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A Paper for  
Farmers and Stockmen

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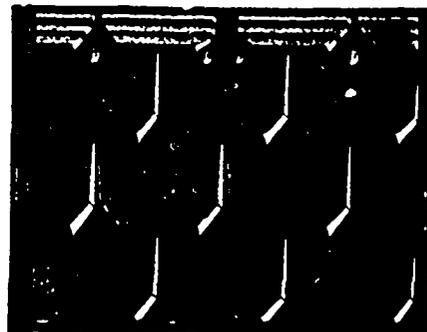
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**Gotswolds** Twenty good ram lambs, shearing and two-shear, at farmers' prices. Some excellent shearing ewes, bred to our best studs.

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

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**SHORTHORN CATTLE**  
**OXFORD SHEEP**  
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EAST TORONTO  
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Poultry department in charge of Frank R. Webber, formerly of Guelph. Handsome Peas of White and Brown S.C. Leghorns, Barred P. Rocks, Black Javas, White Langshans, Pekin Ducks. Eggs in season, 15 for \$2, or 30 for \$3.50. Stock for sale. Also Embden Geese or Turkeys.

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This year's fry in fine healthy condition ready for delivery, also yearlings. Market Trout supplied to the trade.



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**CLYDESDALE HORSES, JERSEYS and AYRSHIRE COWS** from the finest milking families. Also 15 **AYRSHIRE BULLS** and 2 **JERSEY BULLS** from tested cows.

**ROBT. DAVIES, PROP., TORONTO, CANADA**

# FARMING

VOL. XVI.

AUGUST 1st, 1899

No. 48

## Agricultural Estimates

The estimates for agriculture, amounting to \$300,000, came up for approval last week in the House of Commons, and elicited considerable discussion. The item of \$20,000 for Illustration Stations received most attention, and was strongly opposed by some of the members, the contention being that such stations were somewhat impracticable and not needed. The Minister of Agriculture, while favoring the establishment of these stations in Canada, agreed to hold over this item for further discussion, and to consider the proposition of one or two of the members that a portion of this \$20,000 be devoted to the establishment of a station in Essex county to illustrate the best methods of growing and preparing tobacco for market.

The Experimental Farm came in for more than the usual amount of criticism, the live stock department receiving the most attention. Favorable opinions were, however, expressed in regard to the appointment of Mr. Grisdale, the new agriculturist, who was likely to effect a great improvement in this line. To all this criticism the Hon. Mr. Fisher vigorously replied, showing that the recent changes in the staff would increase the good work the Experimental Farm is doing. He explained that the weakness in the live stock department was largely due to the fact that a couple of years ago many of the best animals had been slaughtered because of tuberculosis being in the herd. Provision was made in the estimates for the purchase of a number of valuable purebred animals. Some valuable work is being carried on at the present time for the purpose of ascertaining the cause of soft pork, and it is the intention to show the effect upon pasture land of pasturing sheep.

## Dairy Notes for August

What we said in our "Dairy Notes for July," in the first issue of last month, will apply during the month upon which we have just entered, only in a greater degree. Usually the difficulties connected with securing a good quality of milk at cheese factories during August are harder to cope with. The supply of water, which has been getting smaller during July, unless there are frequent showers, often plays out altogether, making it necessary for the dairyman to drive his cows a mile or two to drink. Then the pastures become less succulent, and often reach a stage in which they hardly supply nourishment enough to keep the cow alive, let alone keeping up her milk supply. Coupled with these drawbacks, flies are more numerous, the weather often becomes more oppressive, making it harder to keep milk, and the farmer, in the midst of the grain harvest, is apt to be more negligent of his cows and the milk. Because of these difficulties both the cows and the milk need more care and attention during August than any other time of the year.

Prices for cheese and butter during this month are likely to be well maintained, and dairymen who look after their cows and the milk properly will reap the greatest benefit from them. While a poorer quality of product will bring better returns when the price is high than when low, still it is only the very best quality that can and will command the top of the market. To secure this good quality of cheese and butter a good quality of milk is necessary, and this cannot be had unless every patron supplying milk

to the cheese factory or creamery gives it the very best care and attention. When August approaches the milk becomes richer, and should make a fine quality and an increased quantity of cheese if the milk is taken care of and supplied the maker free from bad flavors and in a condition to make the finest quality in a finished article.

It is during this month that the bulk of the cheese to be exhibited at the fall fairs is made. Every patron should be interested in this matter and should be ready to assist the maker in turning out a quality of cheese or butter which, if it does not secure the prize, will come very close to the top. A sweepstake cheese or package of butter at any of our leading fairs reflects, not only the skill and intelligence of the maker, but also the care and attention which every patron of the prize-winning factory gives his cows and the milk. In this way all the honor of winning a prize does not fall to the maker alone, but to everyone directly interested in the welfare of that particular factory. So we say to the patron, encourage your maker to exhibit and help him to get the quality right by taking good care of the milk. Nearly one-half of the points awarded by the judges are given to flavor, and good flavored cheese or butter can only be secured from good flavored milk.

## The Care of Milk

### A Cheese-Maker Makes a Proposal that may Lead to Something more Definite along this Line

Mr. J. W. Fotheringham, cheese-maker, Courtice, Ont., wrote us a few days ago making a proposal in connection with instructing his patrons in the care of milk, etc., that may be useful to makers and dairymen generally. Mr. Fotheringham has been in the habit of sending each of his patrons a monthly milk ticket, with instructions on the care of milk printed on the back as will be found below. He thinks, however, that if the instructions given on this ticket varied each month the patron would read them with more interest and give more attention to carrying them out, and suggests that this might be done very effectively and at a very low cost if a number of factories (say, fifty) co-operated and had the printing done at one place. It would not be necessary to have the name of the factory on the card, as shown below, but each factory might have a special stamp that could easily be put on the ticket before it is sent to the patron. The idea is to get the patrons to read and act on the instructions sent them and have the milk cared for more uniformly.

There seems to be something in this proposal that is worthy of consideration by cheese-makers and factory owners. A few pointed and practical suggestions sent to each patron once a month would serve to keep him posted as to what his duties are in connection with our co-operative dairy system, and be the means of establishing a relationship between the patron and maker that should prove helpful to all concerned. We would be glad to hear from makers and others in regard to this proposal.

The milk-ticket containing the instructions sent out by Mr. Fotheringham is of a size that will go in an envelope, which can be addressed to each patron. The following is the reading matter contained on the front and back of this ticket, which may be taken as a sample of about what such a card might contain:

DARLINGTON UNION CHEESE FACTORY.

Milk delivered for .....  
 By Mr.....

1899.	1st week.	2nd week.	3rd week.	4th week.	5th week.
Monday .....					
Tuesday.. ..					
Wednesday. ....					
Thursday .....					
Friday..... ..					
Saturday .....					
Totals .....					

Any mistakes or dissatisfaction you may have report the same to the cheesemaker in writing immediately and they will be attended to.

The patrons will confer a favor on the cheesemaker by noting the rules on this card.

THE CARE OF MILK.

The flavor of the cheese or butter largely determines the price. The flavor of these depends upon the flavor of the milk. Therefore the price of cheese or butter depends upon the care the milk receives before reaching the factory.

By aerating the milk when fresh most of the bad odors from feed, etc., are easily got rid of. Straining should begin before commencing to milk by brushing off all hair, dirt, straws, etc., from the cow's udder. Do not wet the teats; milk with dry, clean hands.

Stir the milk often to keep the cream from rising after aerating or dipping till cool. It is not necessary to put can in water to keep over night except in very hot weather. Divide the milk into two cans to keep over night and empty into one to send to the factory (when using two cans).

Empty the whey at once, wash the cans with lukewarm water first, next with hot water, and then scald, after which put them to dry in a clean, airy place. Do not use a dish cloth; all dairy utensils should be washed with a brush.

Do not cover can with lid or boards; use a screen and protect the can from sun and rain. Have your milk left where the air is pure, away from swill barrels and hog yards at least one hundred feet.

Neglect of any of these rules causes more milk to be required to make a pound of cheese, injuring the quality as well. Feed nothing but clean, wholesome food, rape and turnips are strictly prohibited. Allow cows access to plenty of pure water and salt at all times.

An Encouraging Outlook

Prof. Robertson Says Some Good Things About Canadian Agriculture

The Dundee (Scotland) *Courier* of July 13th last gives a very full account of the launching of the new steamer *Minto*, being built in that city for the Canadian Government. The vessel was christened by Mrs. Robertson, wife of Prof. J. W. Robertson, Agricultural and Dairy Commissioner, Ottawa, who with the latter was on a visit to that city. Prof. Robertson, in an address delivered on the occasion of the launching, spoke very hopefully of the outlook for Canadian agriculture and the prosperity of Canadian farmers, as the following, taken from the *Courier*, will show:

"The shipments of butter from the port of Montreal alone to the 1st July last year were \$180,000, while up to the 1st July this year these had been \$345,000, and he expected this rate of increase to go on for many years to come. Canada at the present time was certainly the most prosperous country in the world. They were on the inflowing tide in every respect. Agriculture was prospering, while

every other nation was lamenting the decay of its farming, and, as a proof of this, Professor Robertson mentioned that in country districts the deposits in the Savings Banks were a third more than a few years ago. After supplying her own people, Canada in 1896 exported over \$51,250,000 worth of farm produce, and in 1898 the exports had risen to \$78,750,000, and there was every indication that they would keep at that rate of increase for some years to come. Indeed, ten more ships would be required every year to carry the increased exports. This meant extra shipbuilding, extra carrying and more exchange, and in this way both countries would prosper. If Great Britain gave them a good market for their produce they would give in return a good market for British-manufactured goods."

The new steamer *Minto* is for service between Prince Edward Island and the mainland, especially during the winter months. She is built specially for cutting through the ice, and when it is stated that she will be expected to cut through ice twenty to twenty-five feet thick, some idea may be gathered of what this new steamer will be able to do. The following description of the *Minto* from the journal referred to will be interesting:

"The principal dimensions are—Length, 225 feet; breadth, 32 feet 6 inches; depth, 20 feet 6 inches; and gross tonnage, 1,100 tons. As she will encounter immense quantities of ice, the ship's form and scantling have been specially arranged to meet this, the stem being boldly cut away from the water-line, and the shape of the stern designed to prevent jamming in the icefields. The hull is flush-plated and heavily belted all fore and aft in wake of the water-line, and there are seven transverse bulkheads. Water ballast is carried in a cellular double-bottom and large trimming tanks aft for the purpose of sinking the stern and lifting the fore foot to get on top of the ice."

Clydes at the Highland Society Show

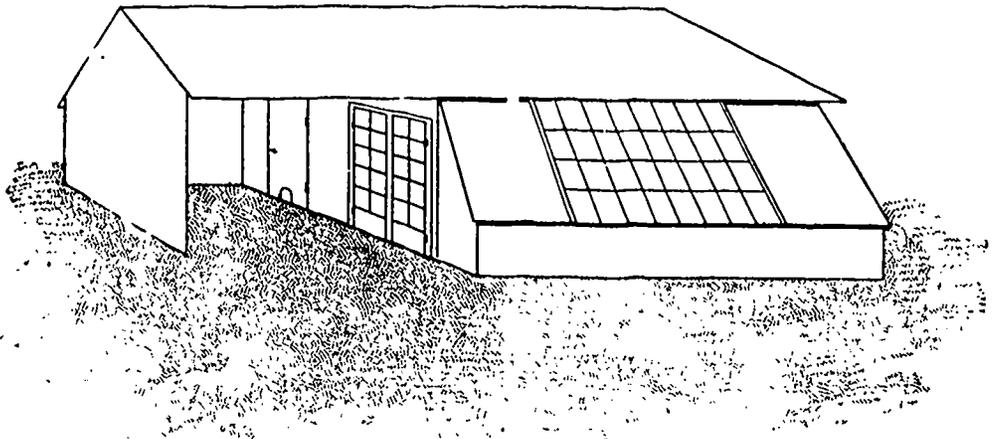
By Stockman

This year the Highland and Agricultural Society of Scotland held their show for 1899 in Edinburgh. There was a splendid show of Clydes both in numbers and quality and a feature of the year was the size of the animals specially in the younger classes. Some years ago a great outcry was made that the Scotch breeders were sacrificing everything for quality of feet, pasterns and feather—that this was spoiling a good draft horse and much was said about the superiority in size of the English Shires and some urged crossing of the breeds to bring up the size of the Clydes. This year there was no lack of quality of feet and legs and with it there was also good scaling quality. There came to the Northern Show four of the best Shire geldings that could be found in all England with them the first prize yearling Shire colt at the Royal, owned and exhibited by the Prince of Wales. This colt did not get a place in the prize list, was not even in the short leet of the yearling class. The Shire geldings, a grand lot as to size and appearance, had hardly as good feet and legs as their Clyde rivals, while the latter on the scales were close up in weight. The Clydes were put first and second and the Shires third and fourth in the class. The Clydes had more quality and decidedly better action than their southern rivals. Hiawatha (10067) was the winner of the Aged Class and the Championship. He has been a prominent winner in Scotch rings for some time and has twice carried off the Cawdor Cup at the Glasgow Show. He is not a very big horse but has grand quality of feet and legs and moves very well. He was closely pressed for the Championship by a two-year-old son of MacGregor (1487), bred at Drumflower. He won last year at the Royal and at several Scotch shows and has grown to be a massive horse for his age, with good quality.

The champion female was the 3-year-old filly, Lady Victoria, by Baron's Pride, owned by H. Webster, and was

bred by W. Nicolson, Bombie, Kirkcudbright. She is said to be a wonderfully good young mare. There were twenty-five yearling fillies shown, some sixteen 2-year-olds, and a lot of good mares out, though not so many of the latter as the younger animals. The feature of the show was the wonderful success of Baron's Pride (9122). As a successful sire he won hands down. In the breeding mares Sir Everard had three winners to his credit, second, third and fourth—but in the 3-year-olds and under Baron's Pride got almost everything both in colts and fillies. In yearling fillies, out of twenty-five shown, eight were by Baron's Pride, and they got all but the 6th prize. The like has never before been seen in the show yard. Baron's Pride is still a young horse, and is owned by A. W. Montgomery, Netherhall, Castle Douglas, Scotland. He is certainly the most successful sire, not only of the day, but has beaten all Clydesdale records.

ground, a perfect fly ready for business. It will thus be seen that many generations will appear during the season. Nearly everything that can be done to prevent their



A—View of South Side of a Poultry House, 13 x 25 ft., Suitable for Use on Farm.—O.A.C. Report, 1896.

## The Horn Fly

For the past few years this fly has been a great pest amongst the neat stock of our farms. This is particularly true on the dairy farms, as by the continued annoyance and pain caused by the fly the dairy cow shrinks materially in her milk flow.

The fly derives its name from its peculiar habit of resting at the base of the horns. While there it appears to do no particular harm, but confines its attacks to the back and loins of the animal, and such other parts as cannot be readily reached by the tail or horns. This fly is about one-half the size of the house fly, but unlike the house fly does not breed in ordinary waste matter, but in the fresh droppings of the animals. The eggs are laid by the fly as soon as the manure is dropped, and if left undisturbed they will hatch in about forty-eight hours, when they immediately

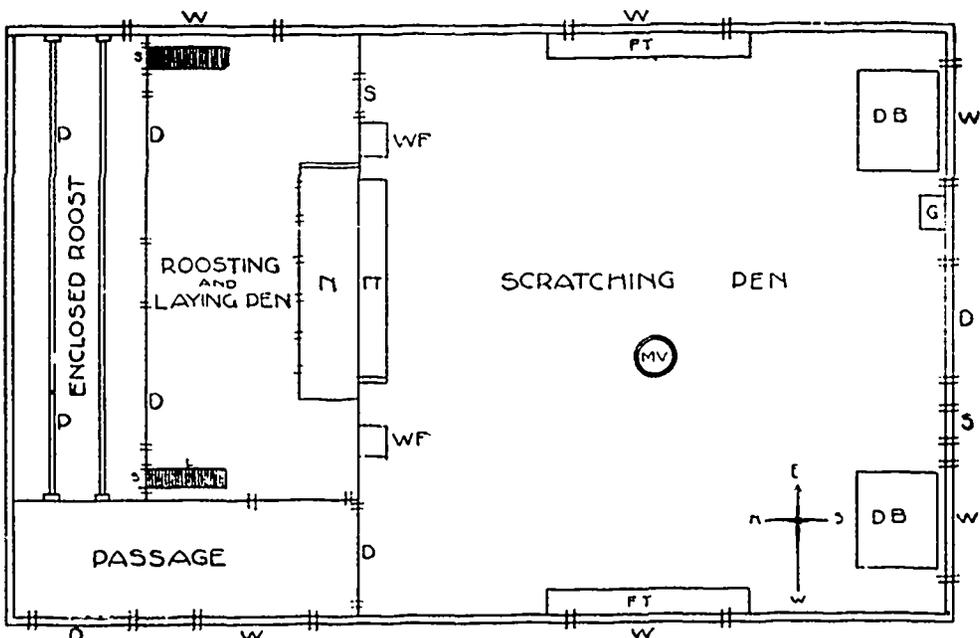
ravages must be of a preventive nature. They may be kept from breeding by scattering the voidings of the animals every two days or by sprinkling land plaster, lime, or dry earth upon them. They may be kept from the animals almost entirely by applying some oily preparation, or Pyrethrum powder. The liquid preparations are cheaper, and some of them are more effective. They may be applied to the sides and limbs of the animal to better advantage than the powder, another advantage in their favor. A gentleman in Knox county reports that he uses a mixture made of one part fish oil, one part tar oil, one part kerosene oil, with a very little carbolic acid. This, he says, is quite cheap and seems to be very effective.

It will be found advisable to apply this mixture with some implement that will put it on in a fine spray, as it will be quite as effective in this way; there will be a saving of material and the animals will not be unnecessarily covered with the oil.—Main State Board Bulletin for June.

## The Hessian Fly

The Ohio Agricultural Experiment Station has recently issued a bulletin giving the life history of the Hessian fly, particularly as to its working in the State of Ohio. The information gathered is very valuable, and outlines the habits of this insect and how its ravages may, to a large extent, be overcome. The following is the summary of the bulletin as prepared by Prof. Webster, State Entomologist, and will be found of value to Canadian farmers:

The Hessian fly is a small, dusky-colored, two-winged insect, about one-eighth of an inch long. It appears during spring and fall, the former period extending, in Ohio, throughout the month of May and probably the first half of June, and the latter, or fall brood, extending through the last days of August and much of September in the northern part of the State, and the last of September and the first week or ten days in October, in the extreme southern portion of



C—Ground Plan of Poultry House for 50 Fowls; Scale 1/4-inch to the foot; D, Doors; W, Windows, S, Slides; N, Nests; FT, Feed Troughs; P, Perches; L, Ladders; MV, Milk Vessels; WF, Water Fountains; G, Grit; DB, Dust-Bath.—O.A.C. Report, 1896.

enter the ground and go through the second transformation. After remaining here about two weeks they emerge from the

the State. The eggs are deposited in both spring and fall on the upper side of the leaves, and the young, as soon as

they hatch, make their way down the plant behind the sheath of the leaves. In the spring, they go down to the first or second joint above the roots, but in the fall, when the plants are much smaller, they usually go down to a point just above the roots. The effect on the wheat, in the fall, is to prevent the plant from sending up shoots that would bear heads the following year, and to reduce the growth to a mere bunch of rank growing leaves, that kill out during the winter. In the spring, the maggots, or young, go down to the first or second joint above the roots, and there become imbedded in the straw, thus weakening it, and when the grain comes to head the straw thus weakened will topple over and break down, thus giving rise to what is known as "straw fallen" grain. The insect passes the winter, largely, in the flaxseed stage about the plants, just above the roots. It passes the summer, largely at least, in the stubbles that are left in the fields at harvest. Thus the adults breed in spring and fall at dates varying with the latitude. They live but a few days and die almost immediately after depositing their eggs. The preventive measures are late sowing, rotation of crops and burning of stubble, where this can be done. The remedies consist in the use of quick-acting fertilizers, in the fall, or pasturing early sown fields, preferably with sheep. There is no known remedy against the spring brood of flies.

## Canadian Horses for England

Another fine shipment of heavydraught horses has been got together by Mr. John Sheridan, of this city, for the British market. The shipment consists of upwards of forty animals of fine quality and type and purchased chiefly from the farmers in Peel, York and Ontario counties. The horses range in weight from 1,500 to 1,800 lbs. each and are in their prime, their ages ranging from five to seven years, the bulk of them being six and seven years old. This is considered to be the finest shipment of horses that has been sent to England from this country for many months and should serve to increase trade with Britain in Canadian horses. At any rate they will show what can be done in this country in the way of producing prime heavydraught horses for export.

## The Practice of Dipping Sheep

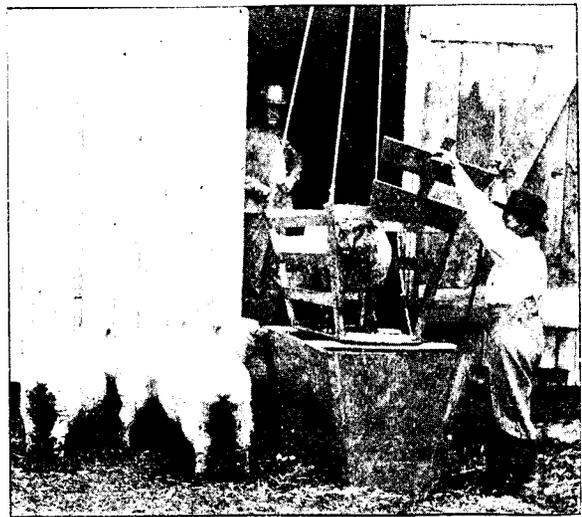
John A. Craig, Iowa Experiment Station

The main justification for the dipping of sheep lies in the fact that it is the only way we have of guarding against losses from the presence of the many parasites which attack sheep. Not only is dipping, when effectively carried out, necessary in removing these, but a good dip should also have a beneficial influence on the wool and contribute to the general health of the sheep. It would be only fair if our markets would discriminate more in favor of the wool that comes from dipped sheep; for there must be a marked difference in the fleeces that are dipped and those that are not should be treated in regard to their shrinkage. When sheep are dipped in the spring after shearing and again in the late fall, the fleeces should show the benefit of this both in growth and cleanliness, and it seems but reasonable the wool dealers should recognize this.

Shortly after shearing is an excellent time to dip the ewes, for then the skin may be cleaned and the sheep completely rid of ticks. The advantage of again dipping in the autumn is that it cleanses the wool after it has become more or less dirty with the dust, and this treatment of the fleece usually keeps it in good condition through the winter. If for any reason it is only possible to select one time in the year, in the northern sections, to do the dipping, it will likely be the most satisfactory to do it before the cold weather comes on in the fall, and just previous to the time when the sheep require shelter. When the fleece is about

half grown, it is then that the ticks cause most annoyance, and later than this the scab usually begins to make its presence known by the havoc it plays with the sheep and its fleece. It is a very good plan, when a small flock of sheep is kept and the facilities for dipping are not extensive, to have a small dipping vat, in which the young lambs may be dipped two or three weeks after the ewes have been shorn. The shearing of the ewes causes the ticks to seek other quarters, and these they find to be most comfortable on the lambs. Small flocks may be kept perfectly clean in this way, but it is certainly more advisable wherever possible to have a large dipping vat for the treatment of the older sheep.

No sheep farm is complete in its equipment unless it has a draining vat, at least two feet long, for dipping the mature sheep. On our northern farm the vat is twenty-four feet long, twenty inches wide on top and six inches wide at the bottom. It is four feet six inches deep and made of two-inch plank, matched, leaded and painted. The tank is sunk about two feet below the ground level. On the whole, I think that the steel tanks which are made would be much more satisfactory, as they are more durable. At the entrance to this tank we have division yards. The one nearest the tank would be better if floored, as it helps to keep the feet of the sheep cleaner. At the other end of the tank there are two draining pens, elevated above the



Dipping Sheep.

exit of the tank, so that the fluid dripping from the sheep runs back into the tank. At the entrance of the draining pens there is a gate that swings both ways, so that when one of the drainage pens is filled with the sheep they may be closed in by this gate and those which follow are compelled to pass into the other pen. The upper end of the drainage pens is one foot higher than the lower end, where the sheep enter, and from the outer edge of the pens to the centre, or dividing line between them, there is a fall of four inches. At this dividing line there is a drain two inches wide, and one inch deep, which carries the drippings back into the vat. These draining pens each hold the same number of sheep as one of the division yards. These are the main features of this dipping arrangement, which have proven very satisfactory to us.

In the operation of dipping I would emphasize the importance of keeping the sheep long enough in the fluid that it may thoroughly soak the fleece and reach the skin. It may be necessary, if the vat is not long enough, to stop them in their progress through it and hold them in the fluid for a short time. Another point that I would emphasize is that the fluid should be stirred from time to time, and, if possible, kept hot. Warm water will likely be more cleansing than if the fluid is used cold.

For the comfort of the sheep it is desirable to choose a day that is not too warm, and care should be observed when driving and penning them that they do not become heated. In passing them through the dip haste should be

avoided. They should be allowed to remain as long as possible; this is better for the sheep; it saves dip and lessens the possibility of any danger of poisoning afterwards. If the sheep are hurried out too rapidly and the sun is very hot, it will dry out the fleeces too quickly, add to its harshness and sun-burn the sheep, so that they will lose their wool. If it becomes necessary in the purchase of lambs for feeding or sheep for breeding stock, to dip them in cold weather, it may be easily accomplished without any danger to them if they are sheltered from the winds and extreme cold after the dipping. I have dipped feeding lambs when the temperature was considerably be

trate so deeply, and it does not dry out to such a depth. A study of the roots of the corn plant shows that many of them would naturally grow within three or four inches of the surface, but when the upper layer of soil is dry they cannot obtain any nourishment from this portion of the ground.

Another injury to the corn crop from deep cultivation is the tearing out of the corn roots by the cultivator shovels. By pruning these roots the ability of the plant to secure nourishment is greatly hindered, and the crop injured thereby.

It is very important that the cultivations should be sufficiently frequent to prevent a hard crust from remaining on the ground for any length of time.

## Judging Horses at Fairs

At the New York State Breeders' Meeting a very practical paper was read on this subject by Mr. Mortimer, from which we make the following extracts:

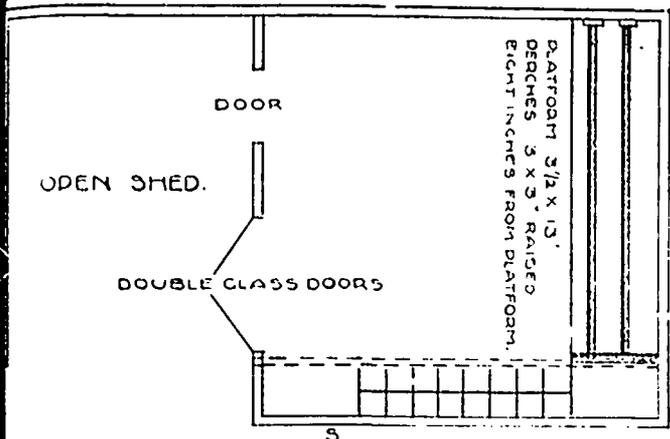
"In all the galaxy of talent secured to pass judgment in the show-ring on the different breeds, it is hardest to find well qualified men to act as judges of the horse classes. Much unfavorable comment has been heaped upon the leading horse shows of the country because year after year they have engaged the very same men to place the honors, but, when you investigate the matter, you will learn that the management have found it difficult to secure proper men to take their places. Of all the 'roasting' criticism, anathemas, and disgust, the whole category is heaped upon the average judge in the horse ring, and nowhere else is it so justifiably expressed or deservedly accredited.

"Judges should not be influenced by what an animal has won in former shows. This is a common fault, and marks a grave weakness. The champion of another day may have been overdone, broken down, failing, or perhaps he is meeting for the first time new rivals, and better than have ever crossed steel with him. It is a universal comment of the man holding an animal in the ring to say to the judges: 'This is the great champion'; 'This was first forty times in England and ten times first as a yearling.' The proper judge will promptly say: 'Well, this may be the time he will not even get a second; we will see when we get through examining the others.' A judge who lets former judges award the prizes in the ring is not fit to be in the ring. He must feel that he is competent to judge for himself, and will put the ribbons where, in his own mind, they rightfully belong. Judges should not take catalogues into the rings with them—not that the high-minded, unprejudiced, honest judge could be influenced by the names of the owners, but that he 'avoid even the appearance of evil.'

"All animals should be considered as they appear in the ring before the judge. No allowance ought to be made for age or condition. If a man show in the class with a young animal against a more matured one it is his fault. He must not ask the judge to try to think how his animal will look when it is as old as his competitor's. Nor can a judge be asked to take into consideration the oft-stated fact that the animal 'has been just taken out of pasture,' or that he has 'not been pampered for show purposes.' Fie upon such nonsense! If the animal is not old enough, not fat enough, not in a proper condition to show, why then show him? Or if he is shown merely to fill up the class, do not expect a judge to give a prize on what he might have been or what he may some day be.

"Let the judge go into the ring well posted in what he is going to do, be perfectly sober, cool, and collected, without any coercion, sentimentality, or prejudices against a variety or an exhibitor, to stand by his own convictions, and be honest enough if he is not qualified to do justice in the ring to decline to serve in the capacity. The task of the judge is not a pleasant one. It is difficult to satisfy or even conciliate the defeated exhibitor, the ringside spectators, the grand stand, and the press reporters. It is a labor of the head and not of the heart—a thankless work at best. 'Judge not, that ye be not judged.'

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Ground Plan of Poultry House, A; Scale 1/4-inch to the Foot.—O. A. C. Report, 1896.

low zero without any of them suffering, by putting them in dry, sheltered quarters as soon as possible after dipping and keeping them there until the fleeces had at least dried out close to the skin. Considering the importance of this practice on the thrift of our flocks and the danger that there is from such diseases as scab in the ordinary course of trade in feeding and breeding stock, it would seem that a compulsory dipping should be in vogue in every state of the Union. It certainly should be the practice of every feeder or breeder, for his own interest, to thoroughly dip all sheep that come under his charge when they show any uncleanness.

## Cultivation of Corn for Conservation of Moisture

A test of the relative values of deep and shallow cultivation of corn on the Nebraska Experiment Station Farm demonstrates beyond doubt the superiority of the latter method. Four acres of land were divided into tracts of one acre each, and each tract was cultivated by a different cultivator, the same one being used on each throughout the summer. The same number of cultivations were given in each case.

The cultivators used were the Moline Corn Plow (Brigadier) to represent the deep style of cultivation, and the Moline Spring Tooth Cultivator and the Superior Cultivator to represent the shallow cultivators. In the fall the corn was picked from each acre and weighed. The yield was as follows:

Method of cultivation.	Yield per acre.
Deep cultivation . . . . .	59 bushels.
Shallow " . . . . .	68 "
" " . . . . .	69 "
" " . . . . .	69 "

The land receiving shallow cultivation was stirred to a depth of three inches, that receiving deep cultivation to a depth of six inches.

Shallow cultivation for corn possesses two advantages over the other method. In the first place, by stirring the soil to a depth of only three inches, the air does not pene

## CORRESPONDENCE

Mr. MacPherson's Proposal  
Commended

To the Editor of FARMING:

On leaving Toronto, July 6th, I left word for my FARMING to be forwarded to me at this address until Sept. 1st, but through some mistake the paper of July 11th has not been sent to me, although the last number, July 18th, has come to me all right. I may say that I enjoy reading your paper so much that I do not wish to miss one number. I am not a farmer but take a keen interest in agricultural matters, and I always find something in FARMING that suits my taste.

The paper is taken by the gentleman in whose house I am now stopping, Mr. Thomas Tremeer, the owner of large and valuable fruit farms in this county. In this way I have had the reading of the article from the pen of Mr. D. M. MacPherson entitled "The Basic Principles of Successful Farming." I am always especially interested in all Mr. MacPherson has hitherto written, and am always pleased to read any article he writes. The competition which he proposes between Prof. Robertson, Dr. Saunders, and himself should, if entered upon, be of great benefit to the agricultural interests of Canada. I sincerely hope it will be agreed upon.

Will you kindly send me *two* numbers of FARMING for July 11th, as I wish to hand one to a friend?

ALEX. COWAN.

"The Crest," Randolph, Ont., July 20th, 1899.

## More About the Farm Fence

To the Editor of FARMING:

I have just read an editorial in FARMING in which you ask for views on wire fencing, and as I have had some experience in both rail and wire fencing I thought I would give you my views as to both. In the first place rail fences have been and are mostly used in this vicinity or locality, but as timber is getting very scarce farmers are turning their attention to wire. Up to recently, however, the wire fences of different kinds have not given satisfaction.

Some very good wire fences are now being put up. One of the best, in fact I consider it the best, is the Frost wedge lock spiral steel wire fence. Owing to its extreme strength, and also its being thoroughly stayed and locked, each stay acts as a small post, which will naturally keep it from sagging. Besides, each wire, being stretched separately, will certainly make it much stiffer and less liable to sag than any woven wire fence could possibly be. Then, again, where other wire fences are stretched in the same way as the Frost spiral steel wire fence is, only in place of the Frost stay and lock only use a small wire woven in and around the lateral wires they cannot be compared to the Frost stay and wedge lock spring or spiral wire fence.

I think wire fencing an improvement along the roads where it is on both sides. I cannot see how it can form drifts any more than in the centre of the field. As to farmers herding their stock, I think if that were done here it would only be a very short time before the fields along the roads would look no better than the roads do now.

Glenwilliams, Ont., July 24, 1899.

JOHN HUNT.

## Our Fence Laws

To the Editor of FARMING:

I have read and studied carefully the correspondence published in FARMING in respect to fencing. I was much pleased with your article on the subject in the issue of the 18th inst., in which you suggest further discussion on this subject. It seems to me that most of the correspondents have not taken into consideration the three most important points of the whole matter.

1st. What is the law as to fencing at present? I understand it to be that a man must take care of his own cattle,

and can be sued for any damage done by them to his neighbor's crops, notwithstanding all the by laws of both township and county councils.

2nd. Where is the justice or fair play in a law or custom that compels a man who has no cattle to fence his whole farm to keep his neighbor's cattle off of it?

3rd. Would it not be much less expensive for every farmer to put up and keep such fences as he requires for his own cattle than to fence his whole farm to keep out his neighbor's cattle?

This would do away with all road fences except where required for a pasture fence, and would remove one of the greatest causes of bad roads in winter time.

If any of your readers think that we could not get along without road fences let them take a trip over to Rochester, N. Y., and take a day's drive along the roads there and ask the farmers there which is the best method.

In conclusion, I would say that when the farmers can get along without road fences in the State of New York I can see no reason why we cannot do so in this province.

JAMES S. MILLAR.

Parry Harbor, Ont., July 26, 1899.

## Oats as a Food for Horses

To the Editor of FARMING:

I suppose everyone admits the superiority of oats over any other grain as a food for horses. No grain will give nervous energy to the horse like oats. It is only about ten years ago that I understood why oats stimulate the nervous organism in the equine species. I was quite familiar with the living example of the effects of the oats on the *genus homo*; that my "brother Scots" were possessed of greater energy, grit and shrewdness than any other nation; I was prepared to give credit to the oat, but when I became familiarized with the many different nourishing principles it contains I was not surprised that horses and men fed on oats as the principal diet are hardier, stronger and possess greater nervous energy. The following from a French paper appeared in 1891, of which I give a translation:

"What is the value of oats as a nourishment given to animals? Oats contain twice as much mineral principles to form and grow the bones of the animal as Indian corn. It is 12 to 14 per cent. richer in protein—that is to say, in matter that makes muscle and other tissues. Besides that, oats contain a principle that has been ignored for a long time—a stimulant similar to theine, contained in tea, and caffeine, contained in coffee. The German chemist who discussed this principle calls it *avenin*, from the Latin word *avena*—oats. Oats are almost indispensable for the horse, and with regard to all other animals one ought to feed this grain in preference to all others."

The fact as described by the German chemist that oats contain a principle similar to theine, caffeine, strychnine and quinine makes it easily understood why oats stimulate the nervous energies of the horse as no other grain will. We are all familiar with the stimulating effects of a cup of tea or coffee, and of the stimulating medical properties of such drugs as nux vomica (which is a compound of strychnine), quinine and other alkaloids of like class. The oat, apart from the powerful alkaloid it possesses, contains mineral and albuminoid properties in a greater degree than most other grain. At the time it was thought this principle was contained in the germ of the oat, but I have seen lately that a French scientist failing to find it in the germ found the principle in the inner coating of the oat. The same scientist contradicts the statement that this principle is an alkaloid. Before accrediting the analytical contradiction of this savant I must have more chemical data. That the principle is an alkaloid similar to strychnine, etc., my own practical experiments bear me out.

Knowing the different principles contained in the oats the question arises, can we not feed other grains to make up the amount of protein and mineral matters contained in the oats? This would seem easy enough, but here we lack the stimulating principle *avenin*, which is a part only of the

oats. But can we not substitute alkaloids in every way similar to the avenin? Strychnine has precisely the same stimulating effects as avenin. Can we not, therefore, substitute some compound of strychnine, such as nux vomica, for the avenin in the oat? It would now appear that we can get along quite well without oats. Corn and linseed and pea-meal would supply all the muscle-making properties of the oat, and nux vomica or some similar drug would supply the avenin. I do not write this from mere theory. I have experimented to some extent along this line with very great success, and I feel confident in saying that we can make a complete substitute for oats by having access to powerful and highly poisonous drugs. I have fed a driving horse on barley, corn and wheat bran (no oats), adding a small quantity of powdered nux vomica to the feed, and found the animal showed as much spirit and nervous energy as if fed wholly on oats. A horse seldom shows much spirit when fed on corn and wheat bran and this is why oats are so much sought after by owners of driving horses and stallions. The stallion fed on corn and barley and bran and linseed would be dull for service, and hence oats are always more the chief grain food. By feeding a small quantity of nux vomica, say a half-drachm of the powdered nux a day given in two feeds, not a pound of oats need be fed, and the stallion and driver will show as much spirit as if fed entirely on oats. On several occasions when I had no oats for my drivers I fed small quantities of strychnine and nux, and I found that the horses showed even more spirit than when fed oats largely. For boars doing heavy service oats are indispensable; but when oats were scarce with me I have fed small quantities of fluid extract nux vomica and tincture of cantharides to supply the vital principle contained in the oat. I am aware that stallioners feed stimulating drugs during heavy service, and feed so large a quantity that overstimulates the animal, causing deterioration of the offspring. Ordinary people should hesitate before using these deadly drugs. In the hands of intelligent persons and fed in infinitesimal doses—doses sufficient only to equal the vital principle in the oats usually fed—these drugs—substitutes—are invaluable, and, in parts of the country where oats are little grown, are indispensable.

J. A. MACDONALD.

Hermanville, P.E.I., July 26th, 1899.

## Separating Cream by Gravitation and by Centrifugal Force

To the Editor of FARMING:

The specific gravity of whole milk is about 1.028 to 1.033, and skim-milk 1.033 to 1.040. The variation is due to the difference in the amount of total solids in the milk. Cream which contains the fat globules in the milk is lighter than the whole milk or skim-milk. Pure butter-fat is lighter than water, and cream containing about 27 per cent. butter-fat is about the same weight as water.

The specific gravity of butter-fat is about .930, which means that a vessel that will hold 1,000 lbs. of distilled water at 60° Fahr. will hold only 930 lbs. of butter-fat, 1,030 lbs. of whole milk and 1,036 lbs. of skim-milk.

The fat globules in the milk are not always of the same size in the same kind of milk, nor are they the same in the milk from the different herds, breeds or individuals.

The fat globules in milk when set still naturally rise to the top, but the tiny globules are so small and easily retarded in their upward tendency that they do not reach the top, and a loss of butter-fat will be the result. The Babcock test reveals this when no loss of cream is visible to the eye.

There are six causes why there may be a loss of butter-fat in the skim-milk when raised by gravitation:

1st. The breed has an influence. The Ayrshire cream will not rise as perfectly as the Jersey cream.

2nd. The individual cow has an influence. The fat globules in the milk of some cows are very small and do not rise as perfectly as they do on the milk of others.

See O.A. College Report, 1891.

3rd. The period of lactation. The cream will not rise as perfectly on the milk when the cow has been milking a long time as it will when the cow is fresh in milk.

4th. Temperature has its influence. Cream will not rise as perfectly when warm as it will when the milk is cold. When milk is cooled to 50° F. in water, the loss of butter fat is about .8% to 1%, but when the same milk is cooled below 45° F. the loss may be reduced to .2 of one per cent. I have observed this repeatedly in my experiments, and this is why the loss is so great in the farm dairy. Temperature is not considered, and no ice is stored for summer use.

5th. Crops and small pails are used by some. The result is they are losing a great amount of cream.

6th. Methods of skimming and carelessness. Here is a point in the creaming of milk where some make a great mistake. The method some adopt to take the cream off the milk after it has risen is very wasteful.

These are some of the causes why the loss of butter-fat is so great in farm dairies. The average being equal to one-quarter of the total butter-fat in the whole milk, or the cream in the milk from every fourth cow is lost in the skim-milk. No wonder so many say that cows do not pay when the raising or separating of the fat globules in the milk is trusted to the old gravity method, which entails a lot of heavy, disagreeable kind of work as well.

As a result of scientific investigation it was learned that the fat globules in the milk are lighter than the serum part of the milk, and that by means of centrifugal force the difference in the specific gravity of the fat globules and skim-milk is very much increased and that by means of the centrifugal cream separator a perfect separation of the butter-fat can be effected. By means of the centrifugal force applied to the milk in the bowl of the cream separator the skim-milk which is the heaviest part of the milk, flies with greater force from the centre of the bowl than does the cream.

The whole milk is delivered in the bottom of the bowl and by the time the bowl is filled separation has been brought about so that the cream (being the lightest) is left at the centre and the pure skim-milk is at the outside or the farthest point from the centre in the bowl. Skimming devices are now put into the centre of the bowls and are so perfected as to effect almost a complete separation of the butter-fat.

Farmers are beginning to learn the value of the cream separator for separating the cream while the milk is warm and fresh from the cows and the relish with which the calves will drink the warm skim-milk, also the labor they save and the money they make.

Farmers should be careful when making a choice of separators and get one that is adapted for family use; one that can be run by the children ten to twelve years old or by the women, as the men cannot without much inconvenience be at the house at milking time at all seasons. Also, have nothing to do with a separator that will not skim more than 300 lbs. of milk per hour, as there is too much time wasted with the small separators. Only two cream separators have been introduced into Canada that are adapted for the children to run. Both will skim 330 lbs. and over per hour and do the work right.

There are four points that the farmer should consider when wanting to buy a cream separator: (1) Its skimming capacity. (2) Easy running. (3) Time required to put it together, take it apart, and wash it. (4) Its price.

In some localities farmers are now buying cream separators as they buy other farm machinery seeing that they are the most profitable investment they can make. A binder is used on every farm for only five to ten days in a year, but the cream separator is for use twice a day, every day in the year. Some object to the price of the separator, but I do not look for a reduction for some time to come, as the demand is greater than the manufacturers can supply. There have been five separators sold this year to one last year, and the farmers never realized as they do now the profit there is to be derived from the daily use of this machine. The old gravity method has served its day and must give way to the introduction of the cream separator and separation of the milk by centrifugal force.

Guelph, Ont., July 24th, 1899.

T. C. ROGERS.

# The Farm Home

## Chemistry and Science of Cooking.

By Mrs. S. T. Rorer.

Cane sugar may be taken alone without serious injury. Mix it with an acid fruit and subject it to heat, and examine the mixture, and you will not find cane sugar as a result, but in its place two new sugars created from the action of the heat and acid, which are much more liable to fermentation than cane sugar alone. The fruit being attractive, we are enticed to eat more of it than is good for us; fermentation is the result, and this not only destroys the power of the acting digestive secretions upon the fruit and sugar, but frequently contaminates all other foods within range, thus converting the stomach into a fermenting vat rather than a place where food should be properly digested. I am fully of the opinion that all food products now used by man are comparatively wholesome, if not destroyed in combination with other foods or in the cooking, for instance, a person may digest easily meat and potatoes; add a cup of coffee sweetened with sugar and diluted with milk, and a dish of stewed fruit, and fermentation will be immediate. Sour eructations, and probably flatulency, will follow. Any of these foods might have been taken alone, or in proper combinations, without injurious effects.

Nature teaches what to eat, but her rules have so long been violated by artificial living that even those with clear, bright-seeing eyes and of thoughtful mind cannot recognize what nature is, so artificial are we. Foods are made tempting, highly seasoned and spiced, to please the palate, producing gluttons, or a set of people who live to eat rather than eating scientifically to live. These gluttons, strange to say, eat, but really never live, as to live is to be healthy and happy. Our fancies are too often taken into account. He eats what he likes, studies what he chooses, and lives as he can. For instance, he would like to be a stenographer, whether or not he has adaptation for that profession; and many a good blacksmith has been spoiled by being a poor stenographer. Others feel that teaching is a nice, easy, comfortable way of earning one's living; they have no special adaptation in that direction, but they take to teaching. Independent thought in all such cases is lost; the humdrum, everyday book-learning does not produce the highest type of educators.

In my own school days, for instance (if you pardon a personal allusion), people at Aurora were interested in astronomy and algebra. I, joining with my friends, went into both of these studies with more than average enthusiasm. No one suggested chemistry or hygiene; and, upon leaving school, my algebra was of little use in my kitchen. My astronomy I found most entertaining and elevating; but I was sadly at a

loss to know how to boil a potato, to broil a beefsteak, or to make a respectable loaf of bread. Of course, sickness and sorrow always comes to homes of this sort, and I did not escape the penalty of punishment.

'Tis true that a woman's life is made up of many small and irritating duties; not of necessity, but from lack of training, we have made them so. She must be seamstress, laundress, child's nurse, cook and chambermaid. All these professions, separate and individual as they are, cannot be done well by one person. If she loves to sew, she neglects the cooking; if she likes to cook, she neglects the sewing; and I am fully of the mind that laundry work should be a separate profession from either. There was a time when a woman, too old and decrepit to wash, iron, or scrub, took up the profession of nursing. Results correspond to her ability. Who would in these days go back to the Sarah Gamp in preference to the trained, skilled, intelligent hand of the modern nurse? And the time cannot be far distant when cooking will assume the same dignity and standing as nursing. Women of higher mental calibre will find it entertaining, instructive, and lucrative, and naturally drifts into its walks. Laundry work will be done at the village laundry under a skilled and trained laundress; clothing will come back like new, the color not faded but restored, materials not worn out, and flannels not three sizes smaller, I find all housekeepers interested in these subjects. Our shortcomings do not exist from lack of interest. It was announced, during my stay in Hamilton, that I would talk at Stoney Creek on scientific laundering, on Saturday morning at ten o'clock; a busy morn-

ing for a housewife to leave her home; but, on arriving at the little room in which the institute holds its meetings, I found two hundred and fifty energetic, thrifty looking women awaiting me. They were all housekeepers, many of them having families; and not a single one knew anything about the chemistry of the soap that they used three, four, and five times a day. It was soap, and that was the end of it. Washing powders were washing powders; they had no more idea of its composition than they had of the composition of sugar. They had never examined the fibre of muslin or wool under a microscope; consequently, knew nothing about its shrinking capacity or its construction. Now, why should these women do good laundry work?

In looking back over the foundation education in our woman, we feel that many years of our lives have been lost, especially if our allotment is only three score years and ten. We are now, many of us, beginning to study at forty, and our minds are not capable of absorbing and holding new facts as they were perhaps twenty years ago. The consequence is that while now we are trying to do our best to build both body and soul, we find ourselves, at fifty, not in the prime of life, as we should be, but just a little on the other side. What matters it whether our grandmothers put potatoes on to boil in cold or hot water, if it was not the proper thing to do? Let us examine, experiment, watch carefully, and find out for ourselves whether results are better if potatoes are put on in cold or hot water, with or without salt. Our palates are not to answer these questions, but our common sense judgment and results.

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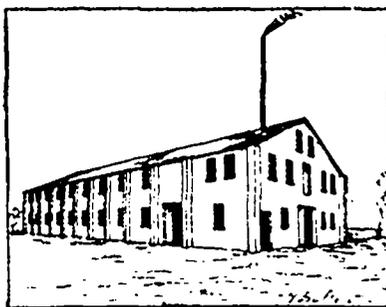
**How to Wash Dishes.**

The water cannot be too hot for your glasses, and no matter how frail they are they will not break in the coldest weather providing you manage rightly. Heat expands, cold contracts; and the unequal expansion of the inner and outer surfaces of your glass will cause a fracture. Thus, if you pour a hot liquid into a cold glass the inner surface expands more rapidly than the outer; while if you set a cold glass in hot water the reverse takes place—breaking the vessel in either case. Therefore, dip your glasses into the water sidewise, and roll them around as you do so with a quick twist of the hand so that the expansion is equal. Merely observe this simple law of physics, and you may wash your glasses with safety in the hottest water. Glasses cannot be clean unless washed in clean, hot water; moreover, they should be wiped as soon as they are taken out of the water, using a clean, dry towel. If allowed to stand and drain, the water will dry on them in cloudy streaks. Glasses which have been used only for water need no soap; it is only necessary to rinse them in hot water. The superstition that glass washed in hot water becomes brittle probably originated in the fact that if it is allowed to stand in a draft, directly after being taken out of the water, the sudden contraction of its outer surface breaks the glass. In the same manner a pitcher, which has held iced lemonade on a hot day, has been known to crack from top to bottom immediately after being suddenly emptied.

After washing the glasses, next take the cups and saucers, and then the silver, before any of the dishes with grease on them are put into the dishpan. Wipe each piece separately as you take it out of the water, taking care to have thoroughly dry before putting it aside. If many dishes are to be washed, change the water again and again. Dishes should never be washed in water which has become greasy. Be careful not to put too many pieces into the water at once, lest they strike against each other and be chipped. Fastidious housekeepers are agreed that it is better that a dish should be broken outright than chipped; since the first misfortune is done once and for all, while the latter is a constantly recurring source of annoyance as long as the defaced article holds together, which it is sure to do indefinitely. Hand-painted china and that with gilt decoration should never be allowed to stand in water, especially if the water is hot, since such treatment is certain sooner or later to injure the decoration. Many a housewife mourns over the nearly effaced figures on some once beautiful dish which has been ruined in this manner.—*American Queen.*

Mrs. Callahan—"I want to get a pair of shoes for the little bye."  
 Shopman—"French kid, ma'am?"  
 Mrs. Callahan (indignantly)—"Indeed not; he's me own son, born and bred in Ameriky."

**Built with THOROLD CEMENT**



EVAPORATING FACTORY OF J. W. VANDYKE, GRIMSBY, ONT.

Size of walls 45 x 160 x 24 feet. Built with Thorold Cement and gravel, from the bottom of foundation to the roof. All this concrete work was done in 114 days, under the direction of our traveller, Norval B. Hagar.

Mr. Vandyke states that he effected a saving of from \$1,000 to \$1,200 by building concrete walls instead of stone or brick.

GRIMSBY, ONT., Dec. 12, 1898.  
 ESTATE OF JOHN BATTLE,

GENTLEMEN.—It gives me great pleasure to testify to the good qualities of your Thorold Cement. During the past season I built an Evaporator under the supervision of your traveller, Norval B. Hagar, the size of which is 45 x 160 x 24 feet to plate from bottom of foundation, and gables 12 feet high, making top of in all 36 feet high to gables. The first storey is 13 feet high and 12 inches thick, the second 8 feet high and 10 inches thick, gables 8 inches thick. I have a concrete floor in first storey, and the second storey is held up by trusses. There is not a post in the first storey to hold the second.

I also built a barn, under the supervision of your Robert G. Hagar, size 36 x 70 x 14 feet from bottom of foundation to plate, and I consider I have a 1 building both in strength and workmanship, for the walls are straight and plumb as any building could be, and they are far cheaper than either stone or brick.

Yours, etc., J. W. VANDYKE.

**ESTATE OF JOHN BATTLE  
 THOROLD, ONT.**

Mention this paper.

**THE FINCH WOOD PRESERVATIVE AND PAINT**  
 Unequaled for Farm Building. Send for Circulars.  
**FINCH WOOD PRESERVATIVE and PAINT CO.**  
 TORONTO, ONT.

**A Trifle**

**BUT—**

Salt seems a trifle but it will either make or mar Butter or Cheese. Use Windsor Salt, which adds to the sweetness, and to the price.

Perfectly pure, dissolves uniformly. All progressive Grocers sell

**WINDSOR SALT**

The Windsor Salt Co., Limited  
 Windsor, Ont.

**THE CO-OPERATIVE FARMER**

**SUSSEX N. B.,**

reaches the farmers of the Maritime Provinces. Get a sample copy—you'll be sure to like it. Ad. rates on application. Address:

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 Sussex, N. B.

**The Wonder of the Age.**

**ALL EYES ARE ON THIS INVENTION**

Patented 1893, '95, and '96.



**HARVESTING PEAS**

The Genuine Tolton Pea Harvester with New Patent Buncher at work

Harvesting in the most complete manner from eight to ten acres per day. Harvesters to suit all kinds of mowers.

Every Machine Warranted. Our Motto: "Not How Cheap but How Good"

No drilling holes in Mower Bar or Inside Shoe. A wrench is all that is required to attach it to any mower. Give your orders to any of our local agents, or send them direct to

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

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A PAPER FOR FARMERS AND STOCKMEN

**Farming** is a paper for farmers and stockmen, published weekly, with illustrations. The subscription price is one dollar a year, payable in advance. **Postage** is prepaid by the publishers for all subscriptions in Canada and the United States. For all other countries in the Postal Union add fifty cents for postage.

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**Receipts** are only sent upon request. The date opposite the name on the address label indicates the time up to which the subscription is paid, and the change of date is sufficient acknowledgment of payment. When this change is not made promptly notify us.

**Discontinuances.**—Following the general desire of our readers, no subscriber's copy of **FARMING** is discontinued until notice to that effect is given. All arrears must be paid.

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**Advertising Rates** on application. **Letters** should be addressed to:  
**FARMING,**  
CONFEDERATION LIFE BUILDING,  
TORONTO.

## The Brandon Fair.

The Western Manitoba Fair, which took place at Brandon, on July 18th to 21st, was a success. Previous to the opening the cattle and horse stables had been enlarged; but notwithstanding this, the live stock accommodation was too small for the number of exhibits. Especially was this so in the cattle classes where, in spite of increased accommodation, a number of head had to be housed in sheds along the fence. All pure breeds were well represented, Shorthorns making a very fine display. The Holstein class was also well filled with a number of prize-winners. The horse exhibit was also a good one, and additional accommodation will have to be made next year. There was a good exhibit of sheep and swine, all the classes being well filled and competition keen. A rather fine display of poultry was made, the Brandon section being especially noted for its fine birds.

The display in the Agricultural Hall of Manitoba No. 1 had attracted some attention, as well as that of dairy products in the Dairy Building. A rather fine display of flowers was made that would give Easterners a surprise if they could have seen it. The display of agricultural implements was also a feature of the show. All the leading manufacturers were represented, the whole exhibit being larger than last year.

## The 1899 Fall Fairs.

Industrial	Toronto, Aug. 26 to Sept. 9.
Central Canada	(Ottawa), Sept. 11-23.
Western Fair	London, Sept. 7-16.
Stanstead Live Stock	Stanstead, Que., Aug. 21-24.
Eastern	Sherbrooke, Que., Sept. 4-9.
Kingston	Kingston, Ont., Sept. 11-14.
New Brunswick Provincial	St. John, N.B., Sept. 11-23.
Bay of Quinte	Belleville, Ont., Sept. 13-14.
Elgin Agricultural Society	Woodville, Ont., Sept. 14-15.
Southrn.	Brantford, Ont., Sept. 16-21.
Northern	Waukesha, Ont., Sept. 19-20.
Central.	Guelph, Ont., Sept. 19-20.
Great Northern	Collingwood, Ont., Sept. 19-20.
North Oxford	Woodstock, Ont., Sept. 21-23.
Nova Scotia Provincial	Halifax, N.S., Sept. 23-30.
Central	Peterborough, Ont., Sept. 26-28.
Ontario and Durham	Whitby, Ont., Sept. 27-28.
South Waterloo	Galt, Ont., Sept. 28-29.
North Perth	Stratford, Ont., Oct. 3-4.
East York	Markham, Ont., Oct. 4-6.
South Norwich	Ottawa, Ont., Oct. 6-7.
Norfolk Union	Simcoe, Ont., Oct. 17-19.

# LITTLE'S PATENT FLUID SHEEP DIP AND CATTLE WASH

## Non-Poisonous Fluid Dip.

Still the Favorite Dip, as proved by the testimony of our Minister of Agriculture and other large Breeders.

### FOR SHEEP

Kills Ticks, Mergots; Cures Scabs, Heals Old Sores, Wounds, etc., and greatly increases and improves growth of Wool.

### CATTLE, HORSES, PIGS, Etc.

Cleanses the skin from all Insects, and makes the coat beautifully soft and glossy.

Prevents the attack of Warble Fly.

Heals Saddle Galls, Sore Shoulders, Ulcers etc. Keeps Animals Free from Infection.

No Danger, Safe, Cheap, and Effective.

### BEWARE OF IMITATIONS.

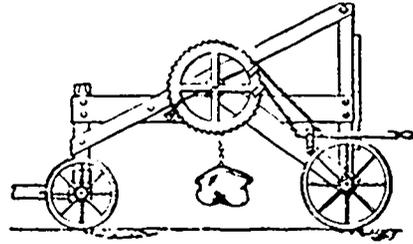
Sold in large tins at **75 Cents**. Sufficient in each to make from 25 to 40 gallons of wash, according to strength required. Special terms to Breeders, Ranchmen, and others requiring large quantities. Sold by all Druggists. Send for Pamphlet.

**ROBERT WIGHTMAN, Druggist, Owen Sound**  
Sole Agent for the Dominion.

## Binder Twine

Agents Wanted. Ontario Binder Twine Co., Union Station Arcade Toronto, Ont.

## Lemire Stone and Stump Lifter



NOUVELLE PATENT.

Capacity of Lifting 18,000 lbs. WITH NO EQUAL.

Lifting and carrying stones at will, so you can make with them fences from four to five feet high. You will clear your land for the mowers and reapers. To lift a stone you make the lever work, and the hooks will hold it when lifting. You can lift, remove, and put into fence a stone in ten minutes. Agricultural societies should buy it. Farmers, if they like, may join in club to buy it. Price moderate. For all particulars address to

**A. LEMIRE, Prop.,**  
WOTTON, Que.

Or The Copp Bros. Co., Limited.  
Hamilton, Ont.

## WANTED

A man and wife to work on farm in Manitoba, man to team or tend stock, woman to have full management of house and cook for three men. Splendid location, good buildings and near town and church. For further information, write to W. L. M. JONES, Lyons-hall, Manitoba

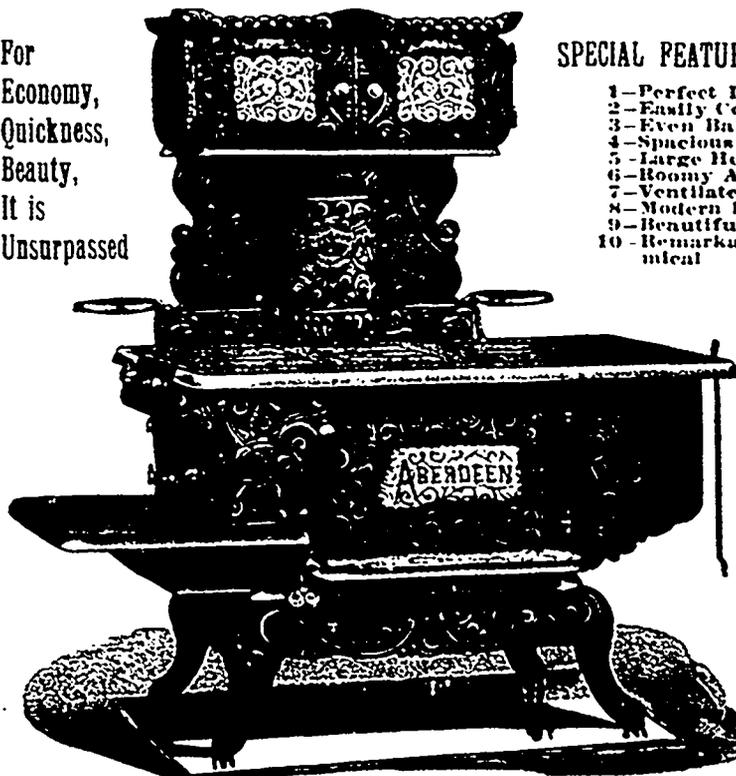
## Feeds and Feeding

A book for Farmers and Stockmen. Price, \$2. Sent postpaid on receipt of price Address

**Farming**  
TORONTO

# ABERDEEN RANGE.

For Economy, Quickness, Beauty, It is Unsurpassed



### SPECIAL FEATURES

- 1—Perfect Draft
- 2—Easily Controlled
- 3—Even Baker
- 4—Spacious Oven
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- 7—Ventilated Oven
- 8—Modern Dress
- 9—Beautiful Finish
- 10—Remarkably Economical

Our Range has been an unqualified success. It has never failed, a remarkable record in itself. Buy it in preference to any other.

**The COPP BROS. CO., Limited, Hamilton**

**Ottawa Fair.**

Last year the Central Canada Exhibition directors had new poultry and dairy buildings erected and big increases made in the live stock and dairy premium lists, making the prizes, it was admitted, all that could reasonably be asked for. Nevertheless, with the object of making this year's dairy exhibit excel anything ever seen in Canada the prizes in that department have been still further increased and special inducements held out to parties to exhibit. All cheese and butter exhibited at the Fair and remaining unsold at the close of the Exhibition will be placed in cold storage by the directors until it is disposed of at exhibitors price.

Three new classes have this year been added to the Central Canada Exhibition Association's premium list for horses. Two of these classes are specially for horses owned by farmers—carriage and heavy draught. The third is for French Canadian horses. Secretary McMahon reports an unusually large number of entries for this year's show, which opens on Sept. 11.

**Books and Bulletins Received.**

The Soil of the Farm, published by the Orange Judd Company, New York. Price, \$1. It contains information regarding the origin and formation, the physical properties, composition and fertility, drainage, tillage and manuring of soils and should be a valuable work for every farmer.

Gravity and Dilution Separators Bulletin, by Cornell University Experiment Station.

Hessian Fly Bulletin, Ohio Agricultural Experiment Station.

Report of the Horticulturist Central Ex. Farm, Ottawa, for 1898.

Herdbook National Pig Breeders' Association of Great Britain, Vol. XV., containing pedigrees of large white, middle white, small white, and Tamworth boar and sows farrowed prior to Sept. 1st, 1898.

Journal of the Royal Agricultural Society of England for the quarter ending June 30th, 1899.

Report of the fourth annual meeting of the Nova Scotia Farmers' Association and the proceedings of that organization for 1898.

Evidence of the Agricultural and Dairy Commissioner before the Agricultural Committee of the House of Commons on the production and export of cheese, butter, bacon, fruit and flour.

Evidence of Dr. Stunder, Director of the Central Ex. Farm, Ottawa, before the Agricultural Committee of the House of Commons on results from test growing of crops.

This little fable, appearing in the "Irish Homestead," speaks for itself:—"Once upon a time two frogs—a hopelessly pessimistic frog and a bright, cheery, sanguine, hopeful frog—for some reasons unexplained tumbled into a pail of milk. The pessimist at once gave up all hope, and determined that it was not worth while even trying, promptly sank to the bottom, and, sad to say, was drowned. The hopeful one, on the other hand, thought that it was worth while making an effort, and paddled hopefully round and round all night in the milk, and in the morning was found quite safe, and sitting upon a little dry pat of butter!"

**SCHOOLS**

**TORONTO**

**Don't Hold Back That Inquiry For Information**

Perhaps you've seen our advertisement before, and made up your mind to look into the matter of a business education. You put it off for a time. Don't delay any longer. Business is on the boom. Business hands and business heads are wanted along every line. Prepare to be on the crest of prosperity's wave. Learn Shorthand, Bookkeeping or Telegraphy.

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**STRATFORD**

**Fall Term Opens Sept. 5th**

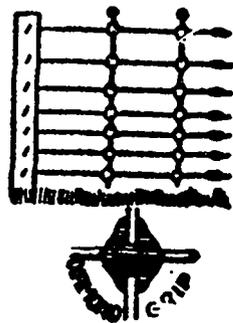
*Central Business College*  
**STRATFORD, ONT.**

Write to day for our new catalogue. It's the finest business college catalogue in Canada, and represents the most progressive and best school.

W. J. ELLIOTT, Principal.

**Fence Machine Free**

With 100 Rods. Gold Stem-Wind Watch Free.



To introduce Diamond Grip Fence in new localities. Don't have to wind wires around each other (like old woven fences), as cross wires are gripped and protected from weather; can never slip or break; 5 times as strong and lasts 10 times as long, as any woven wire fence made; can use coiled spring, plain, twisted or barb wire. Cheapest Fence in end that was ever invented. Agents wanted; write quick to

CANADA FENCE CO., London, Ont.

**WANTED.**

We want one good man to represent FARMING at each Fall Fair in Canada. Applicants will be expected to interview stockmen and farmers generally, to deliver sample copies of the paper, solicit subscriptions and advertisements, and in other ways advance the interests of FARMING. A good income is assured. References required. Address "Farming," Confederation Life Building, Toronto.

**Agricultural College**

The Ontario Agricultural College will reopen on September 26, 1899

Full courses of Lectures, with practical instruction in Agriculture, Live Stock, Dairying, Poultry, Beekeeping, Horticulture, Veterinary Science, Chemistry, Geology, Botany, Entomology, Bacteriology, English, Mathematics, Bookkeeping, and Political Economy. Year shortened to suit farmers' sons.

Send for circular, giving terms of admission, course of study, etc.

JAMES MILLS, M.A., President, QUELPH, ONTARIO



**ROCK SALT** for horses and cattle, 100 lbs., 70c., 500 lbs., \$3.00, Toronto. Cash with the order. Also in car lots  
**Toronto Salt Works, TORONTO**

**ASTHMA**  
LIEBIG'S  
ASTHMA CURE  
Will cure Asthma, Hay Asthma or Hay Fever. A TRIAL BOTTLE sent FREE OF ALL CHARGE to any sufferer sending us their name and address. Mention this paper.  
Address The LIEBIG CO. 179 King St. W., Toronto.  
**CURED.**

**LIGHTNING WELL MACHY**  
IS THE STANDARD  
STEAM PUMPS AIR LIFTS  
GASOLINE ENGINES  
WRITE FOR CIRCULAR  
THE AMERICAN WELL WORKS  
AURORA, ILL. - CHICAGO - DALLAS, TEX.

**Bailey's Hydraulic Ram**

Runs 24 Hours a day and 365 days a year.

10 Year Experience - Water Water Water  
FOR FOR FOR  
House Stock Irrigation



Once started costs one cent or more. As simple as a wheelbarrow and as efficient as a Corliss engine. Information and instruction in plain terms. Prices on Ram or complete outfit by return mail. Address  
**PRYCE W. BAILEY**  
Expert, Seneca Falls, N. Y.

**Stock Notes.**

MESSRS. JOHN COUSINS & SONS, of Har-  
rington, Ont., write: "Our stock is doing  
well, crops are looking very fine, especially  
roots."

Mr. NORMAN M. BLAIN, of St. George,  
Ont., writes: "I have on hand at present  
some of the finest young Tamworth boars  
and sows that I have ever offered, long,  
smooth, even fellows that should do good  
wherever they are placed, and I expect to  
meet my friends and old customers at  
Toronto and London, where I intend exhibit-  
ing a herd bred at Coldspring Farm."

**GLENHURST HERD OF  
YORKSHIRES...**



Noted prize-winners.  
Choice quality and heavy  
milking families. Extra  
fine young animals for  
sale. Also

Leicester Sheep and  
Berkshire Swine

**DAVID BENNING**  
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TREDINOCK STOCK FARM, ST. ANNES DE  
BELLEVUE, QUE.

**Imported and Home-Bred Ayrshire Cattle**

Winners of 34 prizes in 1898 at Toronto, London  
and Ottawa—17 of them Firsts.  
Six Young Bulls for sale, five of their dams  
shown at the above three shows, and all sired by Im-  
ported Bulls, four of them being by Napoleon, the  
Sweepstakes Bull of Toronto.

Also a few HEIFERS and COWS. Apply to  
**ROBERT REFORM,** JAMES BORDEN  
Prop. | St. Annes de Bellevue, Que. | Mgr.

NITHSIDE FARM HERD OF

**LARGE ENGLISH BERKSHIRES**

A choice lot of Boars and Sows of all ages for sale.  
None but First-Class stock sent out and satisfaction  
guaranteed in every case. A grand lot of young pigs  
to select from.

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



**Hursley Stock Farm**

A. J. C. C. Jerseys

Popular St. Lambert  
blood. 1 2-year-old bull  
ready for service to  
offer, also a number of

extra fine bull calves for sale. Some choice heifers 2  
years old and milking for sale. Large improved  
Yorkshires. A large number of pigs ready to ship.  
No better to be had. If

SILLS SHAVER & SON, Winchester Springs.

**W. D. FLATT**

HAMILTON P.O. and TELEGRAPH OFFICE



**OFFERS FOR SALE**

7 Imported Scotch Bulls.  
16 Canadian Bred Bulls.  
21 Two-year-old Imported Scotch Heifers.  
8 Yearling  
Also a number of Young Cows, including both Im-  
ported and Canadian bred served by Golden Fame  
(imp). Prices consistent with quality. Correspond-  
ence and inspection invited.

**The Old Pioneer Chester White Stock  
Farm.**

**Our Great Special-  
ty.**—Stock for sale, all  
ages, both sexes, from  
home-bred and imported  
stock; pairs not akin; every  
hog up to date; prices  
right. Also eggs from pens  
of fowl—Partridge and  
Buff Cochon, P. Rock, S.G. Dorking, Cornish Indian  
Game and Pit Game, Golden Wyandottes, White and  
Brown Leghorns, 13 eggs for \$1; also Mammoth  
Pekin, Rouen and Aylesbury Ducks, \$1 00 per 9 eggs.  
**G. BENNETT & PARDO, Proprietors,  
CHARING CROSS, Ont**



**NORTH BRUCE HERD.**

IMPROVED LARGE YORKSHIRES.

Boars fit for service,  
young sows in farrow,  
and young stock of Im-  
ported and Canadian  
bred boars for sale.

Write for prices.

**WM. HOWE,** - - North Bruce, Ont.  
Port Eglon Station and Express Office

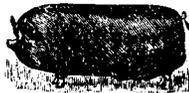


**W. R. BOWMAN,  
MOUNT FOREST,**

**OFFERS** 30 Yorkshire Boars and Sows, all ages,  
at prices away down. 30 Shropshire and  
Suffolk Shearling Rams and Ewes, at  
from \$12 to \$15. 25 Lambs, weighing 110 pounds,  
at \$10.

All Stock Registered.

**Berkshires**



In my herd there is such blood as **BARON LEE,  
DORSET CHIEFTAIN** and **WINDSOR  
SUPREME** and other noted strains. Choice stock  
for sale at reasonable prices. Write for particulars.

**GEORGE N. HARRIS**  
LYNDEN, ONT.

**Chester Whites**

Some grand lengthy young sows in farrow.  
Prices right. Also spring pigs. All from im-  
ported stock.

**JOSEPH CAIRNS,**  
Camlachie, Ont.

**Large English Berkshires.**

FOR SALE

**GOOD STOCK BOARS,**  
2 over 1 year; a number  
of choice SOWS, to farrow  
soon; **YOUNG STOCK,** 8  
weeks to 3 months old, both  
sexes. Mention FARMING.



**C. R. DECKER, Chesterfield, Ont.**

**Oxford  
Herd  
Of  
Poland  
Chinas**

Choice stock of either  
sex and all sizes, from  
2 months up. Bred from  
the best strains known  
to the breeder.  
Write for prices.

**W. & H. JONES**  
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**The  
Home  
of  
the  
Winners**

**COLDSRING HERD TAMWORTHS**



I have on hand at pre-  
sent the most select lot  
of young Boars and  
Sows that I ever offered,  
from 4 months down.  
Write for my prices be-  
fore buying.

**NORMAN M. BLAIN**  
Coldspring Farm, St. George, Ont.

**HERMANVILLE  
..TAMWORTHS..**

I HAVE several litters nursing, and also a number  
of June litters of the highest quality and bluest  
blood in North America. The "Parkhill Mab" strain  
of Tamworths can only be obtained from me. I make  
a specialty of choice Breeding and Exhibition stock.  
I like to ship when "ready to wean." I respectfully  
solicit your valued orders, and will be glad to quote  
you prices, delivered free in any part of Canada or the  
U.S. Address—

**Hermanville Farm, P.E.I., Can.**

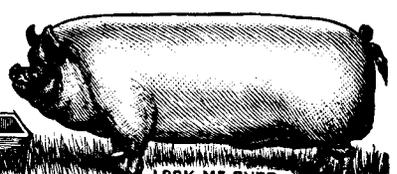
**Wm. Butler & Son**

Dereham Centre, Ont.

Importers and ex-  
porters of Pure-bred  
Live Stock. Breeders  
of Guernsey cattle,  
Chester White and  
Duroc Jersey Swine. Stock delivered free in  
carload lots to any part of Canada. Write  
for circulars, calendars, etc.



**SUMMERHILL HERD OF YORKSHIRES**



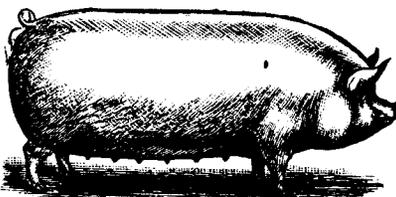
**The Lengthy English Type**

The largest herd of Imported and Canadian-bred Yorkshires of the large English type in Canada. 25  
matured imported sows, among them being several royal winners. Six imported sows sired by Buddington  
Lad, Royal winner and gold medal boar for the best pig of the white breed. Have those imported stock boars  
bred by such breeders as Sanders Spencer and Philo L. Mills. 25 April pigs (imp.) of both sexes for sale. Also  
a number (imp.) in dam. 200 Canadian-bred pigs of all ages for sale. Write for prices. Personal inspection  
preferred. Prepay express charges and guarantee stock as described.

**D. C. FLATT, Millgrove, Ont.**

**.. HIGHEST TYPE OF BACON HOGS. .**

**Oak Lodge Herd of Large Yorkshires**



**The Largest Herd of Pure-Bred Yorkshires  
in America.**

This herd has won the best prizes offered for the  
breed during the last ten years. Only one breed  
kept, but the choicest of its kind. Three im-  
ported stock boars and several sows that have all  
been winners at the largest shows in England, also  
winners at prominent Canadian and United States  
shows. Pigs of all ages for sale.

**J. E. BRETHOUR, Burford, Ont.**

# The 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.

Vol. II.

No. 42

## 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 10,000 copies of this directory are mailed monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States, also to prominent breeders and probable buyers resident in Canada, the United States and elsewhere.

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

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

F. W. HOBSON, Secretary  
Parliament Building, Toronto, Ont.

### Institute Memberships.

The following list of members has been received since the last list published:

Bruce South	29
Dufferin	4
Grey North	2
Lanark South	5
Lambton West	2
Norfolk South	2
Simcoe South	1
Waterloo South	5

Messrs. D. G. Hanmer & Sons, Burford, write under date of July 24th that they have 106 head of pure-bred Shropshires at the quarantine station at Pointe Levis. These animals were selected by one of the Messrs. Hanmer in person from among the best English flocks. Many of these animals are English prize-winners and will be exhibited at the forthcoming Toronto Exhibition, which promises to be a greater success than ever as far as the exhibit of live stock is concerned.

Mr D. McCrae, Guelph, writes under date of July 24 that he has imported a herd of Galloways from Scotland. One animal which will head his herd was first at the Highland Society show at Kelso last year. We cannot have too many prize-winners in Ontario.

### The Value of Live Stock Associations.

By Dr. James Mills, President of the Ontario Agricultural College, Guelph, Ont.

We have eleven or twelve live stock associations in the Province of Ontario. Some of them are strong, vigorous, and useful; others have a name to live, but are practically dead. Among those which are living and giving evidence of a vigorous, useful life are the Dominion Sheep Breeders' and the Dominion Swine Breeders' Associations. We have no hesitation in saying that these two associations are doing good work

The Sheep Breeders' Association was formed in 1888, and the Swine Breeders' the following year. The first annual report of the Sheep Breeders' Association was published in 1889, and the first of the Swine Breeders' in 1890.

Thus we see that the history of these associations is short, but it is creditable. They have already done a considerable amount of valuable work. They have prepared and published a number of useful papers for the information of the farming community, have persistently sought to protect and advance the interests of sheep and swine breeders at the principal fair boards of the province, have been instrumental in securing the appointment of a better class of judges, have improved the rules for judging, and in some cases have secured an increase in the prizes offered for sheep and swine. They have also, in a large measure contributed to the success of our Provincial Fat Stock Show. In 1892, these associations gave \$1,000 in prizes at the Fat Stock Show; in 1893, \$1,000; and in 1894, \$1,000. This money goes directly into the pockets of our farmers. It encourages them to improve their stock by every means possible—to select good females, to obtain the services of first-class thoroughbred males, to study the principles of breeding, and to do all in their power to learn the art of successful feeding. This is a valuable work—work which contributes directly to the prosperity of our people, and we are indebted to the Sheep and Swine Breeders' Associations for the liberal assistance which they have given to the Agriculture and Arts Association and the Guelph Fat Stock Club in their efforts to make our annual Fat Stock Show the very best winter show on the continent of America.

We cannot deny the value of this work to the community at large, but, after all, the question of membership in these associations is continually

coming up in our minds. As a practical people, we expect value in some form for all our expenditures; and in estimating the vitality of the Sheep Breeders', the Swine Breeders', or any other association, we naturally ask the question, Does it pay? Does it, directly or indirectly, make us an adequate return for the membership fees which we contribute from year to year? This is a proper question to ask, and one which should be answered by those who are responsible for the existence and management of our live stock associations.

We venture to answer in the affirmative, that live stock associations, such as those just mentioned, do pay. Under proper management, these associations make an ample return for the money invested in them.

To some, there is the direct advantage of reduction in the amount of fees paid for the registration of animals; and to all who are interested in the production of good stock there are important indirect advantages, which far exceed in value the amount of the annual membership fee. The indirect advantages are largely educational, but they, nevertheless, contribute directly and in large measure to the material interests of the people.

The meetings of these associations bring together the most intelligent, progressive and successful stockmen in the country, and afford them an opportunity to discuss the hindrances to profitable stock-raising, as well as the conditions essential to success in this important branch of farming. I say *this*, but I might perhaps more appropriately say *these*, as embracing the different kinds of stock kept by our people—cattle, sheep, horset, swine, poultry, etc.

The young men and others who attend these meetings have an opportunity which is nowhere else afforded for learning what is most important to know regarding the breeding, feeding, and management of stock. They also get hints and suggestions about showing and judging the different classes of animals, and thus become familiar with the difficulties to be overcome by those who would be really successful stock-raisers. In this way they acquire much valuable information, which they can turn to good account at home; and not only so, but, what is much more important, they get inspiration. The great difficulty with many farmers is that they have little or no interest in their work. They go through their daily routine as a sort of drudgery, with a thick cloud of discouragement constantly hanging over them. They are farmers, not from choice, but from

force of circumstances—because they can see no other way of making an honest living. If such men could be induced to attend meetings of this kind, they would learn something about the difficulties which are encountered and overcome by the most successful men; and they would go home encouraged to put forth increased and more intelligent effort to attain success in their respective lines. Such, I have no doubt, is the general effect of these meetings on those who attend them. They tend to make our stockmen, young and old, more intelligent, cheerful and successful workers. May this influence be felt more and more, till the farmers of Ontario shall be known and spoken of everywhere as men who are not only successful in, but proud of, their occupation. And to this end I would venture to make two suggestions.

(1) That in the future, as in the past, no pains be spared to get the best stockmen on this continent to read papers or deliver addresses at the annual meetings of these associations.

(2) That as little time as possible be spent in routine business at the annual meetings, in order that there may be ample opportunity for papers, addresses and discussions.

Not only the success of the Sheep and Swine Breeders' Associations, but the very existence of these associations is largely due to the zeal and dogged perseverance of F. W. Hodson, our secretary; and I have no doubt that with more time at his disposal, he will make both these associations more useful to the farmers of this province.

#### Rations for Horses.

Amount of feed in pounds required per day, per 1,000 pounds live weight, for horses working hard:

1. Alfalfa hay 10, oats 10, prairie hay 10.
2. Alfalfa hay 13, corn 12.
3. Alfalfa hay 15, corn 6, prairie hay 8.
4. Alfalfa hay 15, Kaffir corn 5, prairie hay 10.
5. Bran 11, corn 6, prairie hay 10.
6. Bran 13, corn 6, timothy hay 10.
7. Bran 11, Kaffir corn 6, prairie hay 10.
8. Bran 6, corn 7, prairie hay 11, linseed meal 2.
9. Bran 7, corn 6, timothy hay 12, linseed meal 2.
10. Bran 7, Kaffir corn 8, prairie hay 12, linseed meal 2½.
11. Corn 9, linseed meal 4, prairie hay 13.
12. Kaffir corn 10, linseed meal 3¾, prairie hay 14.
13. Sorghum hay 8, alfalfa hay 14, Kaffir corn 8.
14. Corn 8, bran 7, linseed meal 2, sorghum hay 10.
15. Kaffir corn 8, bran 7, linseed meal 2, sorghum hay 11.
16. Oats 14 linseed meal 2, prairie hay 12.
17. Oats 12, bran 7, prairie hay 10.
18. Oats 8, corn 5, linseed meal 3, prairie hay 10. R. W. CLOTHIER.  
Kansas State Agricultural College.

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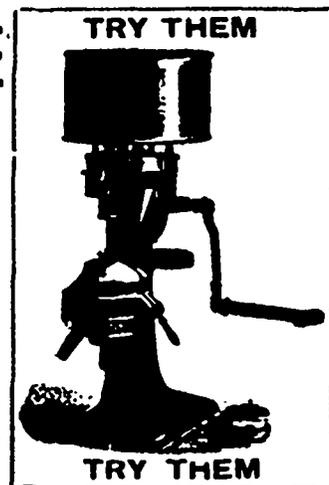
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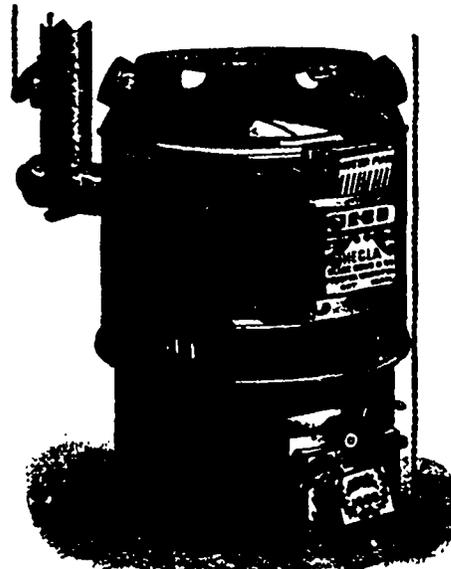
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**CLARE BROS. & CO.**

PRESTON,  
ONT.

# Market Review and Forecast

Office of FARMING,  
Confederation Life Building,  
Toronto, July 31st, 1899.

Trade in nearly all wholesale departments continues good, and everything tends towards increased confidence in the fall business, which promises to be one of the best known for years. Orders keep up to a good average and remittances are satisfactory for this season of the year.

## Wheat.

The wheat situation does not show much change. If there is any change it is in favor of the buyer. The European markets are, if anything, duller and lower than a week ago, owing to more favorable crop reports. The Cincinnati *Price Current* has this to say regarding the crops: "Wheat threshings not essentially changing yield indications. Spring wheat situation moderately less encouraging." The visible supply of wheat in the United States and Canada increased by 1,546,000 during the week, and is now 35,986,000 bushels, as compared with 9,382,000 a year ago. There is estimated to be all the way from 70,000,000 to 100,000,000 bushels of old wheat in the farmers' hands, said to be largest amount on record for this season of the year. In the Western States and in Canada also farmers are said to be marketing wheat fairly, which is taken to mean that the new crop promises better things, and lessens the probability of better prices. But this should not be taken for granted, as many farmers may be compelled to bring out their old wheat to make room for the new.

The Montreal market has ruled quiet during the week for through cargoes, and spot business is merely nominal. Red and white is quoted here at 67 to 68c. north and west, and goose at 67 to 68c.; No. 1 Manitoba hard, 80 to 81c., and No. 1 northern 78c., Toronto. On the Toronto farmers' market red and white bring 70½ to 71c., spring five 66c., and goose 69½ to 70½c. per bushel.

## Oats and Barley.

The English oat markets are weaker and lower owing to larger American and Russian supplies. The European crop outlook, however, is not good though the prospects for a big American crop may counteract this. The Montreal export market is quiet but there has been a very good demand for local requirements at 33 to 33½c. in store. White oats are quoted here at 29c. west. On the Toronto farmers' market oats bring 37 to 38c. per bushel.

There is a good export demand at Montreal for feed barley but offerings are light. The quotations on this market are 40 to 41c. west.

## Peas and Corn.

There is not much doing in peas and prices are more or less nominal. On the Toronto farmers' market they bring 60c. per bushel.

The American corn crop is reported to be doing well generally but not making as much improvement as heretofore. American corn is quoted at 41 to 42c. in car lots on track here.

## Bran and Shorts.

Considerable bran is being exported which is causing values to be higher than they would otherwise be. On account of the demand for the American mills Ontario bran is getting scarce at Montreal where it brings from \$12.50 to \$13.50 per ton and shorts at \$14.50 to \$15.50 in car lots. City mills here sell bran at \$13 and shorts at \$16 in car lots f.o.b. Toronto.

## Eggs and Poultry.

The English markets for eggs continue firm under continued limited supplies. The exports of fresh eggs this year from Canada have fallen considerably below last year. Values this year are about 3c. per dozen higher than last year at point of shipment, while prices in

England are only about 1 to 1½c. above last year's. Quite an improvement in the quality of the eggs marketed recently is noticeable, and the local demand is not quite so keen as it was. Prices at Ontario points keep at about 12 to 12½c. f.o.b. Choice candled stock is quoted at Montreal at 13½ to 14½c. wholesale. On this market the wholesale price is 13 to 14c. for choice, new-laid. On the farmers' market new-laid eggs bring 15 to 17c.

On Toronto farmers' market chickens fetch 40 to 80c. and ducks 50 to 80c. per pair, and turkeys 10 to 11 per lb.

## Potatoes.

Receipts are increasing at Montreal and sales are reported at \$1.20 per barrel in good-sized lots. On Toronto farmers' market new potatoes bring 65 to 75c. per bushel.

## Fruit.

The apple crop in Ontario and Quebec is likely to be very uneven. In some sections of Western Ontario the crop will be a failure, while in other sections a good crop is promised. On the whole it is expected that a fairly average crop will result. The fruit business at Montreal continues fair. Domestic fruits have been rather scarce and the demand for raspberries is equal to the supply, prices being about the same as last week. New Canadian peaches have been offered at 50 to 77c. per basket wholesale. Receipts have been fairly large on Toronto market and the market was a little easier in some lines at the end of the week. Raspberries are quoted at 6 to 8c.; black, 5½ to 7c. per box; red currants, 30 to 40c.; black currants, 50 to 80c.; cherries, 70 to 90c.; peaches, 35 to 50c.; gooseberries, 30 to 70c.; plums, 60 to 90c.; and apples, 20 to 35c. per basket.

## Hay and Straw.

Hay has been somewhat scarce at Montreal. American buyers are taking less hay than they did. No. 1 is quoted at \$8 to \$8.50, \$6 to \$6.50 for No. 2, and clover at \$5.25 to \$5.50 in car lots. Baled hay is quoted here in car lots at \$7.50 to \$8.75, and straw at \$4 to \$4.50 per ton. On the Toronto farmers' market old hay brings \$10 to \$11; new, \$7 to \$8.50; sheaf straw, \$6; and loose straw, \$4 to \$5 per ton.

## Wool.

The Montreal wool market has been quiet during the week, but prices have been firm. There is reported to be large quantities of wool held at Ontario points. Canadian greasy is quoted at Montreal at 14 to 18c., fleece at 16 to 17c., and pulled at 18 to 20c. per lb. Prices at Toronto continue the same at 13 to 14c. for fleece, 8c. for unwashed, and 15½ to 16c. for pulled.

## Cheese.

The cheese trade seems to be in a specially flourishing condition. Cable reports are firmer and higher and with light stocks holders are rather conservative in their offerings. The London cable quotes 46 to 47s. for finest Canadian and 42 to 44s. for fine. Exports so far show a falling off of 86,000 boxes as compared with the same period last year. Factories have been selling well up to the hoops and about all cheese up to July 15th are now out of the factorymen's hands. There has been a good consumptive demand in England and stocks do not appear to be accumulating at any point. Values are now 1¼ to 1½c. per lb. more than at this time last year and the indications are that these higher values will be maintained during the remainder of the season.

The local markets have been fairly active though early in the week salesmen were inclined to hold. There has been an advance of ½ to ¾c. during the week and the ruling prices at the local markets have been 9½ to 9¾c. with Brockville going at 9½c. on Thursday. Montreal prices are 9½c. for finest Western, 9¾c. for Eastern and 8½ to 9¼c. for under grades.

## Butter.

The creamery butter market continues active with prices on the upward turn. Last week Montreal prices were reported at 18½ to 18¾c., while 19 to 19½c. are the ruling figures with sales reported at 19½. Some extensive purchases are reported at factories during the week at 18½ to 18¾c., the Allaugrove combination bringing 19½c. The English market is steady as the *Trade Bulletin's* London cable of July 27th shows. It reads:

"The market has ruled quiet but steady, and with light stocks holders are not anxious sellers. Finest Canadian creamery 92s. to 94s. Fancy well-known brands 95s. to 96s. Good to fine creamery 84s. to 90s. Western dairy 70s. to 75s."

Shipments from Montreal so far this season show an increase of over 35,000 pkgs. over those of last year from the same period, while those from New York show a falling off of over 16,000 pkgs.

Western dairy is still active and quotations at Montreal are 13½ to 15c. as to quality. Here choice dairy tubs bring 13 to 14c. and lb. rolls 14 to 16c. per lb. wholesale. Creamery brings 18 to 19c. for prints and 17 to 18c. for boxes. On the Toronto farmers' market lb. rolls bring 15 to 20c. per lb.

## Cattle.

The American cattle markets have, as a rule, been quiet during the week, though where really fine dry fed cattle were offered the demand was good at firm prices. But generally speaking medium and lower grades

## WITH WHAT WE CANNOT KNOW

we cannot be concerned, but we do know that The

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have been easy at lower prices. On Toronto on Friday, which is the big cattle market day of the week, deliveries were large with the quality of fat cattle generally good. Considering the heavy deliveries business was fairly good, especially for the better grades of exporters and butcher's prices for these remaining steady while inferior and medium butchers' cattle were from 15 to 20c. per cwt. lower and slow of sale.

**Export Cattle**—Choice heavy exporters sold at \$4.75 to \$5 per cwt., and light exporters at \$4.50 to \$4.65 per cwt. Export bulls are scarce, with prices firm at \$3.80 to \$4.50 per cwt.

**Butchers' Cattle**—Choice picked lots of these, equal in quality to the best exporters, weighing 1,000 to 1,100 lbs. each, sold at \$4.37½ to \$4.50 per cwt. Good butchers' cattle bring \$3.80 to \$4.10; medium, \$3.60 to \$3.75; and common and inferior, \$3.12½ to \$3.50 per cwt.

**Stocks and Feeders**—Buffalo stockers were a little firmer on Friday at \$2.50 to \$2.75 for heifers and common steers, while well-bred steers brought \$3 to \$3.25 per cwt., and picked lots 10c. higher. Several lots of feeders were sold, ranging in weight from 800 to 1,100 lbs. each, at \$3.40 to \$3.75 per cwt.

**Calf's**—Prices for these are firm at \$4 to \$8 each for the general run.

**Milk Cows**—About 25 of fair to good quality sold at \$28 to \$45 each, while a few of extra quality brought \$50 each.

**Sheep and Lambs.**

These have been steady all week, specially for the better quality which is in demand. Generally inferior quality both in sheep and lambs at the American market was lower. On this market on Friday there was a heavy run of sheep and lambs with prices practically unchanged at \$3.50 to \$3.75 per cwt. for ewes, and \$2.50 to \$3 for bucks. Prices were easy for lambs because of so many of medium quality coming forward at \$3 to \$4 each, or \$4.50 to \$4.85 per cwt.

**Hogs.**

The hog market keeps firm and active. On Friday on this market, though deliveries were large, prices were firmer at \$5.12½ per cwt. for select bacon hogs of good quality weighing 160 to 200 lbs. each, unfed and unwatered off cars, with thick and light fats, bringing \$4.37½ per cwt. The Montreal market continues firm at \$4.60 per cwt. The *Trade Bulletin's* London cable of July 27th re Canadian bacon reads thus: "The market is firm, with a good demand at last week's advance."

**Horses.**

About forty horses were sold at Grand's on Tuesday. Good draught horses sold well. Horses from 1,400 lbs. to 1,675 lbs. brought from \$120 to \$165; smaller blocks from \$90 to \$125; drivers from \$65 to \$100. Two or three special horses in that class sold for from \$130 to \$147. The principal demand seems to be for work horses.

**Make Fair Entries Now.**

The manager of the Toronto Industrial Exhibition has asked us to remind stockmen, dairymen, and others that entries for live stock, dairy products, ladies work, fine arts, honey, and all class of manufacture, close on Saturday, August 5th. Stockmen and dairymen are specially urged to make their entries early this week, as the books will positively close on the date named.

"Mary, I saw the baker kiss you to-day. I think I shall go down and take the bread in future."

"I wouldn't be no use, ma'am. He wouldn't kiss you, 'cos he promised he'd never kiss anybody else but me."

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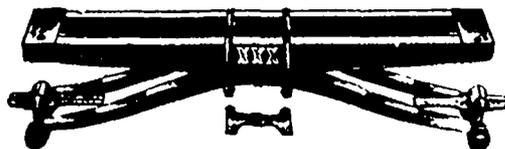


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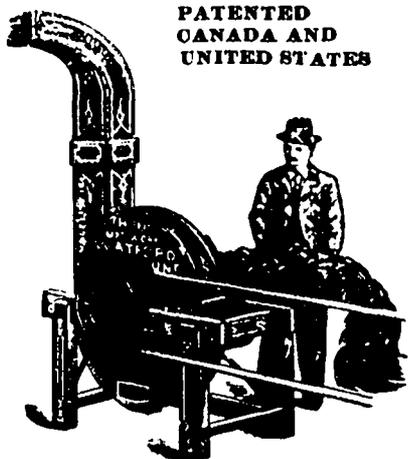
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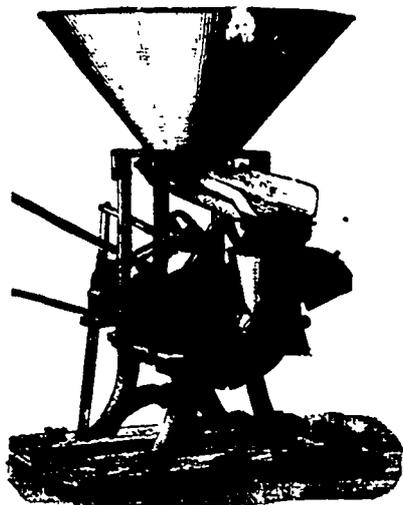
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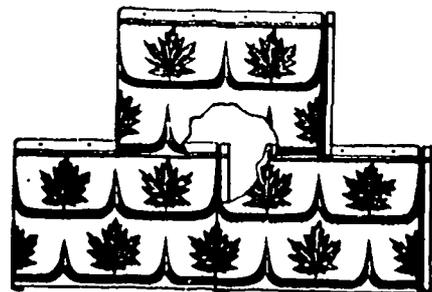
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are made and sold by your own countrymen, and the money you pay for same benefits you and your country.

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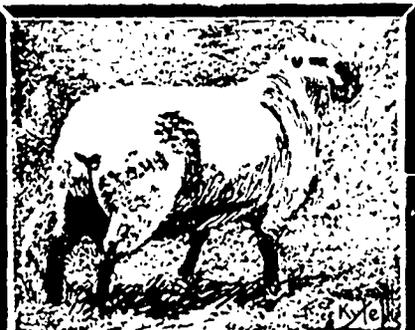
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