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OTTAWA, CANADA.



AYRSHIRE BULLS FOR SALE. One, two, and three-year-old. All prize winners at Ottawa Exhibition in 1896.
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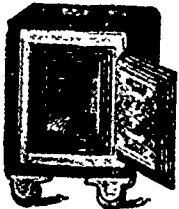
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Eggs and Stock For Sale at Reasonable Prices.

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Ayrshire and Jersey Cattle and Berkshire and Yorkshire Pigs.

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...LEADING TOPICS FOR THE WEEK...

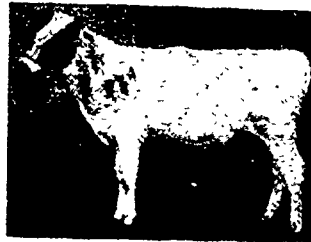
Other Evidences of Success. Breaking the Law. Ability on the Farm. A Rival to the Horse. Mustard for Sheep. Successful Shipments of Fruit. Notes and Ideas. Keeping Fall and Winter Apples. Fall Care of Poultry. Save the Wood Ashes. Meal in the Calf's Milk. The Management of the Dairy. Shall we Wean the Calves? Market Review and Forecast. Correspondence of Interest, etc.

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Ayrshire and Guernsey Cattle.
Improved Yorkshire Swine.
Shropshire Sheep. Our Shropshire sheep and Yorkshire Swine are unexcelled. We offer the choicest Stock of both For Sale at reasonable prices. Our herds of



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Ayrshires and Guernseys are also in first-class condition. We can fill orders from prize-winning and imported animals of the very best strains. Particulars furnished on application to

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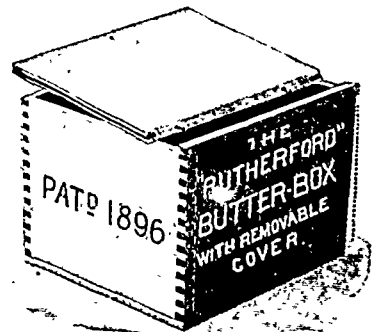
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Pure Bred Ayrshire Cattle

ROBERT REFORD,
Proprietor.

Selected, imported, and bred for usefulness. Special attention given to constitution, size, and milking qualities. Four young Bulls fit for service now for sale. Prices reasonable. All communications regarding stock should be addressed to

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Manager.



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The celebrated stock bull **"DOMINION CHIEF,"** which is considered one of the best stock bulls in Canada; also two choice young bulls, fit for service, sired by **"Dominion Chief,"** as well as several choice young imported cows and heifers, and two Shorthorn heifers, sired by **"Gibson Duke."** These bulls will be sold cheap if taken at once. Write me for particulars.

JOHN H. DOUGLAS,
WARKWORTH, ONTARIO.

Elm Shade Farm

AYRSHIRE



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The head of the herd is Lord Sterling, a prize winner. The imported Cows, Blue Bell, White Glen, and Kate Wallace, belong to this herd. Won the 2nd herd prize at Montreal in 1897, against strong competition. Young stock of both sexes for sale, bred from imported and prize-winning stock. **WM. WYLIE,** Howick, Que., or 223 Bleury St., Montreal.

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Noted prize-winner. Choice quality and heavy milking families. Extra fine young animals of both sexes for sale. Also Leicester Sheep and Berkshire Swine.

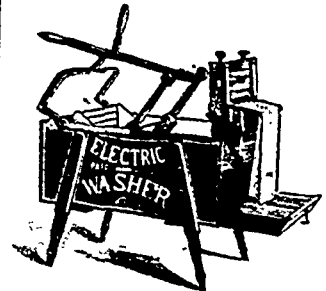


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WILLIAMSTOWN, ONT.

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The Leading Machine—Excels all Others



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Made from the best of material, and guaranteed not to leak. N.B.—Agents wanted. Territory for sale.
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Prize Winning Ayrshires, Oxford Downs and Berkshires.

My Ayrshires are very strong in young stock and are all in fine shape. At the Toronto Fair last year I won first for herd of four calves under one year, also second and third on full calves under one year, and second and third on heifer calves under six months. My Ayrshires are all of the best milking strains.

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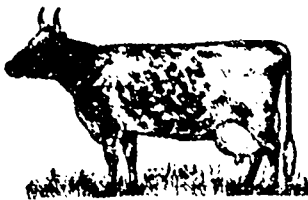
Dominion Lad, No. 1802.

First prize at Toronto, 1877; second, Toronto, and first at six other leading fairs in 1876.

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Bulls from nearly a year to four months; Heifers rising 1 year old, carrying second calves, due to calve in spring. All of the choicest breeding and individual excellence. Heifers in calf of several crosses. May and June Pigs of either sex. For prices or anything in Ayrshires or Yorkshires, write us

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R. REID & CO., Hintonburg, Ont.

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Largest and Oldest Herd in Canada. We have for sale this year a choice lot of young bulls and heifers sired by Leonard Meadow-side, sweep-stake bull at Ottawa. Berkshire Pigs and Shropshire Sheep always on hand. Terms to suit the times.

J. YULL & SONS, Carleton Place.

HILL VIEW HERD OF AYRSHIRES, BERKSHIRES AND FANCY POULTRY.

FOR SALE—The stock bull Grand Duke, sire Sir Laughlin, dam Primrose 4th; also choice young bull sired by Grand Duke. Large English Berkshire boar. Banded Plymouth Rocks and White Minorca Cockerels and Pullets.

R. E. WHITE, Perth, Ont.

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FOR SALE—Two fine Ayrshire Bulls, fit for service; also Banded Rocks, Black B. Red Games, W. and P. Black Spanish, Cayuga Ducks, and Toulouse Geese. Prize Winners.

JAS. McCORMACK & SONS, ROCKTON, ONTARIO.

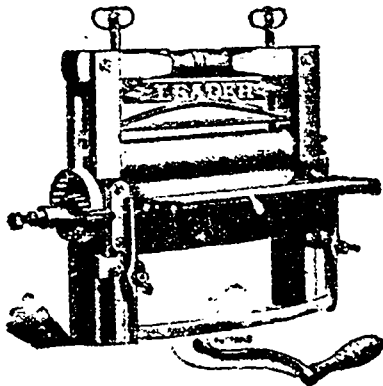
HICKORY HILL STOCK FARM



Two young Ayrshire bulls for sale. One out of Dandy = 2223 =, the first prize in milk test at Guelph, 1896; the other out of Briery Bank Susie = 2847 =. Write or come and see.

NAAMAN DYMENT, Clappison's Corners, 3 miles from Dundas. BROOK HILL HERD OF AYRSHIRES. Estab. over 25 years. Herd headed by Uncle Sam 6974, Dan Nellie Osborne 5783. Young stock for sale. Specialty in bull calves. Write us. W. F. STEPHEN, G.T.R., Carrs Crossing Station, Trout River, Que.

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BUY THE BEST. SAVE TIME AND MONEY. The NEW LEADER WRINGER is unexcelled, and the quick clamping device and internal gear are not found in any other wringer. See it before placing orders. THE DOWSWELL MFG. CO. (Limited) Hamilton, Ont.

Purest and Best.



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Is recommended by the leading Butter and Cheese makers. Messrs. D. Derbyshire & Co., of Brockville, say:

"We have been using the Windsor Salt for a number of years, and selling the same to our butter and cheese factories, and we confidently recommend it as the best salt on the market to-day, without any hesitation."

Mr. Derbyshire is President of the Butter and Cheese Association of Eastern Ontario.

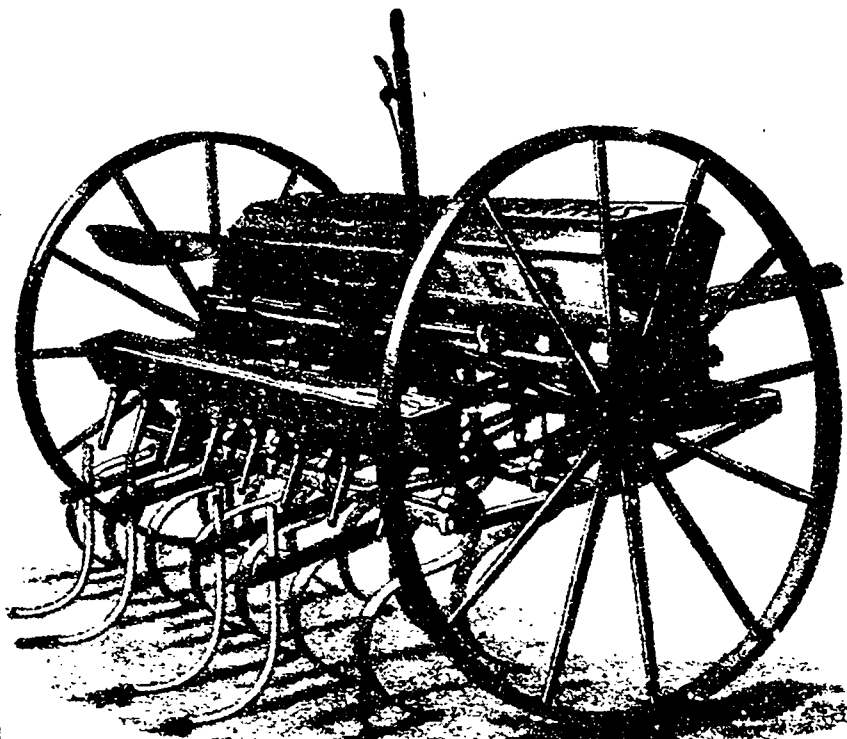
IF YOUR DEALER CANNOT SUPPLY YOU, WRITE TO
THE WINDSOR SALT CO., LIMITED,
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Massey-Harris Cultivator —and— Broadcast Seeder

The high price which is being demanded for wheat will influence many Canadian farmers to sow in greater quantities this season than heretofore. This means that the best and most perfect appliances will have to be used in order to accomplish the increased amount of labor.

The cut below shows the MASSEY-HARRIS CULTIVATOR and BROADCAST SEEDER complete with Grass Seed Sower. This machine has established a reputation for itself at home and abroad for perfect work and wearing qualities.

Made by Canadians



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MASSEY-HARRIS CO., LIMITED
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"RAPIDS FARM" LACHINE RAPIDS, ... QUEBEC ...



Royal Blackbird of Craigton.

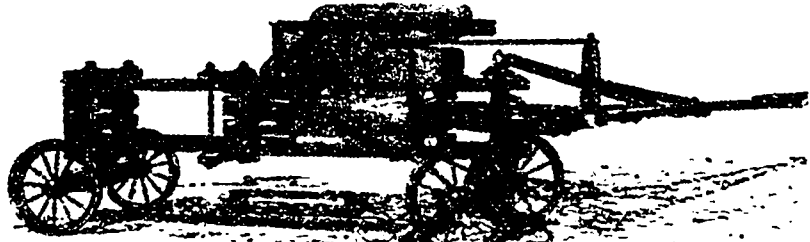
This successful and present head of the herd is now for sale; also two young bulls fit for service. Prices to suit the times.

COMMUNICATIONS REGARDING STOCK TO BE ADDRESSED TO

W. W. OGLIVIE, Proprietor. ROBERT HUNTER, Manager.

...Dederick's Patent Steel Case Hay Presses...

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



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

These improvements make the Press lighter, stronger, easier on the horse, and more powerful. This is the leading hay press in Canada and the United States. Also PATENT ADJUSTABLE AND DIMENSIONAL BALE TIES. Manufactured by

BOYD & CO., - HUNTINGDON, QUE.

FARMING

Vol. XV.

NOVEMBER 9TH, 1897.

No. 10.

FARMING

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

Published every Tuesday by

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TOPICS FOR THE WEEK

Other Evidences of Success.

There can be no stronger evidence of the success of any journal than the extent to which it is quoted by other publications. In this respect FARMING, as a weekly, is meeting with marked success. Its leading articles and editorial notes are being reproduced in a large number of the leading newspapers and journals which circulate in Canada.

This is indeed very gratifying to the editorial management of FARMING, and all we ask of our friends, when quotations are made, is that we get full credit for them. With one or two exceptions this is done. But during the past few days a few exchanges have come to hand containing editorial matter taken, word for word, from FARMING, without any credit being given us. It is very complimentary, indeed, to have our productions purloined in this way, but we think it is only our just right to get credit therefor.

Aside from this, we have been complimented on all sides by the weekly and daily press for our weekly production, and we are indeed very sorry that, owing to lack of space, we have not been able to publish these complimentary references. We quote the following, taken from the *Guysboro, N.S., Leader*, which may be taken as a sample of the many we have received: "We occasionally speak in complimentary terms of that excellent agricultural journal, FARMING, because we believe it deserves all, and more, than it receives of public commendation."

Our special offer to send FARMING to new subscribers from now to the end of 1898 for \$1 still holds good, as does our proposal to advance the subscription of any regular subscriber six months for one new yearly subscriber at \$1, and one year for two new yearly subscribers at \$1 each sent in. There can be no easier method for any of our friends to earn a dollar than this. Just take an evening off this week and call upon your neighbors who are not at present receiving FARMING, and see how easy it will be for you to earn a dollar by getting them to subscribe. We are offering liberal cash commissions to agents to canvass for subscribers. Our lists of special premiums are complete.

Breaking the Law.

Laws to prevent the adulteration of food products are perhaps more strict in Canada than in

any other country in the world. Adulteration in every form is so circumscribed by legislation that it is almost impossible for anyone to practise a deception in this regard without being quickly detected. It has been largely due to this fact that Canada has obtained so high a reputation in the British markets for the production of fine cheese. And though the reputation of Canadian butter has not yet attained to so high a position as Canadian cheese, yet we have not the least doubt that the strictness of our laws against the manufacture of oleomargarine or "bogus" butter will in time have the same effect upon that branch of our great dairy industry. No one regrets the strictness of our laws in these particulars. In fact, if it were necessary to make them more stringent everybody would hold up both hands and call for more legislation.

In the working out of the laws against adulteration it very often happens that they are broken where least expected. In keeping with the laws to prevent the making of "filled" cheese, we have laws to prevent the supplying of adulterated milk to cheese factories and creameries. These laws provide that no one shall supply milk to a cheese factory or creamery from which the cream has been taken, or to which water has been added, or from which the strippings have been retained, etc. In other words, this means that the milk supplied must be as it was when taken from the cow. Very often this law is broken by unscrupulous patrons of factories, though we are pleased to be able to state that the practice of tampering with milk supplied to cheese factories and creameries is on the decrease.

The systems of inspection employed by the various dairy associations, and the improvements made in the instruments used for the detection of adulteration, make it practically impossible for anyone to supply adulterated milk to a factory without being sooner or later found out. Notwithstanding this fact, however, there are to be found occasionally patrons of cheese factories, who do not seem able to resist the temptation to make a little out of their neighbors by adding water to, or taking the cream off the milk they supply to their cheese factory. Quite recently Mr. Alex. Clarke, Inspector for one of the districts controlled by the Western Butter and Cheese Association, inspected the milk at the York factory in Haldimand County. As a result of his inspection, eight of the patrons of that factory were fined for supplying adulterated milk. One patron had added as high as 37 per cent. of water. Such instances show the need of the law, and the importance of our factory managers exerting the utmost vigilance in order to have the milk supplied them pure and unadulterated.

Though the law against the adulteration of milk is sufficient in itself, the working of the law is very often responsible for such instances as herein quoted. None of the fines imposed in this particular case were higher than \$6. In fact, the man who put 37 pounds of water into 100 pounds of milk he supplied was only punished to the extent of a \$6 fine, just \$1 more than the minimum demanded by law. We have watched the working of this law pretty closely during the past few years, and, with one or two exceptions, never has the amount of the fine imposed by the local magistrate been in keeping with the offence committed, the supplying of deteriorated milk to cheese factories and creameries would soon be a thing of the past. A person who is unscrupulous enough to add water to or take the cream from milk which

is pooled with his neighbor's good milk will not feel a paltry \$5 fine very keenly. If it were \$40 or \$50 he would think more than once before running the risk of trying to make money out of his neighbor's honesty. There is another sure preventative, however, against such adulteration, and we fail to see why so many of our cheese factories, who are troubled with unscrupulous patrons supplying deteriorated milk, do not adopt it. This preventative is to pay for all milk supplied according to its quality. The plan of paying for milk according to the percentage of butter fat has passed the experimental stage, and whether it is modified by adding 2 per cent. to the fat readings, or whether the original plan is followed, either one is a long way in advance of the old "pooling" system. By paying for milk according to its quality, the temptation to supply deteriorated milk is taken away, and the patron will not go to the trouble of adding water or taking the cream off milk when he is not going to get any pay for his trouble.

Ability on the Farm.

In no other vocation will marked ability show itself more prominently than on the farm. This has been proven over and over again. In nearly every instance where a young man of brains, push, and ability has become a tiller of the soil he has succeeded well, and in a few years has become a leader among his brother farmers. In the past the idea has been too prevalent that the only place in which real ability has a chance to shine is in some one of the professions, or, perhaps, in business. With this idea kept prominently before the younger generations, is it any wonder that our professions are overcrowded by the young men off the farm, and that many of them to-day are finding it difficult to make a respectable living, let alone becoming a bright and shining light among those of their adopted calling.

We, in keeping with many other well-wishers of this fair Canada of ours, would like to see this tendency reversed, and, instead of young men of ability seeking opportunity for displaying their energies among the professional men, find them looking to the farm as an avenue to fame, prosperity, and happiness. True, to farm properly means constant application and a share of hard work. But it means more than this. To make a success of farming in these days of keen competition means the application of the highest type of skill, the brightest intellect, and the best business ability to the problems involved in the management of any farm. The brightest young man the country can produce will find ample scope for his ability in studying the conditions which affect plant life, in following out the proper rotation of crops, in the breeding, selection, and feeding of all kinds of stock for profit, and in looking after the business side of his undertaking. If he feels that he would like still further scope for his energies let him enter the realm of higher agriculture, and give his attention to the many branches of the sciences bearing upon the calling of the farmer. Here, we think, he will find as wide a field for research and investigation as any of the professions afford.

In the outset we stated that there are many instances of what ability and push can do on the farm. In our own land, as well as across the border, many of the real leaders of the people are agriculturists. As an incentive to young men, we mention, as a case in point, the achievements in the line of agriculture of Mr. Alex. Gunn, of Janesville, Minn. Mr. Gunn, who is a brother of Mr. D. Gunn, of the firm of D. Gunn Brothers & Co.,

Toronto, left Ontario seventeen years ago, and arrived in the Western States without any capital, excepting his two hands and a goodly supply of that energy and determination which is worth more to any young man than gold. To-day he is a leader among the agriculturists of his adopted State, and has risen to opulence and independence in his business. Recently one of our western exchanges made reference to Mr. Gunn in a very creditable way, which has drawn our attention more particularly to him in this connection. There are numbers of similar instances in Canada to-day, and there is no need for any young man leaving his own country in order to engage in farming. Canadian agriculture affords every advantage that any young man of ability requires in order to find scope for his energies, and our advice to the rural youth is to stay on the farm. A new and brighter day seems to be dawning for the tiller of the soil. Canada is essentially an agricultural country, and what it will be ten or twenty years from now will depend largely upon the number of young men of ability and push who make farming their special vocation.

A Rival to the Horse.

The horseless carriage seems to have come to stay. It has only recently appeared upon the scene, and to many is yet a novelty. That it is a convenient and feasible means of transportation is established beyond a doubt. Its champions predict that it will be in general use before very long. At present the cost of procuring one is very high. This tends to limit their coming into general use, and permits of their being purchased only by the rich. But, like the bicycle, this will soon be remedied. When bicycles were first made they were very costly; but now they are so reduced in price that the poorest can buy it he wishes. So it will be with the automobile or horseless carriage. In a few years, by simplifying the method of production, prices will be reduced, and we may be as familiar with seeing the horseless carriage on our roads as we are now with seeing the bicycle.

The general introduction of the horseless carriage will, without doubt, injure the business of the horse breeder to some extent, just as his business has been injured by the introduction of the bicycle. The injury, however, will not be as great as many suppose. Like the bicycle, the horseless carriage must have good roads before it can do its work well. In our towns and villages, where the streets are in tolerably good repair, they can be used to advantage, but on many of our country roads, unless a vast improvement is made, that old reliable standby, *the horse*, will be able to do duty for many a day to come. Aside from this, there will always be a demand for a really fine carriage horse. The man who loves to drive a fine horse, and they are not a few, will be in no great hurry to relinquish that pleasure. There is really an inspiration to some men in riding after a beautiful, prancing steed that no other means of locomotion can give. The race horse, too, will likely remain upon the scene for many years. For ages the race tracks of nearly every nation under the sun have been graced by the horse, as, with the swiftness of the wind, he strove for a prize. And to-day the interest in this line of sport is not one whit the less. The annual meets in every city are largely attended, not only by those specially interested in running their particular steeds, but by a large crowd of the most fashionable people. True, there are trials of speed with the horseless carriage, but aside from the novelty of the thing, which will soon wear off, who will say that such sport will ever replace the good old-fashioned horse race. Then again, heavy horses will be needed for heavy teaming, both in the cities and country districts for some time to come.

The horseless carriage *versus* horse, a problem, therefore, resolves itself into this, that in future the scrub horse must go. It will be the work of the ordinary small driving horse that the horseless carriage will interfere with most, and our farmers will do well to bear this in mind in the breeding of horses. Only the finest type of horse will have a chance in

the keen competition of the future, when this new means of locomotion comes into more general use.

Mustard for Sheep.

One of our subscribers, who has been residing in England during the past year, writes that while on a recent visit to Lincolnshire he was surprised to find a large quantity of mustard growing among the turnips and rape. On making enquiries he found that the farmers in that section have been accustomed to sow mustard with turnips and rape, especially with the latter, for feeding sheep. Sheep and lambs are very fond of it, and, as our correspondent states, it helps to warm them up. The sheep are turned on the rape and mustard before the latter has time to run to seed, which prevents the mustard from spreading. This plan of utilizing one of the most obnoxious weeds to good advantage will be news to many Canadian farmers. Mustard grows too readily on many Canadian farms. We are accustomed to look upon it as one of our most injurious weeds, and every farmer who allows mustard to run all over his fields is considered by his neighbors to be shiftless and unthrifty. However, the evil things of this world may often be turned to good account, and we would like to know if any of our readers have ever tried pasturing sheep upon a field of mustard. If mustard is a good food for sheep it is another strong argument in favor of our motto, "Keep more sheep." The moral to be drawn is, don't allow your land to be overrun with mustard when the keeping of sheep on the farm will prevent the weed from going to seed. In explanation we might state that the mustard which our correspondent refers to is probably the white mustard, which is much grown in England for sheep, and is not so persistent as our yellow variety. Nevertheless, the experiment may be well worth trying in regard to our own variety.

Successful Shipments of Fruit.

It is a matter of considerable satisfaction to the Canadian fruit-grower to know that the cold storage system is going to make it possible for him to place his finer fruits upon the English market. The first consignment of fruit sent over in cold storage compartments, as a trial shipment, by the Department of Agriculture did not arrive in good condition. Having found out what was the cause of failure, a second shipment was made with these defects remedied. This shipment went to Covent Garden, London, and proved to be wholly successful excepting the grapes. The pears arrived in very fine condition, and are very similar to the English and French varieties and of a quality that will suit the English trade. The peaches, though not as large as the English hot-house specimens, are of sufficiently good quality to secure a large trade. The tomatoes were of exceptionally fine quality. If they had a defect, it was that they were too large. A medium-sized variety seems to take best in the English market. They were of such good quality that it is thought that they will surpass those sent from France. The buyers were exceedingly well pleased with the consignment, and expressed satisfaction at the appearance of another source of supply, and they also said that Canadian fruit would be able to compete successfully with continental supplies. The grapes were the only fruit that did not seem to stand the shipping all right. They seemed to be of too soft varieties and, although sound, fell off the stems. Since the report was received, other trial shipments have been reported, one at London and another at Glasgow. Both are reported to have arrived in good condition and sold for good prices. Cases of pears containing about a bushel sold as high as 15s.; half cases as high as 9s. 7d. Apples and tomatoes also brought good prices. The report, however, is again against the grapes, but it is hoped that further trials will prove successful.

This is, indeed, welcome news, but just such news as the fruit-grower wants, because only about one-half the fruit now set out is bearing, and unless some such market is opened up there will be serious times in store for the fruit-men. This is

some of the first fruits of the cold storage system, which, if wisely directed, is bound to be a good thing for Canada. Why cannot cold storage cars be fitted up to carry fruit to Manitoba and the Northwest?

NOTES AND IDEAS.

The Argentine wheat crop to be harvested next December is estimated by the *Liverpool Corn Trade News* at approximately eighty million bushels, subject to possible damage during the next two or three months. The crop a year ago was placed at twenty four million bushels.

* * *

The "beer privilege" in the State Fair of Wisconsin, lately held at Milwaukee, sold for \$4,000. "All sorts of fakes and gambling devices were rampant." The farmers of Wisconsin are very much disgusted with the management. Wisconsin is one of the most progressive agricultural countries in the world; no wonder the people are indignant.

* * *

Professor Henry Stewart speaks of "intensive farming" as the farming of the future. He says: "Think of what has been done in the rearing and feeding of cattle, which now at two years make as much as the old-time steers did at five, thus saving three years feeding! What is now wanted is the application of the same methods to our crops so as to make by intensive culture twice or thrice on the same land as is now made by the ordinary methods."

* * *

Mr. J. F. Sears, B.H., has accepted an engagement with the Nova Scotia Fruit Growers' Association. Mr. Sears is a graduate of the Iowa Agricultural College, Ames, Iowa, and will take up the work as director of the Nova Scotia School of Horticulture at Wolfville. Professor Faville, who has had charge of the work for some years, and who has been very successful, resigned last summer to take up similar work at one of the leading American experiment stations.

* * *

Our readers have often seen the name of Messrs. Burgess & Son, Wenona, Illinois, as the breeders of prize-winning heavy horses and Hackneys. They will regret to learn that the Messrs. Burgess' stables were lately destroyed by fire, and that in them thirty Shire and Hackney stallions, many of them the winners of the first premiums at the late Illinois State Fair, were burned also. The insurance was but small. This is a sad loss, and all Canadian stockmen will, we feel sure, sympathize greatly with the Messrs. Burgess in their misfortune.

* * *

Illinois has stepped into line in respect to Farmers' Institute work. A "Superintendent of Institutes" has been appointed (Mr. Oliver Wilson), and the intention is to organize the whole system of local institutes somewhat in the way in which the local institutes into one system as those in Ontario have been organized. The State provides, at its own expense, lecturers for the county institutes as is done here. The object, as Mr. Wilson states, is "to build up a systematic series of successful institutes in every county in the state."

* * *

New York, having one beet-root sugar factory, now wants others. Meetings are being held in the "sugar beet belt" for the "purpose of making the sugar beet industry a success for farmers." These meetings are being called by Mr. F. E. Dawley, director of Farmers' Institutes for the State of New York, and are being addressed by Mr. Wilson, United States Secretary of Agriculture; Mr. Payne, chairman of the House Committee on Agriculture in Congress; Congressman Wadsworth, member of the Ways and Means Committee; Professor H. W. Wiley, of the Uni-

ted States Department of Agriculture; Mr. J. P. Hines, sugar beet inspector for the United States Department of Agriculture, and others.

* * *

Queensland, Australia, is waking up to the advantages of agricultural education. The Minister of Agriculture, the Hon. A. J. Thynne, has established an agricultural college at Galton, and arranged for several experimental farms elsewhere. He is also about to establish another experimental farm in order to make experiments in fruit culture, and particularly with regard to insect pests. It is understood that this farm will be started at a very early date, and that it will be in a neighborhood convenient to Brisbane. Within the last twelve months Sir Patrick Jennings has started a private experimental station of his own at Westbrook, Darling Downs.

* * *

The use of the farm separator is extending. It is being advocated in England very strongly. *The Rural World*, (London) says "that no dairyman who manufactures his own milk and butter, having ten cows or more, can afford to be without one." It instances a case where a separator had been run for five years, averaging nearly 9,000 lbs. of butter a year, and the repairs in all that time had been only 12s. 6d. It advocates the use of the herd bull to supply the power. "The bull needs exercise. Working the tread-power will keep him docile, gentle, vigorous and healthy, and he enjoys the work. The separating is done while the milking is going on, and in ten or fifteen minutes after the last cow is milked the calves and pigs have had the new, warm, sweet skim-milk." The saving made by the use of the separator will in five years be many times more than the cost of the outfit.

* * *

Secretary Wilson reports that the results from this year's experiments in growing sugar beets, encourage the belief that the sugar beet-root can be grown successfully in almost every state of the Union. In Europe an average of 13 per cent. of saccharine matter is considered large. The analyses made of beets grown in several States this year show a much larger average percentage than this. Mr. Wilson proposes to distribute ten tons of seed for further tests of the sugar beet next year. About one-half of the seed used in next year's experiments will be home grown seed. In five years from now, at the present rate of development, the sugar beet industry in the United States will be a very large one. We are anxiously looking for some indication of Government action in the direction of the development of this industry in Canada - so far, however, in vain. But if we can't lead we may follow; that is one comfort.

* * *

The Local Government of London is one of the most progressive governments in the world. One of the things it has set its foot down upon is the adulteration of food. It is proceeding against the vendors of adulterated coffee, confectionery, wine, beer, distilled liquors, etc., etc. We are concerned only with what it does to secure unadulterated farm products. It has great trouble with the milk vendors, especially in the use of boracic acid as a "preservative." Inasmuch as the milk passes through several hands, and as each uses his own quantity of the preservative, the milk when it reaches the poor consumer is often "distinctly poisonous." Nearly 18 per cent. of all the milk sold in London is adulterated. Sunday is the day on which the greatest amount of adulteration is done! It is to be hoped that the London government will find some way of wholly preventing adulteration. It is a fraud upon the consumer, but it is an equal fraud on the farmer who sells pure milk.

* * *

When a man has brains he specializes; the more brains he has the more intently does he employ them upon some special object; particularly so, if he is a business man. This is the cause of intensive farming. Every little while we hear of

some one who departs from the beaten path, strikes out a new line for himself, and makes money. Mr. Isaac Wilbur, of Little Compton, Rhode Island, markets about 150,000 dozen of eggs a year! He keeps his fowls on the colony plan, housing about forty in a house 8 ft. by 10 ft., or 8 ft. by 12 ft. in size, and places these houses about 150 feet apart. Set out in long rows, he has 100 of these houses scattered over three or four fields. The food is loaded in a low wagon, which is driven about to each house in turn, the attendant feeding as he goes. At the afternoon feeding the eggs are collected. The fowls are fed twice a day. The morning food is a mash of cooked vegetables and mixed meals. The afternoon food is whole grain the year round. *Fowls* (London) says Mr. Wilbur's poultry establishment is the largest in the world.

* * *

One of the great drawbacks to the comfortable keeping of sheep in Canada and the United States is the prevalence of dogs which worry sheep. Our dog laws are not so rigid as they ought to be. The farmers of Canada ought to rally round their respective ministers of agriculture, and back them strongly enough to get good wholesome dog laws passed in every province in the Dominion. In Kansas a very useful plan of frightening away dogs has been found to be the putting of a cow bell on every third sheep. A writer in the *Kansas Farmer* recommends the following methods. "Get some small sponges and soak them in melted poisoned lard or tallow, and then place the sponges where the dogs will be likely to get them. The sheep or other stock will not touch the sponges, but the dogs will. You will be in no danger of poisoning anything you don't want to. The sponges are indigestible, and will never leave the dog's stomach, and the owner of the dog will believe he has got a dog going mad, and will not only kill that dog, but every other one he has." This writer also adds: "No sheepman should be without a Winchester, and should know how to use it, too." These methods are harsh, but circumstances might justify their use. We should rather see passed effective dog laws.

* * *

The Government of New South Wales, Australia, offered a travelling agricultural scholarship to the best diploma student of the Hawkesbury Agricultural College. It was won by a Mr. J. A. Bulkeley, and he is now on his way to the Michigan Agricultural College, where he is to take a two year's course of instruction. In addition to taking the usual agricultural course of the college, he will visit a number of the chief centres of agricultural interest, as well as experiment stations and colleges in other states. It is also his intention to visit the agricultural college at Guelph and some of the Dominion experiment farms. He is to make himself thoroughly acquainted with the latest classes of machinery, new crops of commercial value, and the most modern methods adopted in the tilling of the soil. He will be in constant communication with the Minister of Agriculture, and will draw attention to any matters likely to be of value to the colony. Such a scholarship would be well worth striving for. If our Ontario Government (or failing it some private party) could see their way to establish such a scholarship, supposing it was more limited, it would be a very valuable thing for the province and the student who won it.

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CANADA'S FARMERS.

VIII. Mr. Henry Arkell, Arkell, Ont.

We have much pleasure in presenting to the readers of *FARMING* this week a sketch of the life of Mr. Henry Arkell, Farnham Farm, Arkell, Ont. Mr. Arkell was born on the farm on which he now resides, in 1854. He is the youngest son of the late Thomas Arkell, who settled on the present homestead in 1831, when it was a dense woods. Farnham Farm consists of three hundred acres of well tilled land, and is situated about five miles east of Guelph, near Arkell station, on the Guelph branch of the C.P.R.

Mr. Arkell has come by his love of sheep honestly, for his father was a successful breeder of Cotswolds before him, and naturally as a boy he learned the successful methods followed by his father in handling sheep. When Mr. Arkell started for himself he bred Cotswolds for a time, and bred side by side with them Oxford Down sheep. In 1882 he visited some of the best sheep farms in England, and made a selection of fifty head of Cotswolds and also fifty Oxfords from some of the best flocks in England. He kept both flocks on his farm for some years, but having an opportunity of disposing of his entire flock of Cotswolds at a good figure, he sold out, as he believed his land was better adapted for raising Oxfords. Besides, he believed that he could do better by confining his efforts to Oxfords alone. Since then he has bred and handled them very extensively, gradually increasing his flock year by year. Last year he had on his farm over four hundred Oxford Down sheep of all ages.

Having been brought up among sheep, Mr. Arkell understands them thoroughly, and no doubt this knowledge, together with natural love of a good sheep, his good judgment, sound business sense, and personal supervision, for he is his own shepherd, have all contributed to place him in the front rank of sheep breeders in Canada. Mr. Arkell has been very successful in the show ring. For many years his sheep swept everything before them at our larger shows. At the World's Fair at Chicago in 1893 he secured nine prizes with his Oxfords. The year before he won a \$100 prize at Detroit for ten best mutton sheep, and sweepstakes for the best ewe on the ground. Since 1893 he has not exhibited, although his sheep found their way to the front in the show ring on different occasions. He fits for show purposes between thirty and forty every year for his many customers.

The Americans are Mr. Arkell's best customers, and with the sheep men of the Western States he has worked up an extensive trade. Last fall Mr. Arkell took a trip among his customers in the Western States and saw for himself the results of the Oxford Down cross on the range sheep. The results have been wonderfully good, thus proving the adaptability of the Oxfords for crossing upon common sheep. The progeny from these range sheep are hardy, attain to a good size, mature quickly, and produce a good quality of wool.

Mr. Arkell was a director of the Puslinch Agricultural Society for seventeen years and president for one year. For five years he was a director of the Guelph Central Exhibition, and for a like period a director of the Fat Stock Show. His business has been growing so extensively of late, and as he is his own shepherd, looking personally after his flock, he has found it necessary to retire from all public positions and give his whole attention to his work. He still retains, however, his connection with the Dominion Sheep Breeders' Association, of which he is a director and an enthusiastic member. The Superintendent of Farmers' Institutes has tried to secure Mr. Arkell's services as a delegate to the Farmers' Institute meetings to talk on sheep, but Mr. Arkell believes his duty is at home among his sheep. He has a high appreciation of the work done by the Farmers' Institute system, and thinks that with it and the help of such an agricultural paper as *FARMING* the day is coming when the farmers of this country will be recognized, as they ought to be, the very backbone of our Canada.

What Our Friends Say About Us.

I. B. Clark, Benheim, Ont., writes: "I am well pleased with your weekly number of *FARMING*. It should be in the hands of every farmer."

Mr. W. H. Jeffs, writes: "Send me *FARMING* for September 21st. I do not want to miss one issue."

G. H. Murray, Bright, Ont., says: "I am well pleased with your paper. It is up to date as a stock and farm paper."

John Campbell, Woodville, writes: "Editor *FARMING*: I must congratulate you on the recent change in *FARMING*. On every hand from old subscribers I have many expressions of satisfaction with the change of form and weekly issue."

Mr. John Gibbs, Woodville, Ont., writes: "I have been a subscriber to *FARMING* for ten years, and would not like to be without it."

Postmaster, Fairfax, Man., writes: "Please find enclosed \$1 for renewal of my subscription to *FARMING*. I may say I am exceedingly well pleased with the new weekly edition of *FARMING*. Wishing you every success."

Mr. James Roelofson, Prop. Mt. Pleasant Creamery, Mt. Pleasant, writes: "I assure you I appreciate your paper. It is up to date, and contains much valuable information."

Daniel Sullivan, Elmwood, Ont., writes: "I have received two copies of your paper, which should be in the home of every progressive farmer in Ontario."

Thos. J. Quinn, Ottawa, Ont., writes: "Send me a few copies of *FARMING* as I want to send them as samples to a friend and do not wish to be without my own for I find them very useful and keep all the numbers. The change of *FARMING* to a weekly paper is entirely satisfactory."

J. W. Johnson, Underwood, Ont., writes: "I am very much pleased with *FARMING* since it has become a weekly. I would not be without it for a good deal."

Mr. E. R. Brow, Charlottetown, P. E. I., writes: "Please don't ever let my paper drop."

KEEPING FALL AND WINTER APPLES

By PROFESSOR JAMES TROOP, IN *American Agriculturist*

In order to keep well, apples must be picked at the proper time. Care must be exercised in handling to prevent bruises, carefully assorting the ripe from the unripe, the perfect from the imperfect, and storing in a cool, dry place, with plenty of pure air free from all odors of decaying vegetables or other substances. The average fruit grower does not exercise enough caution in handling and assorting his fruit.

The degree of maturity will have much to do with the keeping qualities. A late fall or winter apple should be mature, but not ripe, when it is picked, if it is expected to be kept for any considerable time. The process of ripening is only the first stage of decay, and if this is allowed to continue before picking, till the apple is ripe, or mellow, this breaking down process has proceeded so far that it is a difficult matter to arrest it. As soon, therefore, as the stem will separate freely from its union with the branch, the apple is sufficiently mature for storing.

The proper temperature for keeping apples is as nearly 35 degrees F. as it is possible to keep it, and in order to maintain this, it will often be necessary to provide a separate place for storing the fruit, as the average cellar under the dwelling house is wholly unfit for this purpose. If the cellar consists of several compartments so that one can be shut off completely from the others and the temperature in this kept below 40 degrees, it will answer the purpose very well. If this cannot be done, a cheap storage house may be built in connection with the ice house, by building a room underneath, having it surrounded with ice on the sides and overhead, with facilities for drainage underneath, keeping the air dry by means of chloride of calcium placed on the floor in an open water tight vessel, such as a large milk crock or pan. In this way the temperature may be kept very near the freezing point the year round, and apples may be kept almost indefinitely.

FALL CARE OF POULTRY.

By W. R. GRAHAM, B.S.A., Bayville, Ont.

During the fall perhaps no one question in connection with poultry perplexes the farmers more than why their hens mope around, seem dumpish, and even in some cases die when they are in good flesh, and in some cases very fat. This is the moulting season and we must in one way or another supply material for the hens to grow her new feathers. How much better she appears when she gets them! She will soon begin to lay, why not help her a little? A little meat will be found a great help; ground green bone is much better, but dry bones are not much better than ordinary grit. The head of a beef cooked along with some barley and vegetables is greatly relished, and will be found a great help toward the filling of the egg basket. The feathers draw very heavily on the constitution, and we must feed accordingly. It is not necessary to say that a variety of grain should be given, as usually at this season of the year the

hens have access to the barn, where they can get a few grains of many kinds. A warm mash of bran, shorts and ground barley and oats are good in the morning. Give all the grain at night they will eat up clean and no more.

One very serious drawback to hens doing well at this season is the large number of cockerels found in the yards. These greatly annoy the hens and pullets, and should either be separated or sold at once. Hens lay fully as well, if not better, when the male birds are not allowed to run with them.

All poultry in the habit of roosting in the trees and on the fences should be taught to go to the hen-house. See that no doors are left open to make a draught on the hens. Get the young stock accustomed to winter quarters so that when they begin laying they will not be stopped by moving. Use all precautions to prevent colds, roup, etc. The best cure for roup is the axe. Roup can be readily distinguished from a cold by the very offensive odor of the discharge from the nostrils.

A word or two about cleaning the house will not be out of place. The droppings should be removed twice a week and land plaster or, if that is not on hand, slacked lime should be sprinkled on the dropping-boards under the perches. Go over the perches with coal oil at least every two weeks. I have found a large paint brush well adapted to this purpose. Use the oil freely, filling all the cracks. Lice are not liable to stay where the coal oil is. With some this remedy has proved a failure, but where the oil is frequently and freely used I have never known it to fail. Remove all old straw from the nest boxes and wash with coal oil. One of the simplest remedies for lice is to keep cut tansy in the nest. This I have found a good preventive for lice while the hens are setting, and equally as well for turkey hens, in fact, I know of nothing to equal it. Dispose of all hens that are over one year old, also all that are not through moulting December 1st, as such hens are not likely to lay well and will eat the profits made by those that do lay.

SAVE THE WOOD ASHES.

The season is approaching when more fires will have to be kept going in the farm-house, and as a consequence more ashes will be produced. If farmers knew the full value of these ashes they would all be preserved in a dry place and saved for use on the land in the spring. The fruit growers know the value of good hardwood ashes, and are willing to pay for them at the rate of more than twenty five cents a bushel by the carload. It therefore does not pay a farmer to give his wood ashes to the ashman for a small cake of soap. They are worth more to broadcast on the old meadows, and particularly on the clover meadows. It has been the experience of many that the broadcasting of hardwood ashes upon old hay fields "brought in" a thick stand of clover. Now, the clovers and the other legumes have no trouble in obtaining their supplies of nitrogen from the air, but they cannot make the best use of it unless they have a due supply of potash and phosphoric acid. These two plant

foods the clovers have difficulty in obtaining, hence the wisdom of saving the ashes, because they contain both potash and phosphoric acid. Many a farmer would find his land once more full of clover if he could give it a good dressing of wood ashes.

It is because of the potash they contain that wood ashes are so beneficial to fruit trees. Farmyard manure contains a certain amount of potash, but the nitrogen it also contains is apt to cause too great a growth. It contains too great a proportion of nitrogen to potash, hence wood ashes come in well to supply this deficiency. Every farmer should save his hardwood ashes in a dry place, so that they will be in the best condition to apply to the land in the spring. Don't leave them where they will be washed with the rain and all the potash leached out of them. Save the ashes.

MEAL IN THE CALF'S MILK.

There seems to be some difference of opinion among dairymen as to the best way of feeding a calf. The meal intended is to take the place of the fat that has been removed from the skim milk. Some successful men feed linseed meal, shorts, bran, and even ground oats mixed with the milk, and claim that it is the best way. The great majority of the most successful feeders do not feed meal of any kind mixed with the milk. Their experience is that the presence of the meal in the milk is very apt to irritate the lining of the alimentary canal, causing scours, and thus does harm instead of good. When meal is fed mixed with the milk it does not get mixed with the saliva in the mouth, is not so easily digested and is more apt to cause indigestion.

Mrs. E. M. Jones, of Brockville, so well known throughout Canada as a successful breeder of Jersey cattle, always feeds her calves the mother's milk for ten to fourteen days, then gradually changes over to skim-milk. She feeds three times a day from two to three quarts at a feed. As a substitute for the butter fat removed from the skim-milk she makes a porridge of oatmeal and linseed meal. Five pounds of best Scotch oatmeal are mixed with one pound of linseed meal, a porridge is made of this mixed meal, just the same as for table use. It is cooked *thoroughly* and has not been found to cause indigestion or scours. A common potato pot will hold enough for a day's feed for five calves. This oatmeal porridge is mixed with the milk for each meal. As soon as the calves will lick meal they are given it, and as they learn to eat it the quantity of porridge is reduced until they get none at all. The milk is kept up until the calves are about four months old, when water is gradually substituted. Nice clover hay is also fed them and their pens kept clean and sweet. Mrs. Jones believes that dirty feed pails kill more calves than any other thing.

We are of the opinion that if meal is to be fed in the milk, all husks should be removed, and it should be thoroughly cooked so that there will be no danger of it causing any bowel trouble. But it is generally admitted that a little flaxseed jelly, prepared as some of our correspondents suggest, is much the better way to replace the lost butter fat. Teach the calves to lick meal as

early as possible so that they can get their meal themselves and thus save the trouble of preparing it.

SHALL WE WEAN THE CALVES?

By Prof. JAMES WILSON, late Director Iowa Experiment Station, now United States Secretary of Agriculture, in Jersey Bulletin.

Never let the calf suck once, unless it is weakly, when the mother's milk drawn naturally is good for it. If the calf is taken away at once and the cow is milked by hand neither suffer from the separation, as both would after a few days. The cow will become attached to her calf and fret at weaning time, whether it be longer or shorter after parturition. The calf will rebel against drinking after it is used to suckling, and perhaps have to be partially starved before it drinks freely.

I know that deft barn men teach the drinking process very readily, but all men are not alike handy about such things.

If the young cow is never suckled she never expects it. The calf should by all means get its mother's milk at first, because nature prepared the colostrum as a laxative, and if the cow has been on dry feed the calf may require it.

It is not to be supposed for a moment that the editor of the Jersey Bulletin desired discussion relative to whether the calf should be raised entirely on its mother's milk or on skim-milk. That question is settled among progressive men. The calf, and especially the calf of the dairy cow, can be as well raised on skim-milk during the period when it requires milk as on full milk; provided the milk is fed warm and has gradually introduced into it what corn meal or oat meal the calf can digest, which will be a few ounces at first, and two or three pounds a day at three months old.

The theory is to replace the fats taken out by the skimmer with what closely resembles them. Corn meal and oat meal are both rich in fat and heat-producing materials. Corn meal is the better of the two, as experiments at the Iowa station show. The corn meal has less protein than the oat meal and this is desirable, as the skim-milk has too much protein. We read of oil meal being good to mix with skim milk. This is a mistake. Oil meal is a by-product, very rich in protein as skim milk is; it is a carbonaceous nutrient that is required rather than a nitrogenous one, and so corn meal is the best as well as the cheapest. A little flax (ground) is a good addition to the skim milk, as it is 35 per cent oil. A prime factor in feeding a calf is digestibility. The sensible feeder will avoid cold milk, because it tends to indigestion, he will avoid over-feeding, as it has the same tendency.

THE MANAGEMENT OF DAIRY CALVES.

By G. W. CLIMONS, St. George, Ont.

Although an article on calf-rearing must necessarily begin with the birth of the calf, yet every skillful breeder knows that years of study in the selection and mating of breeding stock must have preceded that important event if success is to be depended on. A pedigree rich with the blood of strong vigorous cows that have been

exceptional performers at the pail and churn is the surest guarantee that the baby cow will grow into more than ordinary usefulness. Our calves at Maple Hill are bred on these lines of constitution and dairy capacity, with as much beauty of form as possible, and so far the results have proved very satisfactory.

When the calf is dropped we allow it to remain with the dam for a few hours, usually just long enough for it to get a good square meal of the mother's milk. It is then removed to a comfortable box-stall and taught to drink from the pail as soon as possible. We find that both the cow and the calf fret much less over the separation when this plan is followed. All of our calves get whole milk for at least six weeks, and many of them for two or three months; starting with about twelve pounds per day and increasing gradually to about twenty pounds as the calf grows older. We prefer to divide this amount into three feeds, and as many of our cows require to be milked three times a day when fresh, we can give the young calves a light feed at noon without much extra trouble. Skim-milk fresh from the separator is gradually substituted for the whole milk, and as we usually have plenty of it, some of our calves are still getting it at twelve months old. Such solid foods as clover hay, crushed oats, bran and oil cake are offered as soon as the calf's ruminating stomach is sufficiently developed to digest them, say at four or five weeks old, and it is astonishing how soon the little fellows learn to enjoy these side-dishes. By feeding these food-stuffs we aim to keep the calves in good thrifty growing condition with plenty of bone and muscle, but not fat. Most of our calves are dropped in the late summer or early fall, and are kept growing along nicely through the winter with the above treatment. They will then go out to pasture in the spring in good condition and go through the summer with very little attention on our abundant and well-watered pastures.

The heifers are usually bred at fifteen to eighteen months old, as we find that those that do not calve until they are three years old get into the habit of putting on beef to the detriment of the dairy qualities. When well along in calf it is important that the heifer should have liberal feeding, for it is during the first period of gestation that most cows are made or marred. For a few weeks before calving we find a moderate grain ration of great benefit in developing the udder and milk glands; and after calving an abundance of food, particularly of the succulent varieties, will be necessary to develop the lacteal functions to their fullest capacity. Of course, just after calving, it is best to feed lightly and carefully until the animal's system regains its normal condition, when the amount given may be gradually increased. With us, however, dairying is secondary to stock-breeding, and some dairymen would not be able to give their young stock as much care as we do, but when I say that the majority of our two year old heifers give from forty to sixty pounds per day at their best, does it not go to show that it pays to give them good treatment?

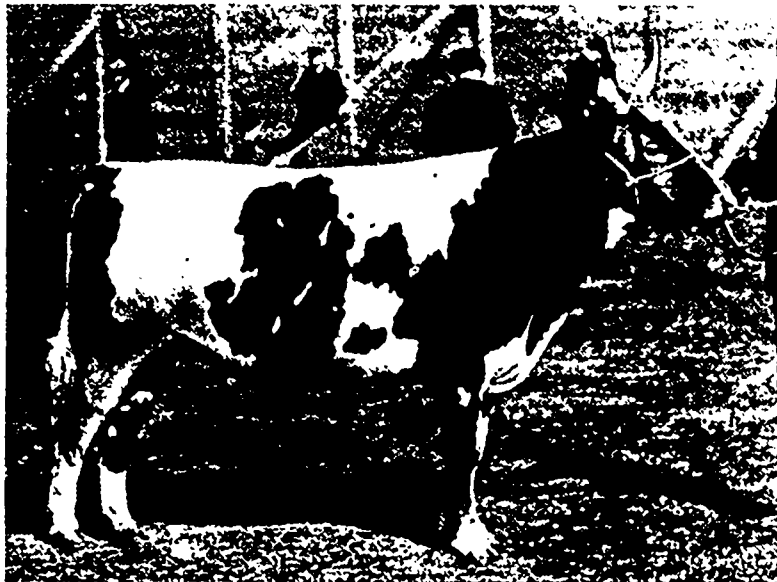
In regard to common errors in heifer rearing, I may say, that in my

opinion, the greatest mistake is in the happy-go-lucky system of breeding so much in vogue among all classes of stock. Hundreds of farmers, who are of at least average intelligence, will breed their cows to a shorthorn bull one year, to an Ayrshire the next, then to a Holstein or a Jersey, and so on. How any man can hope to build up a dairy herd in this way is more than I can understand. Each dairyman should select his favorite dairy breed and stick to it. By grading up with bulls of one breed and of good ancestry it is easy to raise a herd that will, in a few years, be practically as good as pure-breds. I think, also, that the average dairy heifer is not sufficiently well fed, particularly during the first six months of her life, and during the three months previous to first calving. It would be a great advantage if the majority of calves were dropped in the fall so that they would be more likely to get fair treatment during the winter when the farmer is not too busy to look after them; then, if bred to calve at two years, they would have the

over after filling the silo. Only a very small quantity of this is cut at a time because it heats very quickly. We commence feeding this as soon as the frosty nights come so as to keep the cows in condition and keep up the flow of milk, for our experience is that if a cow falls away in condition in the fall we will have a poor cow all winter.

If the oats (cut green) have been well filled and the corn has been well matured the cows will not require much grain. It grain has to be fed we prefer to feed a mixture of 4 lbs. brans, 4 lbs. oats, 1 lb. peas, and 1 lb. barley, the peas, oats and barley should be ground. We feed as much as the cows require of this mixture. If bran is \$10 per ton or less we would feed bran pretty liberally, but when bran is over \$10 per ton we feed it very sparingly. When winter comes we feed a great quantity of heaver hay. We run the heaver hay and unthreshed oats through the cutting box and then mix them with ensilage. We mix this a day ahead.

We milk at fifteen minutes past five every morning, Sunday included. That is all we do before breakfast. While the milkers are at their breakfast the milk is separated. After breakfast the skim milk is fed to the calves and the cows are watered and fed their breakfast. The stable is cleaned while the cows are eating their breakfast. By half-past nine the work is all done, the doors are then shut and the cows are allowed to remain perfectly quiet until half-past three when they are again watered and fed. The feed is then mixed ready for



Ayrshire Bull, Sensation of Lessnessock, 3647.

Bred by Thomas Lindsay, Reidstone, Ocheltree, Scotland. Owned by Robert Montgomery, Lessnessock, Ocheltree. Sensation of Lessnessock is a brown and white, calved March, 1895. First Prize and Champion Ayrshire Bull at the "Highland," Glasgow, 1897.

abundant summer pasture to put them in good flesh and vigor for that event.

Our bull calves get about the same treatment as the heifers, for they are usually sold before they are a year old. After they are six or seven months old it is necessary to keep them separate from the heifers, and we generally confine them in a box-stall or paddock. While we may keep our bulls in a little higher flesh than the heifers, still we have never kept even our show bulls in what a beef cattle breeder would call show condition. Keep dairy bulls in good hearty thrifty condition, but do not over-do them, is the best advice I can give.

CARE AND FEED OF A DAIRY HERD DURING THE WINTER.

By JOSEPH YULL, Carleton Place, Ont.

As soon as the frosty nights come we keep our cows in the stable and let them out on fine days. On cold and wet days we do not let them out, and when cold weather comes they are not let out again until spring. We grow more corn than our silo will hold, and also a large quantity of oats which are cut a little on the green side. We run the oats through the cutting box along with the corn that was left

the next day and all the work done up ready to milk at fifteen minutes past five. The milk is separated while we are at our supper, and all that there is to do after supper is to feed the calves their milk.

When the fine days in spring come we let the cows out for a short time every day, but we are in no hurry to turn them on the grass. We have a small field near the barn on which we turn them on fine days, but we do not let them on the grass until about the 15th or 20th of May. We keep our stables at a temperature of from 50° to 60° Fahr.

The great success in caring for dairy cattle is to be as gentle with them as possible. Never speak crossly or harshly to them, nor allow any other person to do so. Be as punctual as possible in every particular. Never vary one minute in the time of commencing to milk. The milkers should milk the same cows every time and in the same order. If you have been in the habit of milking a certain cow first and you happen to milk another one before her she will feel very much disappointed. It will act like a shock to her nervous system, and will be at your expense. Avoid sudden changes of feed. If you have some inferior feed you want to feed mix it with good feed at first. If you have been in the habit of giving your cows a good feed for their breakfast, and for some reason you have to give them a poor feed, take our word for it they will pay you back at night. A cow will repay you just according to the care and attention she receives from you.

Treat your cows kindly, feed them liberally foods suitable for milk production, keep them warm and comfortable and the cows will keep you.

MILK TEST AT THE SOUTHERN FAIR, BRANTFORD.

The judges were Professor H. H. Dean and R. W. Stratton, of the Ontario Agricultural College, Guelph. There were two sections—one open only to cows, the milk of which had been sent to a cheese factory for at least two months during 1897, and the other class was open to all grades and pure breeds, whether supplying milk to a cheese factory or not. The scale of points used in the test was as follows: 20 points for constitution and conformation; 1 point for each pound of milk; 20 points for each pound of butter fat; 4 points for each pound of solids, not fat; 1 point for each ten days in milk, after the first ten days; limit, 205 days. Ten points were deducted from the total score for each per cent. of butter fat below 3 per cent. in the milk. The test commenced at 6 p.m. on Wednesday, the 22nd inst., and continued for twenty-four hours. One man milked his cows three times per day—9 p.m., 1 p.m., and 6 a.m., and started at 9 p.m. Tuesday, finishing at the same time on Wednesday evening. The cows were milked out clean the evening previous to the test, and the milk given during the next twenty-four hours was weighed and tested, and the points scored were determined according to the scale above. There were seven cows in the test, representing three different breeds: Holsteins, Jerseys, and Ayrshires and two grade cows. The competitors were such well-known breeders as W. M. & J. C. Smith, of Fairfield Plains; A. & G. Rice, of Curries, Oxford county; and B. H. Bull & Son, of Brampton. There were thus more breeds represented at the Southern Fair than competed at the Victorian Era Exhibition, Toronto.

The following table shows the result of the testing:

Owner.	P. O.	Breed.	Open only to Patrons of Cheese Factories.		Score.
			* Lbs. milk in 24 hours.	Lbs. fat in 24 hours.	
A. & G. Rice.	Curries.	Holstein.	59.00	1.883	136.74
J. R. Alexander.	Chainsville.	Shorthorn Grade.	45.00	1.602	108.72
W. M. & J. C. Smith.	Fairfield Plains.	Ayrshire.	26.75	0.917	72.07
Open to all not in Former Class.					
B. N. Bull & Son.	Brampton.	Jersey.	29.75	1.591	96.82
William Britain.	Brantford.	Holstein Grade.	33.00	1.437	91.72
W. M. & J. C. Smith.	Fairfield Plains.	Ayrshire.	35.90	1.189	84.50

CORRESPONDENCE.

With a view to gathering information on the methods followed by successful dairymen in rearing calves and handling dairy stock, we sent a request to a number of successful stock raisers asking them to outline their methods of management for the benefit of the readers of FARMING. We published a number of these in last week's issue, and give a number more this week. We are sure they will prove of interest and benefit to our numerous readers.

HEIFER CALVES FOR THE DAIRY.

Editor of FARMING:

SIR,—My system of treating heifer calves for dairy purposes is as follows: I remove the calf as soon as dry and allow it to stand, and do not allow it to suck for the two following reasons:

(1) It has a tendency to acquire this habit of sucking, which is a great evil, as a calf when sucking for some time after through feeding, draws air into its stomach, which causes indigestion.

(2) Sucking enlarges the glands and thickens the skin around the waddles, which is equally objectionable.

The most successful method I have found in feeding is to give the calf an adequate supply of new milk for the first two weeks, gradually increasing it as the calf advances in age, being careful not to cause indigestion.

Should indigestion occur, I immediately stop the milk and reduce the quantity and quality either by adding water or feeding skimmed milk until the stomach becomes strong enough to proceed as before. I have found the following of great benefit in cases of indigestion: Three tea-spoonfuls of Castoria at a dose each day until better of the complaint.

From two weeks on I would feed sweet skimmed milk, adding a small amount of ground oil cake for health and to develop a good skin, but not in sufficient quantity to educate fat. The milk supply should be reasonably increased until the calf is five or six weeks old.

At this age I feed a small quantity of oats, gradually increasing up to six months of age. As soon as it will eat grass or hay, feed a liberal supply of either in order to develop the stomach and barrel.

In winter, feed a liberal supply of roots and coarse fodders, and also a little oats or oat chop. Where ensilage is used, lessen the supply of roots.

The weaning should be done gradually by mixing water with the milk, increasing the water and lessening the quantity of milk until the calf drinks all water readily.

I would have her become a mother when about two years old, as it tends to hasten an early development of the milking qualities, which is the result wished for in all dairy types.

In regard to raising bull calves, since the sire should have points identical with that of a heifer, the treatment should be much the same for the first six months, with the exception that he should have a small quantity more oats or oat chop for bone.

Paramount to all other errors in raising calves is that of careless selection of those which are to form the nucleus of a dairy herd. The cows or calves to be made part of the herd cannot be selected with too much care. As in all nature, like has a tendency to beget like, think you that dame nature has forgotten her incontestable law in the cow byre? No. There is nothing more susceptible to right handling and right breeding than the calf which so soon becomes a cow and mother. Not only should the cow, calf or heifer be selected of good dairy form individually, but above all their breeding should be of some well-known reputable as well.

Two other very objectionable errors are overfeeding and underfeeding. Feeding should be a gradual education. When at school we learn addition, subtraction, multiplication, and division, and we gradually go on to the most intricate problems. So with the dairy heifer; the early education is absolutely necessary to her higher development and best attainments. Do not overfeed by giving too liberal a supply of fattening compounds or preparations, such as linseed oil cake, cotton seed meal, etc., as the development of the fatty tissue in the system wages war against the milk-producing qualities, and consequently results in pecuniary loss. While I am against overfeeding, I do not wish to be understood as saying they should not have a liberal supply of strong, nutritious foods. For the development of bone and muscle I can find nothing better than oats or oat chops and roots fed regularly, with a liberal supply of fodder morning, noon, and night, and water at least twice each day.

The food, care, and management of a dairy cow from October 1st until June 1st is a very important subject. In the early part of October grass begins to fail, and as a cow is a mere machine, she should have something out of which to manufacture her natural product; and we cannot get something from nothing. In order to have success we must begin to supply food and care. I would recommend feeding a supply of corn fodder, or some other nutritious food, along with bran or oat chop, or a little pea meal mixed with bran, say, in quantities ranging from four to six quarts, every night and morning.

All cattle are susceptible to atmospheric influences, and, consequently, when a cow is exposed to the elements, cold, raw winds, and the damp ground as a bed, it can be readily seen how important a factor exposure to the atmosphere figures in drying up or reducing the milk flow in any dairy cow. From actual weighing of the milk, I have known one cold night in the spring, after the cattle had been turned out on grass, to reduce the milk flow

from two to three pounds. Even, although a cow may for some cause have become reduced in the flow of milk, she may be restored by feed and care, but rarely, if ever, improved. So, as the old adage has it, "An ounce of prevention is worth a pound of cure," she should be fed, housed at nights, and cared for, so that she becomes established in her winter quarters with her usual flow of milk intact. Once established in winter quarters, along with their usual supply of coarser fodders, I would feed a liberal supply of roots at least once a day, with from four to six quarts of bran or chop at each meal, in proportion to size.

Cows in the dairy should have an adequate supply of pure water at least twice daily, but after receiving such should not be allowed to shiver in the cold. The water given should not be too cold. One can easily discern when this is the case by inserting the bare hand and wrist, for at least one minute, into a pailful of water which is being imbibed, when, if it be too cold, the hand will be unpleasantly cold, in which case a little warm water should be added to remove the chill.

On cold, blustery or windy days the cows should be kept indoors, but on fine days should be let out to freely exercise. Above all, do not allow them to become chilled, either by too copious draughts of cold water or by careless and indifferent care.

In spring the cows need the same precautions and care from storms, cold winds, and the wet ground for their bed, as they did in the fall. Spring time—the usual calving season—also demands some special care. The dairy cow should be dried up about six weeks before her calving time. This gives the system ample time to recuperate and undergo the change necessary as a new milch cow. During this six weeks she should be fed a small quantity of oil-cake, two or three times daily, along with her usual quantity of food. She should also be fed half a pound of salts every alternate day from three to four weeks previous to becoming a mother. This has a twofold purpose. It not only keeps the cow loose and healthy, but it also has a tendency to cool the blood and greatly reduces the liability to contract milk fever, which has been so prevalent in the season just past.

Hoping my experience may be of benefit to your readers. I am, yours truly,
K. B. SMITH.

Arkona, Ont.

PERMANENT PASTURE.

EXPERIENCE WANTED.

Editor of FARMING:

SIR,—Wanted, information from any party who has successfully laid down land to permanent pasture. How many years has it been laid down? Explain the methods pursued, and give list of grasses sown.

I am thinking of laying down a field of clay to permanent pasture, and would like to see some correspondence on the subject in FARMING from those who have had some experience with permanent pastures.

Yours truly,

JAMES H. MACLELLAND.

Laurentian Stock and Dairy Farm,
North Nation Mills, Que., Oct. 26th.

[This is an important question, and we would be pleased to have those who have tried permanent pasture give us their experience for the benefit of our readers.—ED.]

RAISING AND FEEDING DAIRY STOCK.

Editor of FARMING:

SIR,—As soon as the calf is dropped and licked by the dam, I take it away and feed it milk from the dam for ten days. Then I gradually feed skim-milk, so that by the end of three weeks it will be taking all skim-milk. Keep a little good hay where it can get it to eat; also feed a little chopped oats, bran, and oil cake, using judgment, and feeding according to size of calf. Keep the calf growing, but do not keep it fat. At six months old it can be taught to drink water, and if the pasture is good turn it out a little. Do not put it out on grass all at once. When in the field, if the calf is nervous, pet it if it will allow you, but do not use force, for it will in time get quiet, and a little coaxing will teach it to have confidence in you. Breed her at one and one-half years old; if large, you might breed a little sooner, but when bred young she should have great care, as you will spoil her growth.

In regard to errors in calf feeding, I think the milk should not be hot one meal, cold the next, and warm the next, but it should be milk warm every time, to avoid stomach trouble. Do not over-feed, but give plenty of rough food so as to develop a good constitution. Feed plenty of roots in winter, in a warm stable, for a cold stable and an annual shivering with cold in an unprotected yard means a loss to both animal and owner. If the heifer is kept fat from a calf she has a tendency to make a beef instead of a dairy animal. Bull calves should be fed and managed the same as heifers, except that they should be kept away from cows or heifers. Give them a chance for exercise. In summer let them have a run in a pasture field, if convenient.

As to the care of a cow from 1st October to 1st June, if weather is fine and the pasture good, I let them run and feed night and morning in stable. I feed bran, chopped oats and peas, and oil cake, mixed equally by weight, or if any of them are too dear I feed what will give the best results for the cost. When the nights are cold I keep them in the stable, and do not turn out while the frost is on the ground or when the wind is very cold, as they want comfort. In winter I feed roots, corn fodder, hay, straw, mixed chop, and beans. If an early spring, I turn out by May, doing so a little at a time, gradually taking the feed away as they get used to grass, but I do not depend on grass until it is good.

Feed well and be kind to the cows and they will be good to you. Do not try to force a cow with feed when near or just after calving, but rather let her go a little short in her food. I give a dose of salts about a week or ten days before a cow calves, and salts, molasses, and a little ginger after calving. Do not allow a newly calved cow to be exposed to cold nor allow her to drink cold water. Great care should be taken of her for a few days after calving.

I am, yours truly,

Hickory Hill Farm,
N. DYMENT.

Clappison's Corners, Ont.

HEIFER COWS FOR THE DAIRY.

Editor of FARMING:

SIR,—When a calf is dropped we leave it with its dam until it is perfectly dry and on its feet. We let it suck the cow perhaps once or twice, then remove it either to a box stall by itself, or tie it up along with other calves, but never close enough so that they can suck one another. If tied, the calf must have exercise at least once a day. It is fed its mother's milk, with perhaps ten per cent. skim-milk from the cooler. It is always fed sweet, and at a temperature of 90° to 94° Fahr.

When the calf is about two weeks old we commence feeding a little meal (ground oats 60 per cent., wheat bran 30 per cent., and flax-seed meal 10 per cent.), and all the good clover hay it wants to eat. When we commence feeding meal we break off new milk and gradually substitute skim-milk sweet from the cooler, warmed to a temperature of about 92° Fahr. This is continued until the calf is about three months old, when it gets cold skim-milk for about two months longer, with a supply of the mixture of meal mentioned before. Coarser food is also given, such as cut corn fodder and roots (or, in summer pasture), and lots of pure water to drink.

When about, say, from eight to twelve months old (according to size), the heifers are bred. They are kept in a good, thriving condition, never stinted, but not fed to fatten.

Some of the worst evils in raising calves are the neglect to use a thermometer in preparing the calves' milk when the milk is set in ice water, lack of exercise, irregular feeding, dark, ill-ventilated stables, and stinting or over-feeding.

Bull calves are raised exactly the same as heifers until about eight months old, when perhaps a little more concentrated food would not be amiss to fit them for service.

Yours respectfully,

Freeport, Ont. GEORGE LATSCH.

CARE OF A DAIRY HERD.

Editor of FARMING:

SIR,—During the month of October the rations for a cow should be as follows: about 10 lbs. of grain per day, composed of oats, corn and peameal, equal portions. During October there should be enough pasture without feeding hay. She should not be stabled either night or day except in severe changes of weather, when the stable is better. Except when it is rough weather give your cow all the fresh air she can get and all the fresh

water she can drink, with all the exercise she needs.

In November the stable becomes a necessity, especially at night, although there are plenty of fine days for exercise. During November, December and January the rations for your cow should be about 12 to 16 lbs. of grain per day, viz., corn, peas and oats, with the addition of about 8 lbs. of bran and about 12 to 15 lbs. of hay, corn and roots pulped, cut and mixed together. You must use your common sense, as no two cows will need the same feed; some will eat more than these proportions, while others will use less. Your cow is a machine, and as long as she is digesting what you give her only so long is she profitable.

From the end of January up to the first of June her rations should be about 10 to 12 lbs. of grain per day with about 6 or 8 lbs. of bran; ensilage, hay and roots, cut and mixed, about 15 to 20 lbs. In April and May have her out in the open air as much as possible. Keep your stable well ventilated and fairly warm, with plenty of fresh water. Your cow should be kindly treated, and well brushed and combed, and by the first of June she will have paid you handsomely for your winter's attention. We are, yours respectfully,

SAMUEL WICKS & SON.

Buttonwood Farm, Mount Dennis.

Oct. 29, 1897.

KEEP MORE SHEEP.

Editor of FARMING:

SIR,—You are harping on the right string when you say "keep more sheep." It is advice which, if put in practice, would enable the average Canadian farmer to increase his income by from \$50 to \$100 per annum, without in any way interfering with the other operations of the farm. A flock of from fifteen to twenty breeding ewes can easily be kept on a one hundred acre farm, even after it is apparently carrying all the horned stock it will support. Sheep are expert scavengers, and seem to have the happy faculty of picking up a living from the waste places of the farm. They can be wintered over fairly well on good pea-straw, supplemented with a little clover hay towards spring, and in this way will convert into a useful source of income that which would otherwise have gone to waste.

I am not prepared, however, to admit your contention that the wool from a flock of ewes will pay for their keep for a year, leaving the lambs as a clear profit. That, I think, is claiming a little too much; but assuming that half the lamb crop is clear gain, the advice to "keep more sheep" is well worthy of our consideration.

They require the investment of very little capital. The buildings required for their winter accommodation may be of the plainest and most inexpensive nature. In fact, the plainer and simpler the better. All that is necessary is a good dry floor and freedom from draughts. The labor of caring for them is less than that required by any other stock. They yield two crops per annum. If one is a partial, or even total failure, you have the other to fall back on. The risk of loss by death is a minimum. And yet, in spite of all these arguments, which go to prove that the Canadian farmer OUGHT to keep more sheep, we find that he is slowly, and it may be reluctantly, but none the less surely, going out of the business, from which we conclude that there is some obstacle to sheep raising of which we have taken no account in our reckoning. In your issue of the 14th ult. you said that the only obstacle is the comparative difficulty of reaching the English market. But I would venture to suggest a greater, and that is the dog nuisance. I think I am well within the mark when I say that since the first of August there have been fully one hundred sheep killed by dogs within a radius of three miles of Brucefield, and although only one was caught, it is the prevailing opinion that the greater part of the damage was done by dogs owned in the neighboring towns and villages. Now, so long as every little town and hamlet is over-run by idle, worthless dogs, just so long will the Canadian sheep-raising industry be at a discount. The dog tax has been the subject of a great deal of discussion, and many apparently sound arguments have been advanced on either side, but when carefully considered in all its aspects, the whole subject resolves itself into a simple question: Whether is it better to interfere with one man's liberty to keep dogs or to allow that man to interfere with his neighbor's liberty to keep sheep? Which is of the greater economic value to the country, the sheep or the dog?

A. P. KITCHEN.

Brucefield, Ont.

The Ontario Agricultural Gazette

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

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

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

BENEFITS OF MEMBERSHIP.

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

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

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

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

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

The list of Cattle Breeders will be published in the first issue of each month, of Sheep Breeders in the second issue, and of Swine Breeders in the third issue. Members having stock for sale, in order that it may be included in the Directory, are required to notify the undersigned, by letter, at least seven days before the date of issue, of the number, breed, age and sex of the animals. Should a member fail to do this, only his name and address will appear in the next monthly issue. The data will be published in the most condensed form.

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

THE DOMINION SHEEP BREEDERS' ASSOCIATION.

Lincolns.

Gibson & Walker	.. Alderton	Oliver, W.	.. Avonbank.
Gould, G. & Son	.. Rutherford	Parkinson, E.	.. Eramosa.
Humphrey, E. & Co.	.. Thamesford.	Robson, Capt. T. E.	.. Ilderton.
Stevens, R. W.	.. Lambeth.		
Gibson, J. T.	.. Denfield.		

A number of ewes.

Cotswolds.

Brown, J. L.	.. Uxbridge.	Shore, T. H.	.. Glanworth.
Ficht, V.	.. Orill.	Slater, J.	.. Butt-ville.
Honey, R.	.. Brackley	Snell, J. C.	.. Snellgrove.
Parks, J.	.. Burgessville.	Thompson, J.	.. Uxbridge.
Russell, J.	.. Richmond Hill.	Thompson, W.	.. Uxbridge.
Linton, W.	.. Aurora.		
McCrac, D.	.. Guelph.		

A number of yearling ewes and rams; ram and ewe lambs. 25 ram lambs; 10 shearing ewes.

Leicesters.

Armstrong, G. B.	.. Teeswater.	Garnham, E. A.	.. Stratfordville.
Benning, D.	.. Williamston.	Kelly, J.	.. Shakespeare.
Blais, A. & J.	.. Glen Saufield.	Little, R. G.	.. Teeswater.
Campbell, J. K.	.. Palmerston.	Martin, R. G.	.. Marysville.
Currelley, I. & Son	.. Fullarton.	Whitelaw Bros., A. & W.	.. Guelph.
Wood, C. & E.	.. Freeman.		
Smith, J. S.	.. Maple Lodge.		

10 ram lambs; 3 shearing lambs; 12 ewe lambs; 10 ewes, all ages.

Shropshires.

Beattie, W. H.	.. Wilton Grove.	Ewing, J. B.	.. Dartford.
Brown, A.	.. Picton.	Everett, G. P.	.. Mount Vernon.
Culder, C.	.. Brooklin.	Ganton, D. G.	.. Saurin.
Campbell, J.	.. Woodville.	Gibson, R.	.. Delaware.
Conworth, J.	.. Pais.	Hanmer, D. G. & Sons	.. Burford.
Davies, R.	.. Toronto.	Hawkshaw, W. S.	.. Glanworth.
Dickin, J.	.. Milton West.	McFarlane, J.	.. Clinton.
Donaldson, W.	.. South Zorra.	Phin, J. P.	.. Hespeler.
Elliott, A.	.. Galt.	Sorby, D. & O.	.. Guelph.
Wren, C.	.. Uxbridge.		
Miller, R.	.. Brougham.		

A number of yearling ewes and rams; ram and ewe lambs.

Oxfords.

Arkell, H.	.. Arkell.	Evans, S.	.. Gourlock.
Arkell, H.	.. Teeswater.	Hines, H. J.	.. Dutton.
Arkell, P.	.. Teeswater.	Jull, J. H.	.. Mt. Vernon.
Cousins, J. & sons	.. Harriston.	Terrill, A.	.. Wooler.
Dickson, W.	.. Mildmay.	Tolton, J.	.. Walkerton.
Elliott, A.	.. Pond Mills.	Turner, E.	.. Burford.
Elliott, W. R.	.. Hespeler.	Wright, H.	.. Guelph.
Hirdsall, F. & Son	.. Hirdsall.		

Bunch of ram and ewe lambs.

Southdowns.

Baker, G. & Son	.. Simcoe.	Martin, W.	.. Binbrook.
Douglas, T. C.	.. Galt.	Miller, J.	.. Markham.
Jackson, J.	.. Abingdon.	Shopland, J. S.	.. Maywood, B.C.
Lemon, S.	.. Kettleby.	Teller, A. & Son.	.. Paris.
Smith, W. M. & J. C.	.. Fairfield Plains.		

1 ram.

Dorset Horns.

Howman, Jas.	.. Guelph.	McGillivray, J.	.. Uxbridge.
Hill, T.	.. Ridgville.	McKellar, J.	.. Avonton.
Humber, J.	.. Wyoming.	Rutherford, J. E.	.. Kemptville.
Lea, H. F.	.. Conesecon.	Stonehouse, W.	.. Wyoming.
Harding, R. H.	.. Thorndale.		
Hunter, J.	.. Wyoming.		

15 ewe lambs and yearlings. 4 ram lambs; a few ewes.

Merinos.

Smith, W. M. & J. C. ... Fairfield Plains. Rams and ewes.

Hampshires.

Kelly, J. ... Shakespeare.

Suffolks.

Thompson, J. ... Mildmay.

Miscellaneous.

Hobson, J. I.	.. Guelph.	Moore, J. D., M.P.P.	.. Galt.
Wightman, R.	.. Owen Sound.		

There is doubtless more stock for sale among the members of the Association than is here advertised, but many members have neglected to forward to the secretary a list of the stock they have for sale, and unless the secretary is notified, the list issued in the preceding number cannot be again inserted. It is to be hoped that next month more members of the Association will avail themselves of the opportunity of advertising their stock and having it brought prominently to the notice of buyers. It will cost you nothing but the trouble of writing a postal card to the secretary.

The next issue, which will contain a list of sheep breeders, will be published on December 14th. All lists for publication must be in the hands of the secretary on, or before, December 3rd.

LIVE-STOCK CAR FOR MANITOBA AND THE WEST.

Applications for space in the live-stock car advertised to leave Ontario November 6th, for Manitoba and Western Canada, were more than could

be accommodated, therefore a second car will be sent out as soon as sufficient animals are obtained to fill it. Those having stock which they wish sent to Manitoba, British Columbia or the Northwest Territories should corres-

pond with F. W. Hodson, Parliament Buildings, Toronto. The rates at which these animals are sent are the same as those granted settlers' effects. Twelve cattle, or a corresponding number of sheep and pigs, are yet required to complete the second car.

ONTARIO PROVINCIAL FAT STOCK AND DAIRY SHOW.

A meeting of the local officers of "The Provincial Winter Show" and representatives of the City Council and other interested bodies, met in the Kerby House, Brantford, Tuesday, November 2nd. Those present were: G. W. Clemons, H. A. Foulds, D. G. Hanmer, J. E. Brethour, C. W. Yapp, S. Suddaby, Geo. Hatley, Mr. Strathdee, representing the G.T.R., F. W. Hodson, and others. After carefully inspecting various buildings available the Grand Trunk Car Shop was chosen as the building in which to hold the next Ontario Provincial Fat Stock and Dairy Show. This building is of brick, one storey high, and is very well lighted, having many windows in the sides, ends and roof. Large boilers are in place in an adjoining building, and steam pipes surround the inside of the building, and are so arranged that if the weather is cold at the time of the show, steam can easily and quickly be turned on to heat the entire space. This structure is 345 feet long, by 136 feet wide, giving a floor space of over 45,000 square feet, all of which is floored with pine plank. The cattle, sheep, swine and poultry will all be stabled and shown in this building. The offices and board rooms, and a large assembly room where the annual meetings of the Dominion Cattle, Sheep and Swine Breeders' Associations will convene, are under the same roof, and if possible, a lunch room will be placed alongside these offices. Visitors and exhibitors need not leave the building from the time they enter in the morning until after the meetings are closed at night. In addition to the rooms above described there will be an exhibitor's room, comfortably fitted, and supplied with a telephone.

This large building, known in Brantford, as the Grand Trunk Car Shops, is situated within three minutes' walk of the G.T.R. station, and within two minutes' walk of the city street cars, therefore, it is of easy access to the public. Live stock sent for exhibition will be carried by the G.T.R. and C.P.R. at single fare, that is, animals sent for exhibition will be charged full rates going to the exhibition and will be returned free. The building is so arranged that large doors can be opened and the car shunted inside of the building and the stock unloaded directly from the cars into the pens which they are to occupy. Arrangements have been made with the G.T.R. officials to place these cars in the freight yards, close by the building, and hold them there until the close of the exhibition, when the cars will be again run into the building and the animals

loaded from their pens into the car. All crates, boards, etc., required by the exhibitors to pen their animals in the car may be left in the cars, and will be taken care of by the railroad authorities and returned with the car when the animals are to be loaded again.

All persons who wish to attend the exhibition as spectators will be carried by either of these roads at single fare, that is, a person wishing to attend is required to buy a single fare ticket and procure a Standard Convention Certificate from the agent at the starting-point. This will be signed by the secretary of the exhibition and will entitle the passengers to return free. Full particulars concerning this were given in last week's GAZETTE.

Arrangements were also completed with Mr. Fred Westbrook, proprietor of the Hotel Belmont, Brantford, Ont., to make his hotel the headquarters of the officers of the Provincial Winter Show and as many of the exhibitors as would like to avail themselves of the privilege. The rates are \$1 per day for persons occupying a double room with two beds in the room, and \$1.50 per day for persons occupying single rooms. Officers and directors who remain for four or five days will be charged \$1 per day. It is hoped that the officers of the exhibition and as many of the exhibitors as possible will patronize this hotel during the exhibition.

After all these arrangements had been completed a local board meeting was held at which the following names were added to the executive committee: Messrs. J. M. Shuttleworth, Geo. Hatley, H. A. Foulds, S. Suddaby, D. G. Hanmer, J. E. Brethour and C. W. Yapp, with power to add to their number. Mr. Foulds was elected local chairman and Mr. Yapp secretary. Messrs. C. W. Yapp and D. Hanley were appointed a committee to take charge of the bacon classes in the swine department, and one or other of these gentlemen will take charge of the ring during the time the judging is being done. It was decided that the superintendent employ four persons to assist him during the day and one night watchman. The day men will require to be in attendance from 7 a.m. to 10 p.m., and the night watchman from 10 p.m. to 8 a.m. It was also decided to employ three ticket sellers who shall also act as door-keepers.

A letter was received from Prof. G. E. Day, of the O.A.C., Guelph, in which he stated that it would be very inconvenient for him to conduct the testing in the dairy department. Mr. J. W. Palmer, B.S.A., Toronto, was elected to take Prof. Day's place, and the judges in the bacon classes were appointed to award the prizes in class 24. The meeting then adjourned.

The growth made by this exhibition has been very marked. In 1891 the total entries numbered 81; in 1892 there were 171; 1893, 364; 1894, 487; 1896, 611. The money paid in prizes was as follows: 1891, \$325; 1892, \$1,453; 1893, \$2,083; 1894,

\$2,525; 1895, \$2,628; 1896, \$3,491. This year the cash prizes offered are increased by over \$600, upwards of \$4,000 being offered in the cattle, sheep and swine departments this year. The exhibition is open to all comers. It is hoped that a number of American exhibitors will be present this year. Entries close November 25th. Prize lists and entry forms may be had by applying to the secretary, F. W. Hodson, Parliament Buildings, Toronto.

MARKET REVIEW AND FORECAST.

Office of FARMING,
Nov. 8th, 1897

General business during the week has been good. The broken weather has interfered some with certain lines of business, but greatly helped other lines. Collections through the country have been good, and there seems to be a feeling that general business will be quite brisk until the holiday season is over.

Wheat

The long unbroken drouth which has prevailed over the great fall wheat growing districts has made this fall a particularly unfavorable one for the growing of wheat. In many cases the seed has decayed in the ground. On account of the shortage in this year's crop it was the intention of a great many farmers to sow more wheat, but on account of the drouth it is doubtful if as many acres were sown as there were harvested this season. Thus on account of the dry weather the wheat that was put in has not made a good growth, so that altogether the prospects for next year's wheat crop are not bright. In view of this and of an active demand for wheat for milling purposes, as well as for export, it was thought that the price of wheat would remain at a good figure. However, slight rains have fallen throughout the wheat-growing districts, and a cable report of an increase in India wheat, and that the world's visible supply showed an increase of over two million and a quarter bushels, caused prices to decline early in the week. At Toronto the demand has been fairly steady all week, although prices have declined below the figures of two weeks ago. Cars sold at \$2c. middle freight, and \$1c. north and west. Most holders are refusing to sell at \$1c. Manitoba wheat is also easier at 93c. afloat at Fort William, and 90c. at Goderich and Midland.

Barley and Oats.

There has been practically no change in the barley market. It is dull at Montreal. This year's crop is quoted at 32c. to 36c. for feed. At Toronto it is quoted at 24c. for feed outside, and 30c. for No. 2. Good malting barley of last year's growth is bringing 52c. to 59c. at Montreal.

Oats have remained steady all week at from 22c. to 22½c. for cars north and west. At Montreal they are about 26c.

Peas and Corn

The market for peas has been steady at 43c. middle freights, and 42c. north and west.

Corn has declined a little, but is steady at 26½c. to 27c. for yellow west. At Montreal it is worth 33c. to 34c. afloat.

Buckwheat and Rye.

Buckwheat is fairly steady at 29c. middle freights Toronto. 37½c. to 38c. at Montreal.

Rye has been in good demand for export at 52c. to 53c. Montreal, or 43c. middle freights, 42c. north and west at Toronto.

Millfeed.

There has been a good demand for bran all fall. Montreal quotes Manitoba bran as having been sold in bags on the tracks at \$11.25 to \$11.50, and can possibly be obtained for \$11. Ontario bran is worth in Montreal from \$10.50 to \$11 in bulk. Ontario shorts \$12.50 to \$13, and Manitoba shorts \$13 to \$13.50. At Toronto millfeed is dull at \$11 for shorts and \$7.75 for bran, middle freights.

Potatoes.

There has been a fair enquiry for potatoes in car lots, and some have sold at 50c. per bag for good lots, while choice lots are held at 52½c. An advance of from five to ten cents is being asked by western holders.

Eggs.

The market at Montreal for strictly guaranteed new laid stock is firm with sales in round lots at 17c. to 18c. Lined eggs are quoted at 13c. to 13½c. At Toronto the market is steady at 15c. to 15½c. for fresh and 13½c. for lined.

Honey.

Choice Ontario white clover comb honey is scarce and firm at 14c. to 15c. per section. Extracted honey has sold at 8c. to 9c. for white and 6c. to 7c. for dark.

Apples.

Apples continue firm at the prices quoted last week. An English buyer has been in Montreal this week buying extensively for the old country market. Good, sound stock arriving in good condition have been sold at Liverpool at prices which netted the shippers in the west from \$3.42 to \$4.62, while other sales of inferior fruit have netted only \$1.20 to \$2. Everything points to a continuance of good, profitable figures during the present season, because of the unprecedented shortage. Still prices may be pushed too far. No. 1 apples are quoted at Montreal at \$3.50 to \$5 per bbl.; No. 2 at \$1.50 to \$3. Dried apples 2½c. to 3¼c., and evaporated apples at 5½c. to 6c. per pound.

Cheese.

The receipts of cheese at Montreal for the past week were 93,888 boxes against 73,111 for the week previous. The receipts are too large to insure a change to a more healthy tone in the market. Still there was some business being done, but at somewhat lower rates. The ruling price seems to be from 8½c. to 8¾c. for Septembers and Octobers.

Butter.

The fall pastures in England have been good and the make of butter large. Ireland is sending forward considerable butter, and the usual foreign supplies coming in have all tended to keep down the price of butter. There is still some June butter in store which comes out as opportunity offers, so that the trade in England has been quiet. In spite of this, however, Canadian butter has held a good price all the way through. As high as the highest Danish has been paid for choice lots of Canadian. That the English market has not all gone to pieces may be gathered from the fact that American July butter, stored in bond in Montreal, has been ordered forward by an English buyer who refused a price for it in New York that would have cleared him 2½c. a pound at Montreal. Sales of October make have been made at 18½c., of September at 18c., and of August at 17½c., but the best factories are holding for 18¾c. and 19c. and some refuse to put a price on it. Prices rule about 18½c. to 18¾c. for finest October.

At Toronto there is a good demand for dairy butter and the market is firm at 15c. to 16c. for choice pails and tubs.

Cattle.

The demand for export cattle continues very dull, and reports from the old country are very discouraging. The offerings at Toronto on Friday were very large and prices fell away. The best export bringing 3c. a pound less than the best last week. Some were sold at 3½c., but the ruling price was from 3½c. to 3¾c. per pound. In butchers' cattle there were heavy offerings and prices were down. Picked lots were sold for 3½c., others for 3¼c., and a carload for 3c.; a number of deals were made at 3¼c. Common stuff sold very low. Stockers and feeders were a little easier, the demand from Buffalo being somewhat quieter. Light stockers bring \$2.70 to \$3.30 per cwt., and feeders from 3½c. to 3¾c. per pound. Choice veal calves are in demand and at good figures.

Good prime stuff is wanted at Buffalo at \$5.15 to \$5.25, for which there is a pretty steady demand. Feeders bring from \$3.50 to \$4.25. Stockers \$3.25 to \$3.90.

Sheep and Lambs.

The demand from Buffalo has not been quite so strong, and prices have declined a little. From \$4 to \$4.10 or perhaps a trifle better, are the ruling prices for good lambs. They still bring from \$5 to \$5.75 on the Buffalo market. Sheep for export are dull at 3c.; young ewes for breeding purposes are bringing from \$3 to \$3.50 a head.

Hogs.

Prices have declined somewhat during the week. The offerings have been heavy, and the prospects are that prices will go still lower. Choice bacon hogs are bringing from \$4 to

\$4.25, light fat hogs \$4 to \$4.10, and thick fat hogs, \$3.90 to \$3.95 per cwt.

There is a good demand for hogs in the United States, and if prices go much lower for Canadian hogs there will be two markets open for them. At present, however, the best prices are still about 35c. lower than Canadian prices.

Hay and Straw.

The hay market continues dull at \$8 to \$8.50 per ton. Straw is quiet and unchanged at \$5 on the tracks.

Publishers' Desk.

Guernsey Cattle Club.—The annual meeting of the American Guernsey Cattle Club will be held at the Fifth Avenue Hotel, New York City, Wednesday, December 8th, 1897, at 10:30 o'clock a.m. It is hoped that all members who can will be present. Among the questions to be brought before the Club will be that of conducting home tests of Guernsey cows.

Dairy Instruction.—We were favored the other day by a visit from Mr. T. B. Millar, chief instructor for the Western Butter and Cheese Association. Mr. Millar has recently been visiting the ex-students of the Provincial Dairy School, at Guelph, in order to report upon the practical work they are doing in the factories. Students at the Dairy School are not given a diploma until their practical work for a season has been thoroughly tested. In connection with his regular work as instructor, Mr. Millar has visited thirty-four different factories. Thirty-two of these received four visits each, making the total number of days spent in this work 128. He reports considerable improvement in the quality of the cheese made this year over other years, and also that the practice of tampering with milk supplied to cheese factories is on the decrease.

Christmas Fat Stock and Poultry Show.—The Guelph Fat Stock Club, assisted by the Guelph Poultry Association, intend holding their sixteenth annual Christmas Fat Stock and Poultry Show in the Victoria Curling and Skating Rink on Thursday and Friday, December 9th and 10th, 1897. A very good prize list has been secured. The prizes for cattle are fairly good, and a sweepstakes prize for the best fat animal on the ground, called the Queen's Jubilee Sweepstakes, consists of a purse containing twelve English sovereigns. The prizes for sheep, swine, and dressed poultry are also very good, also with a number of good specials. The Guelph Poultry Association are offering premiums of one dollar for first awards and fifty cents for second awards for cock, hen, cockerel, and pullet. The prize list includes a very full list of the breeds of turkeys, geese, ducks, hens, pigeons, and rabbits.

The Apollo Harp.—This unique instrument has been called the Musical Wonder; and, considering its great capability and the simplicity of its arrangement for playing, the title is not a misnomer. It is strictly an up-to-date, nineteenth century invention, and introduces some entirely new musical features. One difficulty with a great many of our music-loving readers is that early in life they either had not the opportunity or the inclination to take a musical training, and so find themselves without the ability to perform on any high-grade musical instrument. To such, the Apollo Harp comes as a benediction. While the expert on other instruments will be able easily to execute combinations on this remarkable harp that would require long practice on the larger and more expensive instruments, the novice, if he has a good ear for music, in one week's time, will be able to play simple notes in any key sweetly, and to get all chords, and all chromatics, and positively no discords or picking of dead strings. For a birthday or Christmas present, we know of nothing in the musical line better for the money, and can heartily recommend the Apollo Harp.

Stock Notes.

GEO. LATEW, Freeport, Ont., established his herd of Jerseys some six years ago, and has been very successful with them. His herd now numbers some seventeen head in all, fourteen females and three males. He has now the famous Jersey bull, Eagle of St. Lambert, 3765, A. J. C. C. This bull took first at the West about last year and again this year. He is right royally bred, being a grandson of the noted Canada's John Bull. His sire is Neil's John Bull, whose dam has a milk record of 45 lbs. in one day at a two-year-old. The dam of Eagle is Fama Page of Grimsby, with a milk record of 53 lbs. in one day.

Mr. ARTHUR JOHNSTON, of Greenwood, Ont., writes us to say: "We have now, not only the finest lot of young Shorthorn bulls we have ever offered, but we have two of the very best individuals we have ever bred or imported. One a Duchess of Gloster by the old bull—a beautiful rich roan. They are all (15 in number) in the finest form—big healthy fellows, and full of flesh, as well as character and finish. They are not overloaded with fat, but in splendid condition. There is not a middling one in the whole fifteen. We also have seventeen capital, and capably bred heifer calves, soft of flesh, full of quality, and magnificent coats of soft glossy hair. Our yearling heifers are equally good, and equally well bred. We sell what our customers want if we have it. No pets here. We have a grand lot of young Berkshires for sale of purest breeding—deep, lengthy pigs. See our change in advertisement.

THE sixth annual ram sale held by the Lincoln Long Wool Ram Society came off on the 3rd of September, 1897. A grand sale it was in all respects. The demand was strong and good throughout, and many very high prices were realized. There were present a large contingent of buyers from Argentine as well as from home districts and the competition for the best rams was most keen. The home buyers, however, with the exception of two Messrs. Wright's breeding, succeeded in keeping the best for use at home. The whole sale, compared with that of 1896, has somewhat a lower average, occasioned no doubt by the large number of rams disposed of, however this is very small, being only some £3 a head. The test of course, can best be applied to those leading consignments wherein both the export and home buyer competed; therefore, taking the leading lots of both years, we find that in 1896 there were sixteen lots that went over £15 per ram, but in the present year there were seventeen lots made over that sum. The record price of last year, 350 guineas, was not beaten, for 250 guineas twice paid was the highest record made, this being paid for lot 2 of Messrs. S. E. Dean & Sons excellent lot by Mr. H. Dudding, and for lot 1 of Mr. J. Casswell's herd, a well brought out lot by Mr. H. Smith Jr., 210 guineas was Mr. H. Dudding's highest price made, for which a really grand and excellent sheep was secured by Mr. Langley for Buenos Ayres, a sheep that will be a credit alike to his breeder and purchaser. The proud position of heading the average list again this year falls to Mr. H. Dudding, whose twelve grand, selected rams in every way worthy of that well known and leading flock stood clear ahead at the satisfactory average of £81 12s. Next came a particularly level and excellent lot of rams from Mr. J. E. Casswell, a well-known breeder, whose sheep on this occasion certainly did his flock every credit, with a well-paying price of £65 4s. 1d. for twenty. Next were that well-known firm of Messrs. Wright, whose Royal winner and a mate went to Buenos Ayres, at the first-class price of 200 guineas and 100 guineas respectively to Messrs. Krabbe. The flock of Messrs. S. E. Dean & Sons followed next, being of a capital level character, well grown, with great size; these made an average of £53 17s. 8d. Then we come to Mr. Tom Casswell's lot, whose old flock well maintained its known high repute for quality, type, and size. The demand for these sheep was a good one, and their average price being such as must, we feel fully assured, be satisfactory, namely, £49 11s. 2d. Mr. Taylor Sharp was the next highest average for a well brought out lot of rams numbering fifteen; these made an average of £40 12s. 2d. Next came Mr. J. Pears with a very good average of £33 16s. 2d. These are the highest averages. The demand was strong, and many clients went away unsatisfied.

Maple Cliff Ayrshire Sale.

Mr. R. Robertson, Compton, Que., is to be congratulated on the excellent prices obtained at his sale of the Maple Cliff herd of Ayrshires on October 28th. It was one of the most successful ever held in Canada. There was a goodly number of the proper sort of buyers present, and the weather being excellent enticed a large number of spectators to attend. The sales were as follows:

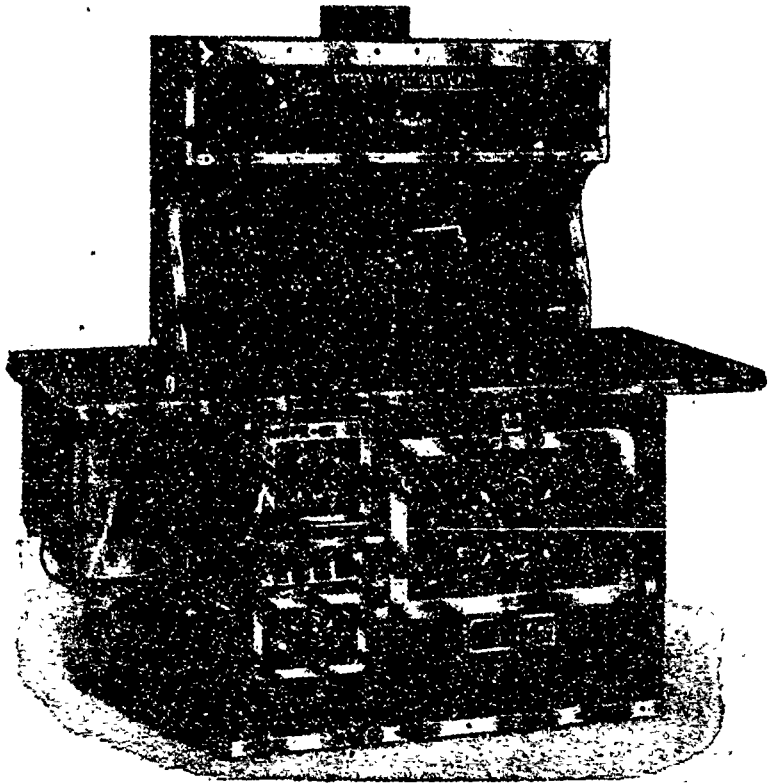
Bulls.—Matchless, 7560, \$255, to T. D. McCallum, Danville, Q.; manager for J. N. Greenshields; Matchless Again, 8757, \$65, to the Central Experimental Farm, Ottawa; Victor of Maple Cliff, 8753, \$34, to D. Cummings, Lancaster, Ont.; bull calf, 16 days old, dam Silver Maid, \$65, to J. D. Morrison; Topsy's calf, 10 days old, \$21, to D. Drummond; Pettie Cate, Q.; bull calf, two weeks old, \$20, to S. A. Baldwin, Norton Mills, Vt.

Cows.—Little Wonder, 6339, \$77, to J. Blue, Capleton, Que.; Wilhemina of Burnside, 6260, \$115, to R. Reid & Co., Hintonburg, Ont.; Daisy of Burnside, 6011, \$120, to P. Ryan, Compton; Lady Maggie, 6011, \$150, to K. Reid & Co.; Eva of Burnside, 6242, \$160, to A. E. Schryer, North Nation Mills, manager for W. C. Edwards; Bud of Burnside, 6259, \$75, to J. G. Clark, Ottawa; Nancie 3884, \$67, to J. G. Clark; Village Belle, 6562, \$63, to M. S. Campbell, Augusta, Me.; Queen of Burnside, 6253, \$50, to K. Reid & Co.; Silver Maid of Howick, 7043, \$50, to Mr. Schryer; Jessie Brown, 8747, \$31, to D. Cummings; Blossom of Burnside, 5887, \$63, to M. S. Campbell; Lady Nancie, 6245, \$130, to D. Drummond; Lady Topsy, 8756, \$71, to M. S. Campbell; Emergency of Burnside, 8755, \$151, to K. Reid & Co.; Primrose of Havelock, 5354, \$76, to K. Reid & Co.; Villa of H., 7612, \$100, to Mr. Schryer; Belle of Brome, 7888, \$60, to S. A. Baldwin; Spot of H., 7894, \$30, to T. D. McCallum; Lucinda of Maple Cliff, 8748, \$42, to T. D. McCallum; Lady Wonder, 7933, \$30, to D. Cummings; Beauty of Compton, 7808, \$30, to John Mills, Compton, Que.; Daisy of Compton, 7807, \$35, to T. D. McCallum; Gipsy Maid of C., 8249, \$45, to T. D. McCallum; Lady C., 8248, \$45, to T. D. McCallum; Lizze of Maple Cliff, 8518, \$44, to J. Blue; Girlie of Maple Cliff, 8750, \$47, to K. R. New, Howick, Que.; Lady Jess, 8560, \$100, to T. D. McCallum; Eveline of Maple Cliff, 8751, \$34, to J. Blue; Mina of Maple Cliff, 8561, \$48, to Mr. T. Ward, Waterville, Que.; Lotie of Maple Cliff, 8562, \$30, to J. Blue; Duchess of Maple Cliff, 8754, \$30, to T. D. McCallum; Maggie of Compton, 8752, \$45, to J. G. Clark.

Grand Dairy Conv.—Spot, \$50, to Hon. M. H. Cochrane, Hillhurst; Dairy, \$55, and Shifty, \$52, to S. A. Baldwin, Norton Mills.

The average price for thirty-eight in all was \$72.25. When it is remembered that of the thirty-eight head thirteen were under one year old, some just a few days old, and five under two years old, the prices paid were very good indeed. Ayrshire cattle are in demand, and will bring good prices even at an auction sale. Mr. Robertson leaves in a few days to take charge of the Experimental Farm at Napan, N.S.

-- A PERFECT RANGE --

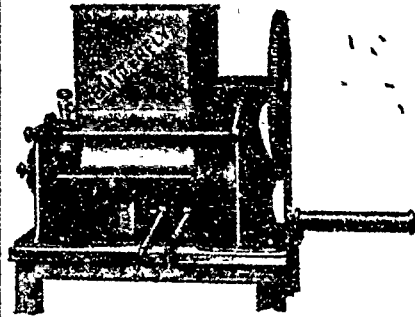


The Oxford Chancellor

This handsome range is of heavy steel plate and will last a lifetime. It has a very large, quick working, perfectly ventilated oven, and burns the coarsest wood. No other wood stove made can compare with it. It will give you glorious satisfaction. Each Range Guaranteed. The price is moderate. Write for details.

The Gurney Foundry Company, Limited, - Toronto
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The Butterfly Hand Separator



It is the latest, best, simplest, and cheapest machine on the market.

Why pay a HIGH PRICE for an INFERIOR machine, when you can get a SUPERIOR machine for a lower price.

No. 1, Capacity 250 lbs. per hour \$75.

No. 2, Capacity 350 lbs. per hour \$100.

The Butterfly...

Runs easiest. A child can run it. Easily kept in order. Requires very little oil.

Write for agent's terms for county rights. They are being rapidly taken up. A quick seller and a sure winner.

GEORGE G. PICKHARDT, GENERAL AGENT, 17 St. John St., Montreal

Stock Notes.—Continued.

THERE has been such a brisk demand for choice stock rams to head flocks, that only few are left for the late trade. I have supplied many of the leading flocks in Canada and the United States with first-class imported and Canadian-bred sires. Among the purchasers were Messrs. W. G. Edwards, M.P., Sheriff Hagar, R. Gibson, G. Hindmarsh, W. Moore, C. Wren, A. McMillan, and J. Barr, of Ontario. The American buyers were Messrs. J. M. Garrett, Kentucky; S. B. Woods, Virginia; H. W. Chaffee, Ohio; L. B. Humbley, New Hampshire; McFadden Bros., Iowa; G. D. Loomis, Ohio; W. R. Weaver & Sons, Illinois; W. D. Rote, Pennsylvania; Smith Rogers, Michigan; H. M. Moore, Pennsylvania. Earlier in the season several sales were made to parties in Manitoba, who exhibited successfully at the Winnipeg Exhibition, both rams and ewes. The trade in the latter is also remarkably good, and singular to say aged ewes are freely acquired for. I have sold several eight-year-old imported ewes, which have been specially good breeders. In fact, I have not an old ewe now left that is fit to offer. But a few pairs of very good imported shewings, and a number of Canadian-bred ewes are awaiting orders.—**JOHN CAMPBELL, Fairview Farm, Woodville, Ont.**

THE MAPLE HILL HERD OF HOLSTEIN-FRIESLIANS, owned by G. W. Clemens, St. George, Ont., was founded in 1891 by the purchase of a bull and two females from the herd of Mr. A. C. Hallman, New Dundee. Three more females from the same herd were added shortly afterwards, and choice animals have been picked up, as occasion offered, from most of the leading Canadian herds, such as those of Messrs. Stiner, McNiven, McWhorter & Butters, Smith Bros., and Bolter. In the spring of 1894 an importation of seven head of the highest breeding and individual merit was made from the great herd of H. Stevens & Sons, Leacock, N.Y., and the herd now on hand is composed almost entirely of these animals and their descendants. Mr. Clemens started early to compare notes with other breeders by sending out a show herd to the large fair, and his success in the showing has been very satisfactory. Since 1893 an exhibit has been made every year and the cash winnings during that time have totalled about \$1,500, besides numerous medals and diplomas, including the gold medal for the herd at Ottawa in 1897. It is worthy of note that no Canadian herd has been placed above the Maple Hill Herd 2 1/2 seasons. Nearly all the most fashionable strains of blood are represented in the herd, which now numbers about thirty-five head, but Mr. Clemens has a special fondness for that great better family, the DeKobts. Visitors are always welcome at Maple Hill, and prospective purchasers can usually find something good in all ages of stock.

R. RAYMOND, St. Anne de Bellevue, Ont.: The imported animals selected by the manager, Mr. James Taylor, last winter, are doing well. The two-year-old bull, Nyphosus, of Anchenbraun, is a good, strong, constitutioned animal of the old country type of a dairy bull. He was bred by Robert Wallace, of Anchenbraun, and is by Baron Wallace and out of Old Heany's law. Of the imported cows, Princess of Hulsehope, bred by Robert Woodburn, Hulsehope, Galton, Ontario, is a three-year-old that will do well. She is a good-bodied, strong-boned, useful-looking cow, with a good head, great milk veins, and all the appearance of making a grand dairy cow. She is by Cavaher's Effie of Hulsehope, and out of Miss Mary's. Another of the imported cows that is going to make a good, useful cow is Kinky Wallace of Anchenbraun.



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She was calved the 15th of June, 1894, and is by Baron Wallace of Bogwood, out of Kinky 5th of Anchenbraun. She is a thick-set, useful kind of a cow. In fact, Mr. Boden, in making his selection for importation, chose stock of families noted for their milking qualities rather than their show ring qualities. How his selections will fare in the show ring remains to be seen. Constitution and ability stand first in Mr. Boden's estimation, show qualities second, and his whole herd show that he has these qualities and a good share of the show qualities as well. The calves, yearlings, two-year-olds, and three-year-olds by Glencairn, the head of the herd, proclaim his good qualities as a stock bull. They are deep, well-built, milky-looking stock, that will please the eye of the most particular critic. Mr. Boden has added a large feeding barn to his already commodious buildings, in which he intends to fatten steers and pigs.

J. N. GREENSHIELDS, KILMORICH GRANGE FARM, DARTMOUTH, QUE.—The cattle have been doing remarkably well since they came home from the show. At the show this fall this farm showed a herd of Guernseys and a herd of Ayrshires; both have done remarkably well. The winnings of the two herds amount to a very large sum. The herds were shown at Montreal, Sherbrooke, Trois Rivières, and St. John, N.B., in Canada, and at Portland, Maine, in the United States. During the summer a large addition has been made to the stock farm. An addition is fifty feet wide and extends the whole length of the barn, 105 feet. In this addition stable room for 120 head of cattle is provided for. The arrangement of the stabling is simple and convenient. Two rows of stalls run from end to end of the building, so arranged that the cattle stand back together. The walk between the rows of cattle is wide enough to drive a wagon through, and the whole stable is so arranged that it will show off the cattle to the best advantage. Along the outer side there is a row of hay racks. The building is well lighted and ventilated. The manure will be removed in a box carried by a car on a track similar to a hay-rack track. The track will extend to a manure shed outside the stables. The feed will be

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carried by a smaller device to all parts of the stable. The basement of the barn will be used for root cellar, feed roots and silos. A new 300 ton silo has been built and filled. In the building of this silo the joints were placed in diagonally around the silo at the end of the upright timber. It makes a strong, complete silo, and the steel joints make it impossible for the walls to spread at all. On the inside of the silo two inch tongued and grooved plank were put on diagonally, on this 1st paper, then a layer of matched inch lumber. The cables on the Isleigh Grange Farm will thus be put into one of the best stables in the land.

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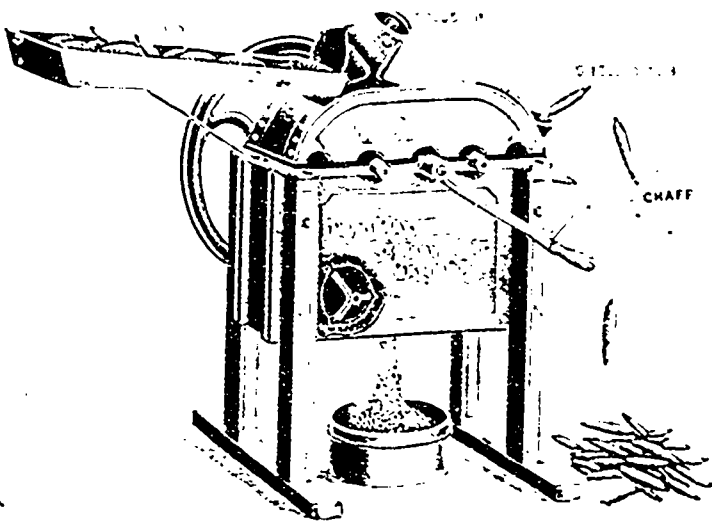
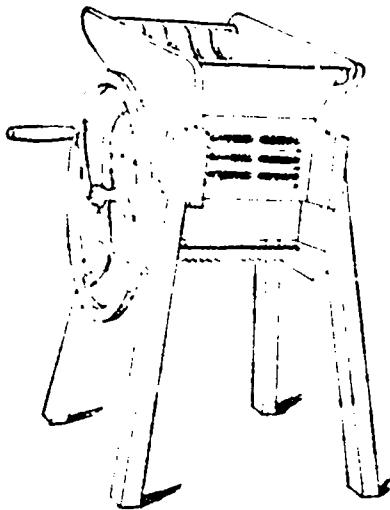
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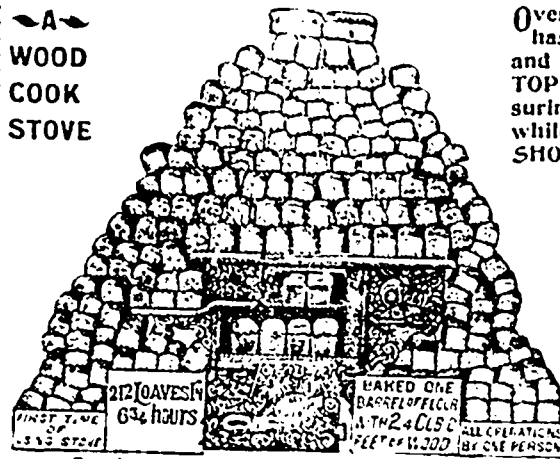
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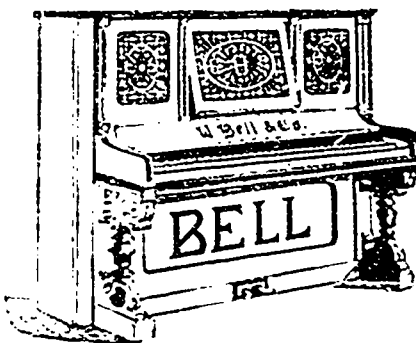
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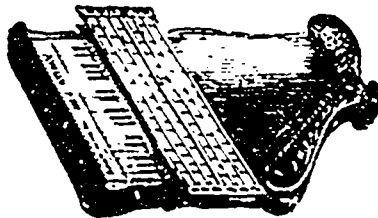
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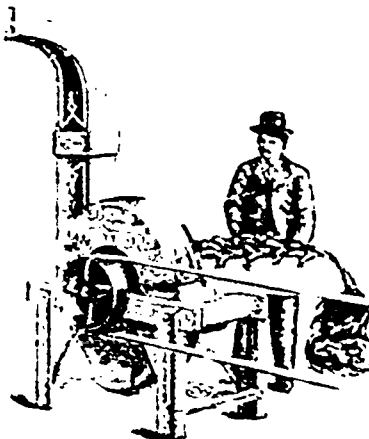
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