prize list in those departments. There were present: Messrs. J. G. Clark, chairman cattle committee; Chas. Mohr, chairman sheep and swine committee; J. C. Smith, E. W. Clarke, Alex. Stewart, George Boyce, President William Hutchinson, M.P., and the secretary. Mr. R. Sangster, Lancaster, Ont., representing the Shorthorn Breeders' Association; G. A. Gilroy, Glen Buell, Ont., representing the Holstein-Friesian Association of Canada; Jos. Yuill, Carleton Place, representing the Dominion Sheep and Swine Ayrshire

Breeders' Association, were also present.

The cattle committee decided to have the herds judged first instead of having the animals judged individually and the herds afterwards. The Devon class was increased and the prizes made equal to the other beefing breeds.

A new section was added in the Ayrshire class for dry cows three years old and over, and the Quebec Jersey class prizes were increased and made equal to the other milking breeds.

The sheep class was considered satisfactory, and little or no change was made therein.

In the swine department the Suffolk and Essex breed were eliminated from the list, and the prizes therein were distributed in adding a litter of pigs to the Chester White, Poland China and Tamworth classes. In the latter class the aged boar and sow were added also, with prizes equivalent to the other permanent breeds.

The committee considered the new class added for bacon hogs a move in the right direction.

The committee on horses revised the list in that department. A new class was added for local heavy draught horses and confined to exhibitors from the counties of Carleton, Prescott and Russell, North and South Lanark, Pontiac, Ottawa, North and South Renfrew, Leeds and Grenville. Prizes amounting to \$75 are offered, divided into four sums.

Very little revision was necessary to be made, as the committee considered this department after ten years' overhauling ought to be nearly right. Those present were Messrs. Wm. Hutchinson, M.P., president; T. C. Bate, treasurer; Ben Rothwell, E. Brown, H. S. Perley, V.S. and Secretary E. McMahon.

**INSTRUCTION IN SPRAYING.**

The provincial spraying outfit for the western division will give instruction in the preparation and application of insecticides and fungicides at the following places during this month:

- April 20th, R. Govenlock's orchard, Seaforth.
- April 21st, H. Curwin's orchard, Goderich.
- April 22nd, J. Lang's orchard, Exeter.
- April 23rd, Edward Lenenbine's orchard, Ridgeway.
- April 25th, G. H. Mills' orchard, Leamington.
- April 26th, Edwin Patton's orchard, Amherstburg.
- April 27th, Job Hodder's orchard, Dutton.
- April 28th, Freeman Chute's orchard, Port Burwell.
- April 29th, H. M. Barret's orchard, Port Rowan.
- April 30th, John Holbrook's orchard, near Hagersville.

The meetings will be held at 2 p.m. on each date. Farmers and others interested should make it their business to attend these gatherings.

**DAIRY SCHOOL EXAMINATIONS.**

The sixth session of the Dairy School at the Ontario Agricultural College, Guelph, closed on March 25th. The number in attendance was 110; the majority of these remained for the full course, and 48 wrote for certificates. The examination is pretty thorough, and covers the subjects of cheese-making, butter making, milk-testing and cream separators with the addition of lectures on general dairying and kindred subjects. Those who succeed in passing this examination should be better equipped for successful dairy work. It is not intended, however, that the training at the school will take the place of practical experience in a cheese or butter factory.

**MANITOBA DAIRY SCHOOL.**

The Manitoba school has closed its session for the winter. There has been a large attendance of students. Every year the work of the school seems to be increasing in interest and value. At the closing the superintendent, Mr. C. C. MacDonald, expressed his appreciation of the diligent work of the students during the past term, which he considered the best yet held.

**SOWS EATING THEIR PIGS.**

Questions are frequently seen in agricultural papers about sows eating their pigs. It is so unnatural for any animal to eat her offspring that there must be something radically wrong in the treatment or diet of an animal to bring about such a condition of affairs. An old experienced pig breeder thinks this depraved appetite is due to a constipated and feverish condition of the sow. Her rations should be such as to prevent her getting into such a condition. She should have a liberal amount of green or vegetable food, daily access to a mixture of salt and wood ashes, and a plentiful supply of pure clean water. Plenty of exercise and less strong food will also help keep her in a proper state of health.

**Publishers' Desk.**

**Miller's Tick Destroyer.**—We can strongly recommend this old and reliable remedy for the destruction of ticks, scabs and vermin of all kinds. The manufacturers, Messrs. Hugh Miller & Co., Toronto, will gladly furnish any information regarding it free to enquirers.

**Corn Planters.**—Two of our subscribers have recently asked us for the names of reliable firms manufacturing corn planters in Canada. If there are any they do not advertise their goods in FARMING or in any of our exchanges, and we are therefore unable to furnish the information. Perhaps some of our readers may be able to do so.

**Reliable Seeds.**—Messrs. William Ewing & Co., of Montreal, are amongst the oldest seed dealers in Canada, and have by careful and conscientious efforts to attain the very highest results in the production of the various seeds adapted to the requirements of the country entirely gained the confidence of the people. Those who have once dealt with this firm remain their friends as well as their customers. Our readers should send for a copy of their annual seed catalogue.

**The Apollo Harp.**—We should like very much to make our readers better acquainted with this marvellously sweet-toned instrument. The offer which we make in another column is one which would arouse the enthusiasm of every one of our readers who appreciates good music if the instrument were as well known as it ought to be. Rich and sweet in tone, full and complete in compass, simple in execution and attractive in appearance, it is an object suitable for the adornment of any home. To give an adequate idea of it in cold type is simply impossible. It must be seen and heard to be fully appreciated.

**The Canadian Horse Show.**—This year the Canadian Horse Show will be held in conjunction with the Military Tournament of the Toronto Garrison at the Armouries in this city from 4th to 7th May inclusive. It is to be hoped that there will be a larger number of entries of breeding stock than there were last year. We should also like to see a very large attendance of farmers and stockbreeders—not only horsemen but every lover of animals should be there. Every effort is being made by the management to ensure the success of the event, and there is no doubt but those who are fortunate enough to be able to attend will enjoy such a treat as they have not experienced for many years.

**A Word for the Women.**—There are people who do not seem to realize the necessity of conveniences for lessening the arduous labors of those who do the household drudgery. Labor-saving devices are supplied freely in every other department of field and farm work. A good washing machine, for instance, should be in every home. It saves time, labor, and the wear and tear of clothes, and an equally important feature of it is that it prevents the irritating delays which impair the strength and try the temper of those whose duty it is to do the work. The Invincible Washer, made by Chas. Kreutziger, of Waterloo, is a good machine, and is a boon and a blessing to any woman who is the fortunate possessor of it.

**"Farming" Advertisements.**—Those who have any doubts about the value of an advertisement in FARMING as a means of drawing trade should read the following from Messrs. W. C. Edwards & Co., the famous stockmen and lumbermen, whose names have adorned the advertising pages of FARMING for many years: "Please drop from our advertisement the 'Two Imported Bulls for Sale.' The animals are both sold, and enquiries about them are coming in so thick and fast we wish them to cease."

Mr. J. C. Lyons, of Lucknow, also writes: "Inclosed please find 'copy' for an advertisement in several issues. Your paper has given me excellent returns from the advertisement I have had in it, and I hope this one may prove equally successful."

**Northwest Lands.**—There are at present considerable tracts of the most desirable lands available for mixed farming or ranching purposes, either on a large or small scale, in some of the best districts in the Northwest. In the old districts lying along the line of the Calgary and Edmonton Railway, in Southern Manitoba in close proximity to the Calgary and

Edmonton Railway and the Crow's Nest Pass Railway, and in Saskatchewan in the Prince Albert, Duck Lake and Rosthern districts, on the Qu'Appelle, Long Lake, and Saskatchewan Railway, some fine lands may be obtained by those contemplating settlement or looking for safe and profitable investments. The lands will not long be available. They are being rapidly taken up, and as they are situated right in the districts to which the people of the rich mining country of British Columbia must look for supplies in the near future, it will not be long before every foot of the best lands will be allotted. Those desiring information concerning these lands should write to Osler, Hammond & Nanton, of Winnipeg, Man., the general land agents of the various railways interested.

**West's Fluid.**—Our readers should write to the West Chemical Company of Toronto for information regarding this very excellent preparation. It is a concentrated antiseptic derived from coal tar and is free from caustic or even irritating properties. As an antiseptic it is a most inveterate enemy of all disease germs and of the lower order of animal life, destroying at once all lice, fleas, sheep ticks and animal parasites, and it may be used freely without the least fear of producing any injurious effects. By its action as an antiseptic it can be freely used as an injection to prevent the difficulty experienced by breeders in some section in getting cows in breeding condition as it destroys the virus or germ which produces abortion in cattle. In hog cholera it is also invaluable as an antiseptic and disinfectant. For internal worms in pigs, for lice on cattle or poultry, ticks on sheep, fleas on dogs, and for the effectual extermination of all manner of noxious insects, disease germs and poisonous matter tending to breed disease it is claimed to be without an equal and at the same time perfectly harmless to live stock, and above all it is cheap. It will pay to get further information from the company.

**Stock Notes**

Mr. J. H. CHALK, of Calton, Ont., reports his stock of Chester Whites in prime condition. He has about forty young pigs from two weeks to four months old, which he thinks it would be hard to beat.

The bull calf advertised by H. C. Graham in this issue is bred from good milking families on both sides, and is sired by Caliph. Caliph is from the same dam as the 1st prize calf at the Toronto Exhibition of 1897, shown by A. W. Smith, Maple Lodge, Ont., and afterwards sold to the Ontario Agricultural College, Guelph. Anyone wishing to purchase a good Short-horn bull cannot make a mistake by going to see him.

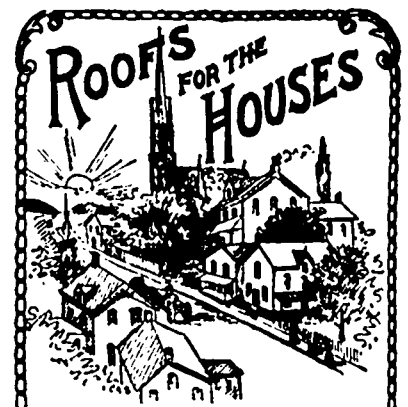
**SALE OF PURE-BRED HOLSTEINS.**—The attendance of breeders of Holstein cattle was exceedingly slim at E. L. Norrish's sale. At the dispersion of the herd of Smith Bros., Chuchill, Mr. Norrish bought some half dozen head. Some of these and their produce he has sold, and at the time of the sale still had some thirteen or fourteen head. He had, however, neglected to have the young stock registered, and as the stock was somewhat thin prices were very low. Henry Welch, Weston, secured Lady Maringa and some young stock. John Clarkson, Summerville, got a good young bull. A Mr. Hamilton, of Rockwood, purchased quite a number of young things. The rest of the pure-bred cattle were knocked down to local men. A few fairly good Leicester ewes went for about \$8 apiece, and a couple of Tamworth sows due to pig soon brought good prices.

**No Money Prizes at the Omaha Show.**

According to a recent report the Executive Committee of the Trans-Mississippi Exposition to be held at Omaha this year has decided to offer no cash prizes at the live stock show, but has appropriated \$15,000 for "gold medals," which shall be the sole prizes. This arrangement will be a keen disappointment to breeders, and will practically kill the show. All stock exhibited will have to be kept on the ground for one month. To do this means considerable outlay on the part of the exhibitor, and unless there is more ahead of him than a gold medal he is not likely to take much interest in the show.

The live stock commissioner of the show, J. B. Dinsmore, had prepared a schedule of prizes calling for \$35,000 in money, but it was over-ruled by the Executive and medals substituted instead. How the Executive can hope for a large exhibit of live stock under such conditions is hard to say. We are quite sure that no Canadian breeder will make an exhibit under these regulations. The medal may be valuable enough, but the exhibitor who undergoes considerable outlay in making an exhibit must see some way of getting it back again. It is within the possibilities, however, that pressure will be brought to bear on the Executive, and that money prizes may be substituted for medals.

Look up our Premium List this issue. It will pay you.



**32 Years ago**

We started the manufacture of sheet metal building materials, and this long experience enables us to offer intending builders all that is desirable in Steel Roofing, Steel Sidings, Steel Ceilings, etc.

**We give You**

the benefit of our long experience—any of our big catalogues—and up-to-date information on these goods on receipt of a post card.

The Pedlar Metal Roofing Co.  
OSHAWA, ONT.



No other make of salt will give such satisfaction. Every package is guaranteed to the purchaser.

Address

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

**LAND For Everybody**

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

**GOOD SOIL PURE WATER AMPLE FUEL**

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

For full information concerning these districts, maps, pamphlets, etc., Apply to

**OSLER, HAMMOND & NANTON,**  
Land Office, 381 Main St., WINNIPEG.

## MARKET REVIEW AND FORECAST.

Office of FARMING,

44 and 46 Richmond street W., Toronto.  
April 18th, 1898.

The warm weather of last week has stimulated trade and given it more buoyancy. Men in business circles have been discussing the effect a war between the United States and Spain would have upon Canadian trade. It is generally conceded that in the event of war Canadian shipping would show greater activity than ever before. The traffic by the St. Lawrence would greatly increase, as it would be necessary to bring in imports for the west by that route. It is also expected that a great deal of the trade from the west for Europe would go by way of Canada.

## Wheat.

The grain markets show considerably more activity during the week, owing largely to the outlook for war being more certain. There seems to be a tendency in the west for farmers to hold their wheat with the probable hope that in the event of war Leiter may be able to shove the market up to \$1.50 or \$2. There seems, however, to be little chance of his doing so. The visible wheat supply now shows an excess of 13,000,000 bushels over the same time last year. It is altogether likely that in the event of war prices may advance for a time, but will not continue to do so.

The wheat market is, however, firm, and late cable despatches show an advance of 61 per quarter with a good demand. At Toronto there has been a gradual advance in prices, and as high as 90 cents was reached towards the end of the week for red north and west. Manitoba wheat seems to be a little unsettled. It is quoted at \$1.12 North By, and at \$1.05 Midland. In Manitoba there is nothing doing at the country markets. At Winnipeg cash wheat ranged from 07c. to 08c. The stocks of wheat at lake and interior points are now estimated at 3,400,000 bushels, as compared with 6,000,000 a year ago. At Montreal not much is doing, though the market is strongly in sympathy with the rise at Chicago. Wheat for May shipment is quoted at 92c.

## Barley and Oats.

At Montreal the barley market is quiet but steady at 50c. to 52c. for No. 1 bright malting barley, and 39c. to 41c. for feed. At Toronto the market is dull and one or two cents lower than last week's quotations.

The oat market is firmer, and at Toronto oats were selling during the week for from 30c. to 31c. north and west. At Montreal the market is 3 to 7 cents higher, with prices at 34c. to 34c. on cars and 35c. to 35c. about. May. Cable despatches show a firmer feeling and an advance of 6d. per quarter. Canadian oats are in demand.

## Peas and Corn.

At Montreal the market for peas is quiet but firm, with an upward tendency in values. Holders are asking 66c. about, May, with 65c. bid and 63c. in store. At Toronto the market is firm, and prices range from 57c. to 58c. The English market is firm, with an advance of 3d. per quarter during the week.

Corn is selling for from 31c. for Canadian to 37c. for American, delivered at Toronto.

## Suckwheat.

The market is steady at about 37c. west. At Montreal the market is firmer, and higher; sales of car lots in stores are reported at 49c.

## Bran and Shorts.

There is a fair demand for mill feed. Cars of shorts are quoted at \$12.50 to \$13, and bran at \$10.50 to \$11 west. It is reported at Montreal that Ontario bran is hard to sell, owing to a poor demand, and sales of 100 cars in bulk are reported at \$13.75 and \$14 respectively. Shorts are easier at \$14.50 to \$15.

## Timothy and Clover Seed.

The demand for the home trade is not as large as in former years at this season. Prices are steady, job lots out of the stores being quoted per 100 lbs. as follows: Timothy, \$3.45 to \$4.60; red clover, \$5 to \$6; and alsike, \$5 to \$5. At Montreal the market is quiet and steady at the following prices: Red clover at \$3.25 to \$4; alsike, \$3.50 to \$4.25; and timothy, \$1.50 to \$2, as to quality and size of lot.

## Potatoes.

Are dull and lower. Cars on track are quoted at 45c. to 50c. Potatoes out of store

sell at 55c. to 60c. At Montreal the market is quiet for car lots at 55c., and 55c. to 65c. are quoted as to quantity. A good many potatoes are sprouting.

## Eggs and Poultry.

Eggs are steady with a fair demand at 93c. Offerings of poultry are small. There is a fair demand and the market is steady at 50c. to 75c. for chickens. At Montreal the supply of eggs continues to increase and prices are easier by 1/2c.; about 93c. seems to be the ruling price for large lots. Single cases are still selling at 10c.

## Maple Syrup.

The supply is fair, there is a good demand and the market is steady at 65c. for wine gallons and 90c. for imperial. At Montreal the market is reported quiet for syrup at 50c. for new in small tins, and 60c. in large tins. In wood 4 1/2c. to 5c. per lb. Sugar is 6c. to 7c. as to quantity.

## Hay.

The market is quiet and unchanged for baled hay. Cars on the track at Toronto are quoted at \$8 to \$8.50. At Montreal No. 1 quality is scarce and sales are reported at \$11 to \$11.25 in car lots, No. 2 is \$8.50 to \$9.50, and all grades below these range all the way from \$7 down to \$4.50.

## Cheese.

The cheese situation has improved greatly during the past week. The Liverpool cable has advanced one shilling and London cable still higher. This improvement in the situation may be ascribed to two causes: the largely increased consumption of cheese in England owing to the present low values and the fact that very little fodder cheese will be made. The outlook is much brighter and the tendency is towards higher prices. At Montreal there have been sales during the week of 10,000 boxes of finest old cheese at 7 1/2 to 8c., which is quite an improvement over last week's figure. Very few fodder cheese have been offered. Prices range from 7 1/4 to 7 1/2c., as to quality.

## Butter.

The receipts of creamery butter are increasing very fast, with an accompanying easier turn to the market. At Montreal there has been a decline of fully 2c. per lb. since the week previous with sales at 20 to 20 1/2c., and offerings at 20c. later in the week. There is still a good local demand, but the supplies are now in excess of the demand and buyers are more cautious. Sales of several lots in boxes are reported at 19c. and in tubs at 20c. These prices, however, are fully 3c. higher than at the same time last year. Eastern township dairy is selling close up to creamery prices, and bring from 18 1/2c. to 19c.

At Toronto receipts are also getting more liberal. Creamery continues to be in good demand, and is steady at 20c. to 21c. per lb. for tubs. The supply of dairy rolls is more liberal and brings from 16c. to 16 1/2c. with a good demand.

Late cable despatches report large arrivals of Danish butter. The market is easier, with no further decline in prices, but buyers are holding off. Finest Canadian is quoted at 95c. at London, and 96c. at Liverpool, with fancy 1s. to 2s. more.

## Cattle.

London cables during the week indicate an easier feeling. Prices are 2s. per stone lower. Receipts at the local market here were light early in the week but were quite liberal towards the close. A weaker feeling prevailed both at Toronto and Montreal during the week owing to large supplies.

**Export cattle.**—There were quite a few buyers on Friday's market, but the supply was large and the feeling weak. The ruling prices were from \$3.90 to \$4.40 per cwt., the latter for extra choice cattle. All shipping is being done by way of Boston.

**Butchers' cattle.**—The offerings were heavy at Friday's market and prices only fair. Drivers are reported as paying too high prices in the country. Prices have ranged during the week from 2 1/2c. to 3 1/2c. per lb.; some picked lots brought \$3.85 per cwt. At Montreal prices have ranged during the week from 2c. per lb. for common stuff to 4c. per lb. for prime steers.

**Stockers and feeders.**—This market also showed a weaker tendency during the week owing to the heavy offerings. Prices were from \$3.25 to \$3.40 for light, and \$3.60 to \$3.70 for heavy feeders. 150 head were bought for \$3.40 to \$3.47 at Friday's market for shipment to Nebraska. Feeding bulls are dull at 2 1/2c. to 2 3/4c. per lb.

**Milk cows.**—The quality has been vari-

able and prices range from \$20 to \$45 each. A few early springers are wanted.

**Calves.**—Good veal calves are selling well from \$5 to \$8, other grades at from \$2.50 up. There are too many unsaleable "slink" calves coming in. The Montreal market is glutted.

## Sheep and Lambs

Trade was a little off during the week. Sheep sold from 3c. to 3 1/2c. for good ewes and wethers towards the end of the week, and 2 1/2c. for bucks. Yearling lambs are steady at 4 1/4c. to 5 1/2c. per lb. On Tuesday's market spring lambs brought from \$3 to \$5 each; Friday they were quiet at \$3 to \$4 each.

## Hogs.

Choice singers have been selling for from \$4.50 to \$4.75, the latter being paid for a few extra fancy. Thick fat and light bring 42c. per lb., sows 3c. to 3 1/2c., and stags 2c. to 2 1/2c. The Montreal market is reported glutted with fat hogs, and sales have been made at \$4.65 per 100 lb.

## BOOKS AND BULLETINS.

The report of the Department of Agriculture for New Brunswick has just been issued. It contains reports from the various local societies as to the nature of the soil, the crops grown, the kinds of stock kept, and the progress made in the various branches of farming carried on, and should prove of value to the farmers of that province. In addition it contains several valuable articles on practical farm work.

The journal of the Royal Agricultural Society of England for the quarter ending March 31st, 1898, has just been issued. It is full of valuable information in regard to the doings of the society, and some special articles bearing upon questions of vital importance to the Canadian farmer.

"I am very much pleased with FARMING as a weekly, and think it is a grand improvement." L. E. Meschenbin, Ashdown, Ont.

## "The Spramotor"



It has received the Highest Awards wherever shown, and also received the First Place at the Government Spraying Contest at Grimby.

## CERTIFICATE OF OFFICIAL AWARD:

This is to certify that at the contest of Spraying Apparatus, held at Grimby on April 2nd and 3rd, 1896 under the auspices of the Board of Control of the Fruit Experimental Stations of Ontario, in which there were eleven contestants, the Spramotor, made by the Spramotor Co., of London, Ont., was awarded First Place.

H. I. HURT, } Judge.  
M. PATTI, }

Catalogue and Price List on application.

Agents wanted. **SPRAMOTOR CO.**  
Mention FARMING. 357 Richmond St., LONDON

## Fruit.

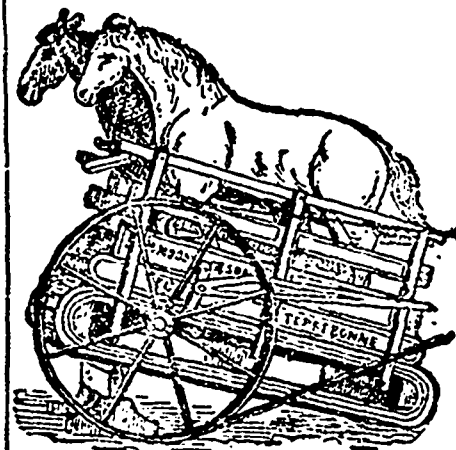
Trees and Vines become hardier, and their products better colored and better flavored when liberally treated with fertilizers containing at least 10% actual

## Potash.

**FREE** An illustrated book which tells what Potash is, and how it should be used, is sent free to all applicants. Send your address.

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

## Two Horses.



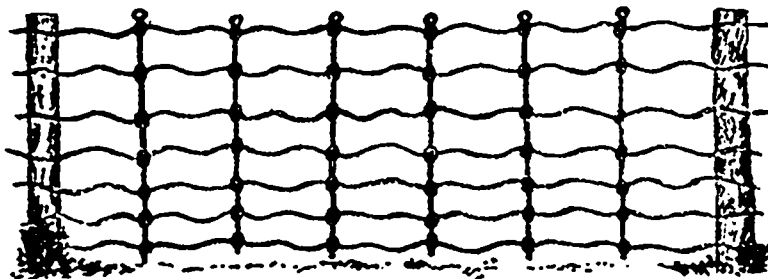
We supply a first-class Governor when required with our Tread Power. Most governors cause friction and thus consume a great deal of power unnecessarily.

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

CORRESPOND WITH US and  
SEND FOR CATALOGUE...

**MATTHEW MOODY & SONS**  
TERREBONNE, QUE.

## The Rankin Coiled Spring Wire Fence...



Farmers wanting fences will find it to their advantage to write us for particulars of our new fence. Easily built, no heavy tools required. Up-to-date in every particular. Agents wanted, where not already represented.  
**THE RANKIN FENCE CO., 875 St. Martin St., Montreal.**

# New Metal Roofing...



Patent Safe Lock Shingle.



Cut showing Top and Bottom Lock.



SIDE LOCK

Cut showing Side Lock.

Our Patent Safe Lock Shingles are so constructed that they lock or fasten on all four sides, making perfect joints, absolutely proof against the weather.

Buildings covered with our roofing look pretty, are fire and lightning proof, and will last a lifetime.

Samples and Prices sent free upon application

**Metal Shingle and Siding Company Limited**

PRESTON, ONTARIO

## Churn Churn Churn

Does your butter work to a "paste" before the salt you use dissolves?

Poor salt spoils what might be good butter. A sharp-grained salt is practically insoluble.

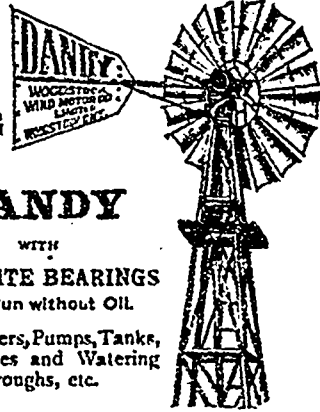
Windsor Salt dissolves easily—it is "taken up" in the butter with very little working. Progressive grocers sell

## Windsor Salt

The Windsor Salt Co. Limited, Windsor, Ont.

## Woodstock Steel Windmills

FOR POWER AND PUMPING



Get a **DANDY**

WITH GRAPHITE BEARINGS They Run without OIL

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

**WOODSTOCK WINDMOTOR CO. Limited.** Woodstock, Ont.

FOURTH ANNUAL

## Canadian Horse Show

To be held in conjunction with the **Military Tournament** of the Toronto Garrison

IN THE Armouries, Toronto, Canada. Wednesday, Thursday, Friday, Saturday, May 4th, 5th, 6th and 7th, 1898.

Prize Lists can be obtained from the Secretary. ENTRIES CLOSE on Wednesday, April 20, 1898 and should be addressed to **Henry Wade, Secy.** Parliament Buildings, Toronto.

Advertisers can best reach 100,000 farmers

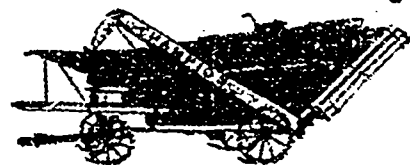
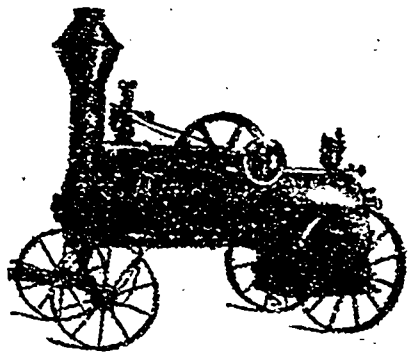
in the Maritime Provinces

by advertising in the **Co-operative Farmer**

Sussex, N.B. a neatly printed, sixteen-page semi-monthly, and the only exclusively agricultural paper in that part of the Dominion. Write to the publishers for sample copy and adv. rates. Address **CO-OPERATIVE FARMER, Sussex, N.B.**

## FOR HIGH CLASS

# Threshing Machinery



**Traction and Portable Engines  
Champion and Counter Balance Threshers  
Sweep and Tread Horse Powers  
And All Thresher Supplies**

WRITE US FOR PRICES. CATALOGUES MAILED ON APPLICATION. Second-Hand and Rebuilt Engines and Separators to Suit Purchasers.

**WATERLOO MANUFACTURING CO. LIMITED**  
Waterloo, Ontario.

## THE DAISY GRAIN GRINDER THE DAISY BARREL CHURN

With New Common Sense Stand.



Has No Equal.



Stronger, Lighter and More Convenient than ever, and has Roller Bearings.

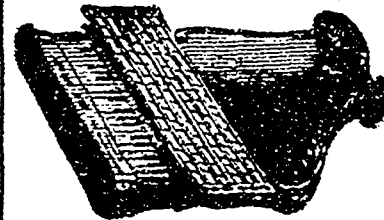
The 1898 "DAISY" is far in advance of any other Churn in the market. Fitted with improved Gas Vent if required. The Gas Vent is not necessary, but you can have it if you want it.

SOLD BY DEALERS EVERYWHERE. Manufactured only by

**THE WORTMAN & WARD MFG. CO., Limited,** LONDON ONTARIO.

Write for Descriptive Circular and Supplement Catalogue before purchasing any other.

## Your last chance to secure an Apollo Harp at a Big Bargain



Mention FARMING.

**25% DISCOUNT** from regular prices on last year's styles. Only a few left. First come, first served. **DON'T MISS THIS CHANCE.** Every harp guaranteed all right, and a high grade instrument. Money refunded if not right.

**A. H. PUTNAM** SOLE CANADIAN AGENT CONFEDERATION LIFE BUILDING TORONTO

## The Common Sense Bolster Spring

For Transforming Common Wagons into First-Class Spring Vehicles.



The BEST Farm Wagon Spring in the World

...WINDSOR, ONT....

Every Spring guaranteed. Will carry light or heavy loads. Especially adapted for marketing fruit, etc. Capacity up to 7,000 lbs. Write for particulars. In ordering give width between stakes and capacity required.

## ONTARIO VETERINARY COLLEGE, Limited.

Temperance St., Toronto, Can.

Affiliated with the University of Toronto. Patron: Governor-General of Canada and Lieutenant-Governor of Ontario. The most successful Veterinary Institution in America. Experienced Teachers. Classes begin on Wednesday, Oct. 13th, 1897. Fees, \$65 per session. PRINCIPAL, PROF. SMITH, F.R.C.V.S., TORONTO, CANADA.

## SHOEMAKER'S STOCK WINN!

In the hands of his customers it wins and keeps winning every year in sight. Never Eastern's shoes. We lead in quality and low price. Largest and best stock. **SEE POLITY ANNUAL & ALMANAC FOR 1898**—a complete page best paper. It tells all about every thing in the poultry line. It is the most valuable book ever published. It should be in every library. Free only, etc. Write for it. All orders to **Address, C. D. SHOEMAKER, FREEPORT, ILL., U. S. A.**

## Why? Because

in these hard times is there such a great demand for this All Steel Flexible Harrow



The flexibility of the Harrow enables it to adapt itself readily to rough and uneven ground as to smooth, and the oscillating motion produced by its flexibility pulverizes the ground, and leaves it in a loose and more porous condition than any other Harrow, and it is made of the very best material money can buy for the purpose. The bars are made of

### HARD SPRING STEEL

very stiff and strong, the hinges and teeth being of solid steel, all of which are of a better grade than is possible to use in any other make of Harrow. We can guarantee more than double the strength and wear in this Harrow than there is in any other make.

Parties wishing a first-class Harrow will do well to write us direct, or apply to the local agent.

Our Motto, "Not how Cheap, but how Good."

**TOLTON BROS., GUELPH, ONT.**

**The Farmer** *supplies the world with food*

and the **Massey-Harris Implements**

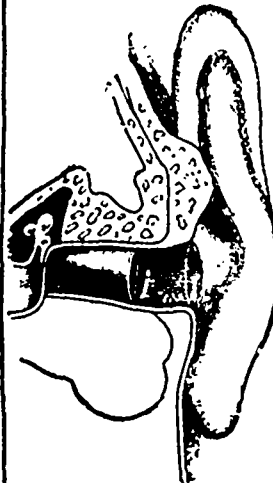


*cultivate the ground and reap the crops.*

*The superiority of these machines is acknowledged in all parts of the universe.*

**MASSEY-HARRIS CO., Limited**  
TORONTO, CANADA

**Deafness and Head Noises - - -**



Relieved by using  
**Wilson's COMMON SENSE Ear Drums**

They are safe, comfortable, and invisible; have no wire or string attachments. Read this letter:-

Stratford, Ont., Feb. 2nd, 1898.  
C. B. Miller, Freehold Loan Building,  
Toronto, Canada,

Dear Sir,—I got a pair of Common Sense Ear Drums from you on January 20th, 1897, while I was in Seaforth, and have been using them ever since. I lost one this morning and as my work is telegraphing must have good hearing.

I gave the Pamphlet I had to a party in Wingham, so please send me price of Drums alone.

I have recommended them to several, but do not know if they got them or not.

I could not do without them now so please send Drums as soon as possible. Your truly, W. J. SUTHERLAND.

Write for Pamphlet giving many other testimonials showing benefit in cases of

Catarrhal Deafness, Roaring and Hissing Sounds, Discharge from Ears, Relaxed, Sunken or Thickened Drums.

Stops Progress of Deafness and Protects Sensitive Ears

C. B. MILLER, Sole Agent for Canada, Freehold Building, 60 Victoria Street, Toronto

**ULRICH'S ENSILAGE Seed Corn**

This Celebrated Corn is Sold all over Canada.

Giant Prolific,  
Mammoth White,  
Red Cob  
Yellow Dent,  
Improved Leaming.

Ask your dealer to procure SEED for you and you will be well pleased with results. No fancy prices. Write for Free Samples and Book of Testimonials.

E. R. ULRICH & SONS,  
Springfield, Illinois.

**2,000 Cream Separators**

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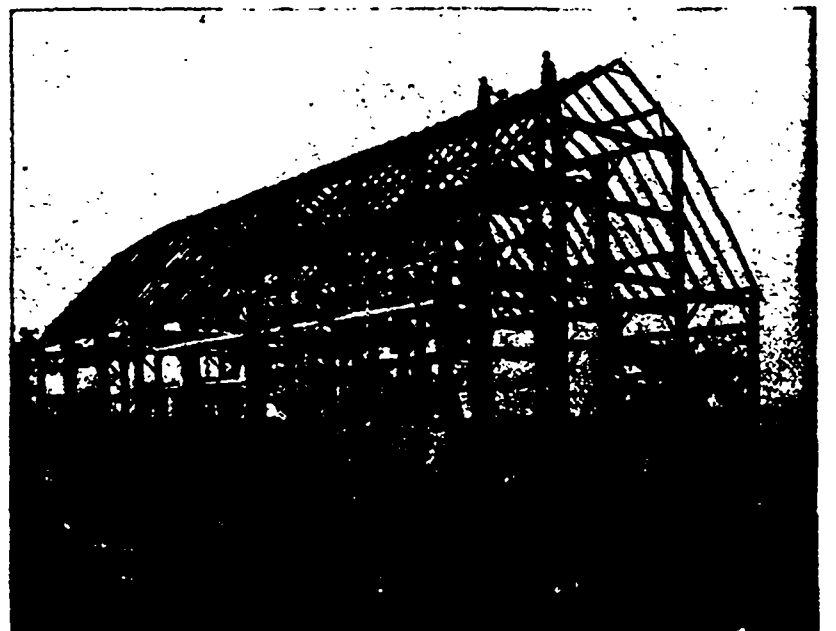
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