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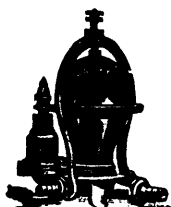
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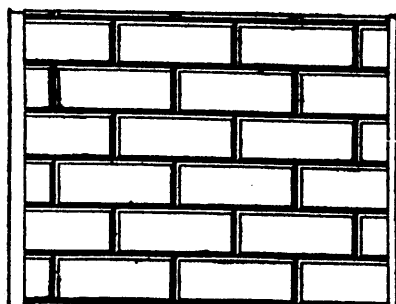
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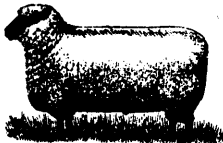
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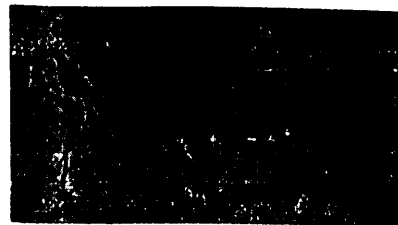
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FARMING

VOL. XVII.

NOVEMBER 7th, 1899.

No. 10

A Generous Proposal.

Read the additional list of premiums offered this week. A good watch costs money but we put you in the way of getting one without money. Just a little exertion required, to secure a reading glass, a bible, a cook book and "The Life of Christ for the Young" free of cost. Many others are taking advantage of this offer; will you not do so?

Every premium offered is of special value and deserving of special mention, but in the limited space we have at our disposal it is not possible to do more than mention them here. The Cook Book we are offering will prove a valuable adjunct to every farm home.

Illustrations Wanted

We are desirous of procuring some good photos of Canadian farm scenes for reproduction in these columns. Any of our readers having such photos will confer a favor by loaning them to us for reproduction. Making a photo-engraving from a photo does not injure it and we will see that all photos sent us for illustration purposes are returned in good order. Photos and descriptions of modern and up-to-date farm houses, barns, cow stables, pig pens, etc., are preferred, though we will be pleased to have photos of any farm scene including stock.

Farm Implement News

A New Departure in Connection With Agricultural Journalism

With the advent of new and improved farm machinery has come a need for more information and a more definite knowledge along this line on the part of our farmers. Realizing this need and believing that practical and definite information regarding the various implements and machinery used on the farm would be of great help to farmers, we have decided to open a farm implement department in FARMING. This department will be under the supervision of a practical mechanic, and will contain accurate and minute descriptions, with illustrations, of all kinds of farm machinery, dairy apparatus, and all appliances used on the farm and in the farm home. In addition to this, full information will be given from time to time regarding the latest inventions and improvements in farm machinery. There will also be included in this new feature a question drawer through which farmers and others can have questions about farm implements and how to operate them answered. For the present this new department will appear once a month, beginning in FARMING for Nov. 21st, and will be continued thereafter in the third issue of every month.

November Cheese

The Montreal Cheese and Butter Association has done the usual thing and has again advised dairymen not to make November cheese. The reason given is that late cheese re-acts in an unfavorable manner upon the Canadian cheese market just as toddler cheese does. The association urges the factorymen where practicable to make creamery butter during November, and the balance of the season packing it in boxes, which is the favorite package for export, or in tubs if intended for local use. There is also a fair demand for 70 pound tubs for export. The Brockville Cheese Board at a recent meeting, amid some dissensions, endorsed the Montreal Association's action, there being some who strongly opposed this action on the ground that the factorymen were capable of looking after their own interests and should stick to cheese so long as it paid best or make butter when such was more profitable.

While we have always contended that taking one season with another, it would be better for the trade and for all concerned if our factories would not begin making cheese till May 1st, and would quit at the end of October each year, yet it is very difficult to convince dairymen that such a plan would be in their best interests, when the price of cheese is as high as is the case this season. However, the advice is sound, and with butter at a good figure, we think factorymen will realize as much for their milk products, where they have the plant in shape, by changing from cheese to butter making early this month. Except where an even temperature can be kept up in the curing room, and the making-room is properly fitted for making cheese in cold weather, it is rather risky for a factory to make cheese later than October 31st. Then it is difficult to get the finest flavored milk at this season. What with promiscuous turnip feeding and such like, November cheese often has injurious flavors which cause a lowering in values that more than offsets the high prices prevailing.

Though this advice has been given to dairymen over and over again, we do not think that many factories, where conditions are at all favorable, will discontinue making cheese this season till this month is pretty well over, if not till next month, owing to the high prices. If this be the case, then, every effort should be made to have the quality of the product as fine as possible. Patrons should give special attention to the milk and see that no food producing bad flavors in the cheese is given to the cows while the factories are in operation. When cold weather comes patrons neglect to aerate the milk thoroughly. This is just as necessary now as at any other season of the year. If the cows have been eating anything that will cause bad flavors in the milk a thorough aeration as soon as the milk is taken from the cow will help matters considerably. Then makers and factory-owners should see to it that the curing and making-rooms are in proper shape for making and curing the cheese properly. Provided the milk is delivered in good condition it is possible to make really fine cheese this month if the factory buildings are such that the temperature can be kept under control. But, comparatively few factories have the best equipment for making cheese in cold weather, and hence the greater likelihood of there being a lot of inferior cheese made. Our advice to dairymen who are determined to make cheese under these unfavorable conditions is: *Look after the curing-room and don't feed turnips.*

The South African War and Wheat

Some farmers are asking if the present war in South Africa will raise the price of wheat. There is no likelihood of its doing so to any great extent so long as the conflict is confined to its present limits. The war, so far, has had some effect, but it has been in the opposite direction. The engaging of a number of ocean steamers by the British Government for transporting troops to the Cape has caused a shortage in ocean freight space and an advance in freight rates across the Atlantic which has tended to lower values on this side, and to delay shipments considerably, not only of wheat, but of many other articles of export. But this will probably be only of a temporary character, though it is possible that the advance in ocean freights may continue throughout the season, owing to the large shipments to be made.

The chief reason why this war will not have much effect upon the wheat market is that no large wheat-producing country is involved in it. Unless it develops into European complications, which is unlikely, the world's wheat markets will continue to be controlled and influenced by the usual supply and demand. This is what the consumer and producer of wheat the world over has to figure upon. A wheat corner such as we had a year ago may create a temporary flurry, but it is of very transitory character, and disappears as quickly as it comes.

The present position of the wheat situation is not one strongly favoring the producer. With the world's supply in sight 75,962,000 bushels, as compared with 39,316,000 a year ago, and with large supplies on hand in the leading European buying countries, there is not much ground for expecting higher prices. The estimated reduction in the world's wheat crop for 1899, referred to in *FARMING* for October 24th, of about 300,000,000 bushels, will have the effect, if nothing more, of preventing values from going any lower. The large surplus from the 1898 crop tends to counteract any effect this year's shortage might have in stimulating values.

While this is the situation, as far as we can estimate it, from a statistical point of view, wheat shipments have been liberal and trade fairly active. Had it not been for this temporary set-back due to the removal of vessels from the Atlantic trade, there would ere this have been a much more active export trade in wheat than there is at the present time. This activity would, no doubt, have had a wholesome effect upon the market, and perhaps have advanced values somewhat. But, as we have already pointed out, this falling off in shipments is only of a temporary character, and we may look forward to normal conditions, so far as the ocean freight service is concerned, being restored at an early date.

Cheese and Butter Outlook

While prices for dairy products are good as compared with what they were other years at this time, still they are lower than many in the trade expected a month or two ago. At that time the pastures were parched and dry and the supply of milk at the cheese factories and creameries had fallen off at least one-third. The producer was led to believe from this that such a great shortage in supplies would result in causing the season's trade to end at even higher prices than were being paid at that time. But such expectations have not been realized and during the past week or two prices for both cheese and butter have lowered considerably. The outlook just now seems to be that prices for both products the balance of the season will not be much if any higher than they are at the present time.

The situation so far as cheese is concerned is not an unusual one. Since our export trade in this product assumed anything like large proportions it has been the almost infallible rule that as soon as values on this side made it

necessary for the British retailer to put his selling price above 5d. or 6d. per lb., consumption began to fall off very rapidly. This season has proved to be no exception to the rule though it was expected by some earlier in the season that it would prove so. The large shortage in the English make caused the market at the beginning of the season to assume a strong tone which has continued nearly all the time, bringing with it a rapid advance in prices and making cheese-making a very profitable business for the farmer. At one time factorymen were offered 12 cents for their cheese but they wanted more, having full confidence in the strength of the market. But they have miscalculated and to-day from 11 to 11½c. are the ruling figures for prime autumn stock. However, 11 cents is no mean figure for September or October goods, and if factorymen can dispose of their output at this figure they will be doing better than they have done for several years back and have no cause to grumble.

The cheese situation is by no means a weak one even if prices are lower, and we would not be surprised if the highest prices of the season were reached before the year's product is disposed of. The English dealer is evidently playing a waiting game and is not laying in his winter's supply as early as other seasons, the reason being that he considers present values too high; and who should blame him? Two years ago his winter's supply was bought at a half to a cent a pound less than is being paid this fall, and he lost heavily on the transaction. This year he seems determined not to be caught and is satisfied to wait for factorymen on this side to drop a little in their ideas of values. But he may wait too long and there may yet be a scramble to get cheese that will send values up with a rush. We would not, however, advise farmers to wait for it as it is somewhat uncertain. It is better to sell at the top price when the cheese is ready to ship rather than to wait for an extra high price that may never come. There are undoubtedly less stocks of cheese stored at this season than for several years back, and the total shipments from Montreal so far this season are over 17,000 boxes more than they were last year at this time. The exports from New York also show a decrease of over 14,000 boxes for the same period. But this decrease is more than made up by the shipments from Portland this year, which now amount to 44,176 boxes, thus leaving a net increase from this side of over 46,000 boxes.

The butter situation on the whole, so far as the export trade is concerned, does not seem to be as strong as that of cheese. There is, however, no ground for apprehension in regard to it. Even at present prices farmers are getting as much if not more than they got for their butter last year. From 20 to 21c. per lb., everything considered, is good price for creamery butter at this time of the year, and if it can be maintained during the winter season there should be no ground for complaint. It must be remembered that prices this season have been almost unprecedentedly high, and that our shipments of choice creamery butter so far are double of what they were last year for the same period. With the large increase in shipments both from Canada and the United States it is somewhat surprising that prices have been as well maintained as they have been. The reason has been a shortage in the English make coupled with the superior quality of Canadian creamery butter which has caused it to be in better demand than other years. But supplies have increased during the past few weeks in the English market and more butter is being produced in the home creameries. This, coupled with the arrival of some large shipments earlier than usual from Australia, has been the chief cause of the recent depression in values.

One gratifying feature of the recent slump in prices is that Canadian has not dropped as much in value as some of the other countries that supply butter to Great Britain. While Danish butter has suffered a decline of 20s. to 25s. Canadian has only dropped 10s. or 12s. per cwt. in price. The outlook then is not an unhopeful one, and with prices at 20 to 21 cents for fresh creamery our dairymen should

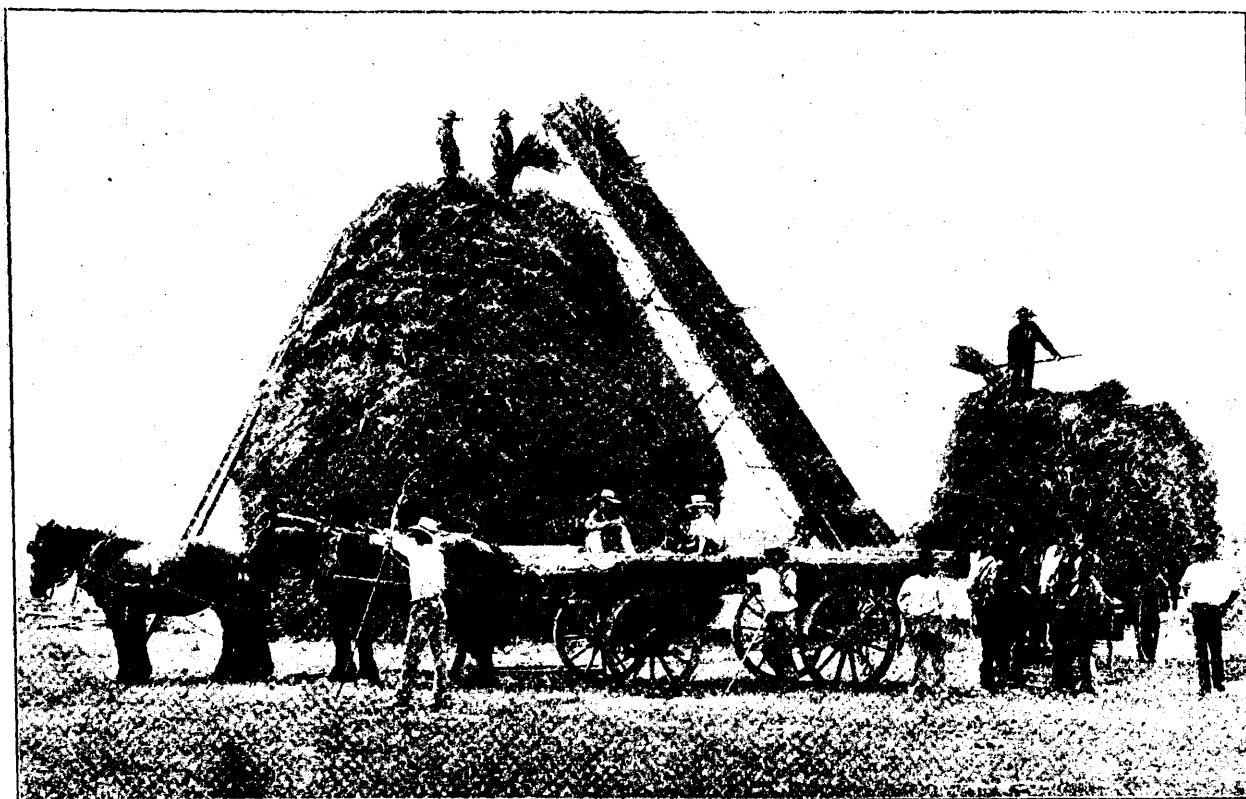
have no ground for complaint. With these prices well maintained during the winter season winter butter-making should be a profitable business for our farmers to engage in during the next six months.

Beet Root Sugar

Considerable attention has been given in these columns to the growing of sugar beets and the establishing of the beet sugar industry in Canada. Several attempts have been made to start an industry of this kind at various Ontario points, but as yet nothing very definite has been accomplished. One of the chief difficulties has been the securing of the necessary capital to establish a beet sugar factory on a proper basis. Then there has been some doubt as to whether Ontario soil and climate were suited for the growing of sugar beets of the right quality for making sugar. And so the matter stands and the growing of sugar beets and the making of beet root sugar is still an untried venture in this province.

less the roots are kept well covered with soil a green "collar" grows in the product, which contains no sugar, and is so much waste material. Mr. Stewart has been advised to visit the Leamington district, before coming to a final conclusion, and it is understood he is now pursuing inquiries in that part of the province.

These difficulties are not unsurmountable and should not be taken as an indication that sugar beets cannot be grown to advantage in Ontario. We are convinced that they can be successfully grown, but the difficulty seems to be that our farmers as yet do not thoroughly understand the kind of soil and cultivation required to produce beets containing a sufficient amount of sugar. The mere matter of less thinning and keeping the growing beets well covered with soil is easily accomplished and if these are the only obstacles which the test shows we may safely conclude that sugar beets can be grown as successfully in this province as elsewhere. All that is required is a little more care and knowledge of the requirements of the plant on the part of our farmers. We would suggest that farmers in the localities mentioned and at other points grow a small patch of sugar beets for a few years in order to get familiar with



STACKING WHEAT IN AUSTRALIA

Some little time back the Ontario Department of Agriculture entered into communication with Mr. Wm. James Stewart, of Glasgow, the representative of an important Scotch syndicate who have been seeking to establish a factory in this province for the manufacture of beet root sugar. The syndicate are prepared to invest \$650,000 in the enterprise if they can obtain a sufficient supply in Ontario of the right kind of beets, and it was with a view to making inquiries in this regard that Mr. Stewart came to Canada. He was given to understand that Dunnville, Aylmer and Leamington could furnish the syndicate with beets containing the requisite percentage of sugar, and came on to investigate the statement for himself. The results are somewhat disappointing. Beets from Dunnville and Aylmer were analyzed at the Agriculture College, and in both instances the samples did not turn out as rich in sugar as had been expected. This is attributed to two causes. First, the beets were allowed to grow too large, that is, they were thinned out too much, and in the next place they were not kept well covered during cultivation. The last condition is an absolute necessity in the production of beets. Un-

less the roots are kept well covered with soil a green "collar" grows in the product, which contains no sugar, and is so much waste material. Mr. Stewart has been advised to visit the Leamington district, before coming to a final conclusion, and it is understood he is now pursuing inquiries in that part of the province.

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of the beet sugar industry as for the iron industry. However this may be, the fact that a syndicate is considering the advisability of investing \$650,000 in such an enterprise would seem to show that there was money somewhere in the business of making beet sugar.



Special Attractions at Fairs

A correspondent in a recent issue of the *New England Farmer* makes the following observation regarding special attractions at fairs:

"I do not believe in the so-called 'circus attachments,' such as tight rope walking, acrobatic performances, trained dogs, etc., as one of the largest factors in drawing crowds, since they overshadow the real intent of the fair, and injure the farmer. But I believe there should be enough of such outside amusement, such as bicycle and foot-racing, to keep the crowd interested during waits, and (as in one instance under my observation and promotion) a firemen's muster in connection with the fair. In short—I believe the fair should be the attraction, and amusement the secondary consideration."

The statement contained in the last sentence of this quotation, that the fair itself should be the attraction and amusement the secondary consideration, will, we think, meet the approval of all those who have given the subject any serious thought. There was a time when, though we had the special attraction at our big fairs, it was only of very secondary consideration, while the fair itself was the chief drawing card. But this order of thing seems to have completely changed of late years, and, instead of finding the special attraction holding a secondary position at our large exhibitions, we find it forming the chief feature of the show, with the fair itself in a somewhat subservient position in regard to it. This condition of affairs has not been brought about in a moment, but is of gradual growth, with perhaps an extra push forward during the past year or two. Should the special attraction continue to grow in prominence at our large fairs as it has done of late, it will not be long till our exhibitions will be enormous amusement and circus performances, with the exhibits of agricultural products, live stock, etc., occupying the position of side-show curiosities, where visitors may view the kind of objects that delighted our fathers at the old-time exhibitions.

But it is to be hoped that the better sentiment of our people will prevail, and that the special attraction at the fair will soon be relegated to its proper place as a mere secondary feature of our big exhibitions. For, after all, it is because a large number of the visitors to our fairs are attracted by these special features that they are given such prominence by our fair managers. But what is responsible for this somewhat depraved taste on the part of exhibition sight-seers? Does not the fact that the amusement rather than the educational side of our fairs has been made prominent, account for a large share of it? While there will always, perhaps, be a certain element who attend our large fairs only to be amused, and unless they get amusement will not pay the admission fee, still we believe that the majority visit the fair to learn something, or, at all events, to note the progress that is being made in manufactures, live stock, agricultural products, etc. For this reason we believe the educational side of our large fairs should be given more prominence than is now given to it.

As the above extract shows, this subject is receiving some attention to the south of the line. As far as we are able to judge, the special attraction has, perhaps, obtained a stronger foothold at American than at Canadian fairs. At our large fairs, as we pointed out a few weeks ago, though the special attraction has grown greatly in importance, the agricultural and other exhibits have not deteriorated at all in quantity or quality. In fact, in many ways they are better than a few years back. But this does not get around the fact that the special attraction, the side show, and such like features are given such a prominence at our big fairs that they practically overshadow the regular exhibits.

The Brantford Milk Test.

A breeder of dairy cattle sends us the following criticism concerning the milk test at the Southern Fair at Brantford, and asks for our views in regard to the method of conducting the test:

"I have been looking for some explanation about the milk test at Brantford. It was run on a very unfair basis. I don't mean that any person was to blame, but that it was an oversight. The rules and regulations were taken from those used at the Provincial Dairy Test last December. The Provincial test was a two-day test and one point was allowed for every ten days in milk after the first twenty days in milk. At Brantford this fall there was only a one-day test, and a cow that had been milking a long time had a big start, while a fresh cow only had one day to make it up. In this test a Holstein grade, long in milk, had 21 points to start with, while she only gave thirty-one lbs. of milk. An Ayrshire cow gave fifty-three lbs., a difference of twenty-two lbs., of milk in one day, and nearly double the butter-fat; so there was nothing fair about the test. A milk test is all right if properly conducted and to do so the feed consumed should be considered, then we would know which was the most profitable cow to keep."

About a year ago a somewhat lengthy though a very interesting and profitable discussion took place in these columns as to the best methods of conducting milk tests. Though nothing very definite has resulted so far from that discussion in the way of bringing about better methods of conducting milk tests we still have hopes that an improvement will yet be made, especially at the larger fairs. At that time we took the ground that in order to have a milk test that would show which was the most profitable cow, the feed consumed should be taken into account, and we still hold to the same view. Our contention is that there is nothing further to be gained by conducting milk tests as they have been carried on at the Toronto and other fairs for several years back, and that the time has come when a step in advance should be taken, and an effort made to take into account the amount of food consumed by each cow during the test. We have learned all that can be learned from milk tests where only the total solids are taken into account in summing up results, and are now ready to advance a little and learn along other lines.

As to the test conducted at the Brantford fair we are not familiar enough with it to express any definite opinion in regard to the way it was managed. We can see, however, where an injustice might be done a freshly-calved cow in a one-day test, where too many points were allowed for days in milk. But as our correspondent points out that this was an oversight on the part of some one, there is not much to be gained by going into the matter. The broader and bigger question of conducting milk tests generally is of more importance and deserving of greater consideration.



A Substitute for Turnips

A very serious problem seems to be confronting Scottish farmers. For a few years back the turnip crop has not proved as valuable and as easy to grow as formerly. The growth of the turnip is becoming more precarious and uncertain at all stages of life. It has become increasingly difficult to get a regular and vigorous plant in the ground. For some reason or other the young plants seem to be more subject to insect pests and do not seem to thrive as well. Consequently, the farmer in most parts of Scotland is finding it more difficult every year to get even a fair turnip crop. On land rented at 20s. to 30s. per acre a well-manured, well-managed turnip crop cannot be raised for less than £7 per acre, so that if it is a partial failure a serious loss to the farmer must result.

Some suggest that turnips might be omitted altogether from the crop rotation. This is what is done in parts of Ayrshire, much of the land being laid down to grass after two grain crops in succession have been taken from it.

But, in adopting such a plan, it is claimed that fewer cattle and sheep could be kept and that far less stock of both kinds could be fattened during the winter months. While it would be easy to get substitutes for cattle it would not be so easy to get something to replace turnips as a winter food for sheep. In Scotland turnips play an important part in the diet of sheep that are brought through the winter in a lean condition and in making other classes of sheep fit for the fat market. All this applies to cattle, but other feeds, such as cake and ground grain could be more successfully made use of in the rations of store cattle than of store sheep.

The *Scottish Farmer*, in commenting on the substitution of cake for turnips, says:

"It will, we believe, be generally conceded that 4 lbs. of cotton cake—half decorticated and half undecorticated—will prove as nourishing a supplement to bulky fodder for young store cattle per day as 40 lbs. of turnips. In the latter there are only 4 lbs. of dry food, the balance being water; and let it be borne in mind that a large proportion of the 4 lbs. of dry food in the roots is composed of wood-fibre and other material containing little or no nourishment. It could be proved that analysis would show the cake to be the richer of the two, and we know which we would prefer for practical purposes if we were offered a choice of the two. Now let us compare their relative cost. The consuming value of turnips is commonly taken at 10s. per ton or 6d. per cwt., and, one year with another, 20 tons per acre may be taken as an average yield over the country. Cattle consuming 40 lbs. of roots per day for 22 weeks, or fully five months, would consume 55 cwt., which, at 6d. per cwt., cost £1 7s. 6d. per head. We may take the price of the above mixture of cake, one year with another, at £5 10s. per ton. At this rate the consumption of 4 lbs. per day for 22 weeks would involve an outlay of 30s. 3d.—that is, 2s. 9d. more than the estimated cost of the turnips. But the extra work of giving the roots to the cattle would do more than swallow up this difference, and, besides, the residuary value of the manure would be decidedly greater from the cake than from the roots. This comparison shows that lean stock could be as economically and as well brought through the winter where fewer turnips are grown. Consequently, a substitute for the roots can so far be found, and in point of fact is found year by year in the practice of many successful winterers of cattle. Then fewer turnips could be given to live stock than is the practice of many at present. A revolution in this respect has already taken place as compared with the practice 30 to 50 years ago, when it was quite customary to give cattle as many of these watery roots as they would eat; whereas, now rarely are more than one-half cwt. allowed to any class of bovine stock daily. But the foolish and wasteful system of feeding sheep on turnips as their sole diet is still by far too common, and by the use of chaffed hay and richer concentrated feeding stuffs a considerable saving might be effected in the quantity of roots consumed."

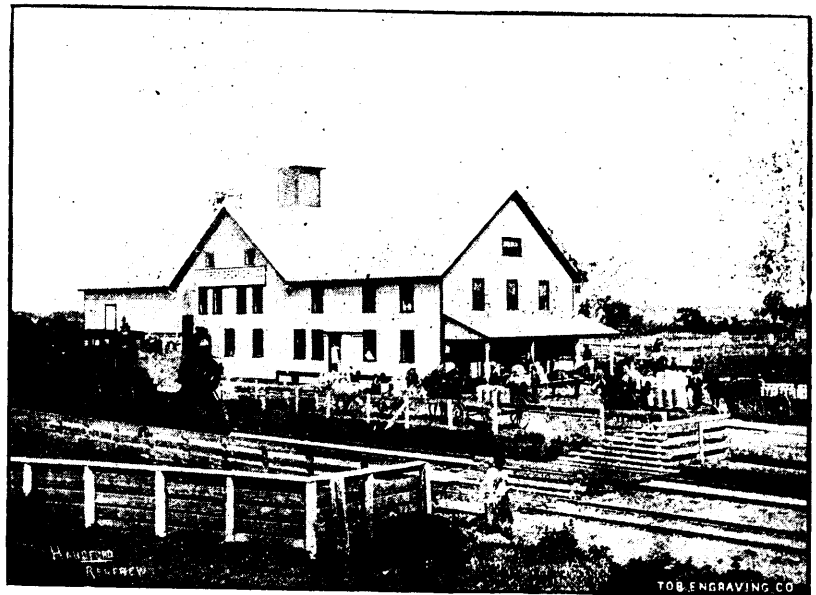
Sheep for Breeding

By Prof. J. A. Craig, Iowa.

The ram should show masculinity in many features. In those breeds that have horns, the latter should spring strong from the head and turn clear from the face. In all rams the face should be broad between the eyes, somewhat short, and with a Roman nose. The crest, or scrag, should be thick and rising, and the neck full. A point deserving emphasis is the depth of the chest. The body should sink

deep between the forelegs, and the ribs back of the shoulder should be deep and round, making the girth large and the brisket prominent and wide—two features that are indicative of a strong constitution. A live fleece, that is, one that is springy and not dead to the touch, and especially a dense, thick covering of belly wool, is also indicative of vigor of constitution. For the same reason, in those breeds that are wooled about the head, the more complete and dense this covering is the better it is liked. The legs of the ram should be straight and strong, and short. In movement the ram should be bold and active. This is often influenced by the condition. A ram should never be so heavy in flesh as to be useless for service, as is too often the case in the show ring. The flesh should be even and firm, and not gathered in masses or rolls at any part of the body. It is very apt to gather at the fore flank, leaving the back bare or raw. Excessive condition is likely to make the ram unwieldy in action, or result in broken down pasterns, which usually render a ram useless for breeding purposes.

The ewe should be rather long in the face, with fine features. The neck should be slender, and without any of the thickness noticeable in the ram. The body should be deep, round-ribbed, and specially long, so as to provide room for the growing lamb. The type of the good milking



Co-operative Creamery at Renfrew, Ont.

ewe verges strongly toward that which is typical of the good dairy cow. The ewe that milks well, and consequently rears early-maturing lambs, tends toward the wedge shape, deep in the chest, large-bodied, and wide across the loins and hips. The condition of the ewe should not be such as to impair her breeding qualities. Excessive fatness, as a rule, is in this way injurious. The flesh should be evenly distributed, and not gathered in bunches about the tail-head, and it should be firm and not flabby.

As a result of our consideration of the good and bad qualities of sheep, there arises the more important problem of breeding to reproduce the former and to remove the latter. I have failed to find, up to this day, where success has been obtained by in and in breeding, cross-breeding, or any other form, but that there was a man behind the system who knew well the merits and demerits of the animals he was breeding. And further, knowing these, he made his selection to get the best blend. This is the basis of a method of breeding that arises from what has gone before. For want of a better term, I have named it "balanced breeding," and I believe that this method has the means of developing and adding to the good qualities, and at the same time lessening and removing the demerits of our domestic animals.

To follow balanced breeding in sheep would mean the selection of rams with the leading thought of removing the

weakness of the flock. When one realizes the force of balanced breeding, and acts on it in the selection of sires, it is wonderful what strides may be made toward perfection in a few years. With this sire we correct a deficiency of the fleece, and yet retain the good qualities of form; with another, we add a little more bone; another deepens the flesh on the valuable parts, and so on, each marking a new advance; while closer discrimination and riper judgment keep disclosing new features to be attained in each additional effort.

Crop Yields in the West

Dr. Saunders, Director of the Dominion Experimental Farms, has recently returned from Manitoba and the North-West Territories and reports large yields of grain in the west. The crops throughout Manitoba are very good, and from returns already received from the threshings it is generally believed that the wheat crop will average 22 bushels per acre. In Eastern Assiniboia crops are also very good and will probably give an average quite as heavy as that obtained in Manitoba. There has been very little injury from frost. In the Indian Head district there is an unusually large acreage under wheat, and it is believed the crop in that section will average 25 bushels per acre. In the Prince Albert and Edmonton districts the rain-fall during the latter part of the summer was exceptionally great and the excessive moisture produced a rank growth of straw: hence the grain was late in ripening, and in some localities frosts occurred before it was fully matured. Many of these green crops have been cut for fodder, and will furnish a large supply of nutritious food for stock. The feeding of beef cattle and the manufacture of dairy products have for some years past been important branches of farm industry throughout this part of the North West country.

At the branch Experimental Farms at Brandon, Indian Head and Agassiz, B.C., which Dr. Saunders visited, good progress is being made. At Brandon some of the most productive varieties of oats have yielded from 100 to 112 bushels per acre; the best varieties of barley from 40 to 45 bushels, and wheat from 30 to 45 bushels per acre. Most of the best yielding varieties of wheat at Indian Head have given 30 to 38 bushels; oats, 80 to 97 bushels, and barley from 55 to 69 bushels per acre. Peas have not yielded so well, the crops ranging from 25 to 35 bushels per acre. At Agassiz about 400 acres are under cultivation, about one-half of which is planted to fruit. A large number of varieties are being tested in order to find out the kind best suited to the district and the most profitable to the grower. Last spring was very wet and the rain was almost constant throughout the blossoming period, which prevented the fruit from setting, and hence the fruit crop was small. The crops of hay and oats, which are the leading ones in the Province, were good. The quantity of wheat sown is small and the crop is about an average one. The season has been cool as well as wet, which has been unfavorable for corn, but field roots promise well.

The Breeding and Care of Horses

By I. P. Roberts, Professor of Agriculture, Cornell University.

"In breeding horses, don't try to breed the largest—their limbs give out and they go all wrong. Exceptions, draft horses, and in smallest ponies. A 2,000 pound draft horse will bring twice as much as one of 1,300 pounds; but is very hard to breed. Never get overstocked with horses, keeping twenty to forty, where eight to ten are enough for your land. Remember that half the success of farming lies in the business part of it. If you lack in the business sense, you will probably be a financial failure. Have a plan in your breeding. There is as much in having the right kind of a horse in the right place as in the

hired man. If you love horses, breed coach horses. If not, breed draft horses, which are easy to break and train. Roadsters come from the trotting class of horses. The hackney naturally belongs to the truck farm, and every farmer ought in a way to be a trucker. Low horses, and even ponies, are good for orchard cultivation.

"It is quite possible, by scientific feeding, to make horses grow large and tall, or the reverse. One successful horse-raiser I know feeds plenty of bone meal to give his horses fine, bony structure. The land has much to do with their quality. The little city of Lexington, Ky., sells annually in her streets \$2,000,000 worth of horses. The blue grass country produces horses because of the phosphates in the soil. In caring for horses, remember that the farm horse does not want his skin made too sensitive by over-currying. He perspires freely. What he does need is to have his feet and legs taken care of. Put your chief care upon him at night, after his day's work is done. Clean out his feet thoroughly, leaving no mud to dry in. He gets rheumatism from it. You only need simple tools to work with; first, an old broom, and finish off with a wisp of straw, rubbing legs and feet well, hard and quick. Cut off the fetlock if you like; the feet, without it, dry off more quickly. To keep the horse clean and free from dust, a light blanket of cotton or jute costs less than the time for cleaning. Then, too, the blanket keeps the hair straight, and helps to keep it from growing. Never blanket a horse in the stable while he is warm, unless you give him a dry blanket shortly after.

"The driving horse must not be fat, but lean and hard, be well curried, sensitive in mouth and skin. . . . The first great mistake in caring for horses is feeding too much hay; the second is not feeding often enough. A horse should be fed four times daily, and half the day's feed should come after 6 o'clock at night. More horses are hurt by overfeeding of hay than grain. A horse should not work over five hours without feed, and different horses require different food. Some horses do better on straw than hay."

Experiment Station Hogs

Eighty Head Fed in Four Lots for Forty-two Days

The hogs were just common, every-day stock, bought of farmers in the vicinity of Manhattan, and averaged about 125 lbs. each. The lots were as even as weighing and selecting could make them. The feeding was done twice a day, a feed being all that the hogs would eat up well in an hour or so after feeding. The two lots receiving skim-milk received the same amount all the time, but the Kafir corn was varied with the appetite of the hogs.

The alfalfa pasture made but slight difference in the gain, but made a strong difference in the slaughter test as well as in the looks of the hogs. However, hogs on full feed do not make the use of alfalfa that hogs not on full feed do.

The four lots of twenty hogs each were fed from May 30th to July 11th, and consumed grain as follows:

Lot 1—Kafir, whole,	6,736 lbs.	Gained 1,411 lbs.
Skim-milk,	4,200 lbs.	
Alfalfa pasture.		
Lot 2—Kafir, whole,	6,601 lbs.	Gained 1,319 lbs.
Skim-milk,	4,200 lbs.	
Lot 3—Kafir, whole, alone,	5,321 lbs.	Gained 834 lbs.
Lot 4—Kafir, whole,	4,931 lbs.	Gained 890 lbs.
Alfalfa pasture.		

At the close of the experiment the hogs were weighed on the college scales and shipped to Kansas City, without feed in the car or after reaching the yards, and the shrinkage on eighty head was but 230 lbs.

Each lot was sold on its own merits July 13th, and brought as follows:

Lot 1—Kafir, skim-milk, and alfalfa pasture,	\$4.10.
Lot 2—Kafir and skim-milk,	\$4.075.

Lot 3—Kafir alone, \$4.00.

Lot 4—Kafir and alfalfa pasture, \$4.05.

Armour Packing Company made a careful slaughter test and report as follows :

SLAUGHTER TEST.

Lot 1—20 hogs fed on Kafir corn, skim-milk, and alfalfa pasture, live weight 3,770 lbs., yielded 80.53%. When cut out the flesh showed a good firm condition; nice white fat and better proportion of fat to weight of hogs than in any of the other three lots. The distribution of lean and fat in bellies not so good as in lots 2 and 4.

Lot 2—20 hogs fed on Kafir corn and skim-milk, live weight 3,700 lbs., yielded 81.17 per cent. When cut out showed conditions of flesh same as in lot 1. One hog in this lot showed fat very yellow, others good white color. Proportion of fat to weight of hogs not so good as either lot 1 or 4; distribution of lean and fat in bellies better than in lots 1 and 3.

Lot 3—20 hogs fed on Kafir corn alone, live weight 3,260 lbs., yielded 80.30 per cent. When cut out showed flesh very irregular and rather soft; color of fat about the same as in the other lots but softer. Neither the proportion of fat to weight of hogs or distribution of lean and fat in bellies as good as any of the other lots.

Lot 4—20 hogs fed Kafir corn and alfalfa pasture, live weight 3,340 lbs., yielded 81.05 per cent. When cut out showed condition of flesh firm, not quite up to lots 1 and 2, color of fat good, proportion of fat to weight of hogs not so good as lot 1, better than lots 2 and 3; distribution of lean and fat in bellies better than lots 1 and 3, about the same as lot 2.

They are also following the lots through various other tests, including the curing, and will test the cured production in their restaurant, a report of which will be made later. It is very gratifying to know that the large packing companies take such an interest in this work, and with their aid the experiment station can hope to accomplish a great deal in the line of experimental feeding.

A bulletin containing a full account of this experiment and five others—in all 250 head of hogs, will soon be published, and any one who does not receive the Kansas Experimental Station Bulletins should send his name to the Agricultural Experimental Station, and have it placed on the mailing list.

PRESS BULLETIN, KANSAS EXPERIMENT STATION.

The Egg Type Hen

The egg-shaped hen is the one most desired by all practical poultrymen, and to be able to determine just what that shape is, when running through the various breeds, requires no little judgment. It is much easier for me to pick out the hen of the desirable shape than to describe her, but when one has the form well in mind he can select with accuracy the prolific hen of any breed. A hen with a long, deep body, carrying the tail well up, presenting a wedge-shaped appearance when viewed from the back or front, will usually be found a good layer, although she may not be a winter layer. This last trait, I believe, must be bred into them. They must have that inherent instinct, produced by generations of careful breeding, that induces them to lay in cold weather. Then, too, the food must be such as will supply the warmth and waste of the body and leave ample material to produce the eggs.

In the Leghorn we find more hens of the perfect egg-shape than, perhaps, in any other breed, although as a general thing they are not a winter laying fowl. Some strains are, when given the care and conditions necessary to make them so. But in nearly every flock of Leghorns there are enough of the laying type to give the breed the reputation of being the greatest layers.

The Plymouth Rocks, as they should be bred, have the desired egg-shape, but of late some fanciers have overlooked form, giving their attention solely to color. Others

have aimed at securing fowls of great weight, and have bred short, compact bodies of the Cochon shape. Among such fowls it will be hard to find very great productiveness, and to such an extent are birds of this class bred that the breed has been given a third or fourth place as layers. The shape given in the Hewes chart gives the correct type of an egg-producing hen of this variety, and when bred to this shape they will have no peers as layers, if not too heavy in weight. Rocks should never be above standard weight to be prolific. In fact, I believe the standard gives them a greater weight than they will stand for general utility purposes.

In the Brahmas, Langshans, and Javas, and in fact in all breeds, we find this same egg-shape, though somewhat modified or varied, and in the same breeds we find fowls that are utterly useless as layers. To breed a heavy laying strain it will be necessary to select the hens of the desired type year after year, and if winter layers are desired, to make a further selection from these egg-type hens of those that are productive during the colder months. Some will lay in winter and some will not, so only those that do should be used as breeders. Some fanciers will tell you that hens that have laid all winter are not in a condition to breed from in the spring; that the eggs will not be as fertile nor the chicks as strong. This I know to be a fallacy. If the fowls are not mated until within a week or two of the time you desire to use the eggs for incubation the eggs will produce just as strong chicks as though they were the first of the clutch. But the better plan is to breed from old hens that as pullets were known to be good winter layers. An old hen will not produce as many eggs during the cold weather as a pullet, and if there is anything in the theory that continued laying weakens the offspring you will thus avoid it.

The reason that a hen does not lay as well the second season is because she is more inclined to lay on fat, is fed less to keep her in laying condition, and consequently does not have the material wherewith to form the egg, her organs become relaxed and the egg yield grows constantly less. I do not believe it is possible to keep old hens in a condition of productiveness equal to pullets, but I do believe that their usefulness can be prolonged, and that they can be made profitable to the second and even the third year by careful management. We must work the fat off and feed only such foods as will keep the body in a healthy condition and furnish the proper material from which to form the egg. Old hens require more animal food than growing fowls and pullets. This may seem a strange assertion, but observation has convinced me of the fact. Green bone, though fattening, is also a physic and has to be fed with care to young fowls, but it does not harm an old hen to give her a plentiful supply. We must keep the fat from forming on the intestines. Animal food, peas, beans, clover, wheat, bran and foods of this character will do this, while giving abundance of material for egg production.—*L. E. Keyser in Reliable Poultry Journal.*

Grass in Orchards

It is customary among farmers who set out new orchards of young fruit trees to cultivate them pretty thoroughly while small, generally planting corn or potatoes as often as possible, as these afford opportunities for cultivating the surface most of the growing season. But as the trees grow larger the apparent profit from cropping the young orchard lessens very rapidly. Under the shade of trees in full leaf neither corn nor potatoes will do their best. Usually the orchard is cropped with grain between the hoed crops, and it is sometimes seeded with clover or with the grasses. This is always a severe check to the young trees. It often starts them to bearing, the check to growth being nearly always accompanied by the formation of fruit buds. So soon as the trees get to bearing, most farmers give up cropping the orchard, and if not seeded before, it is at once seeded with both clover and grass. But if the grass is

continued year after year the sod become impenetrable by air or water, and its roots exhaust the surface soil, which is always the richest. The trees soon become unfruitful, and unless manure is brought to the orchard to fertilize it, the tree will die before it has borne half the fruit it should have given under better treatment.

There is, however, one way to keep orchards in grass that does not lessen their productiveness. That is to have the trees so low that the shade of the branches with a very slight mulch of manure will keep the grass from growing too rampant and will also lessen the soil beneath so that it will be easily permeable by rains and melting snows. The low-trained orchard will also be better protected by snow than the orchard whose trunks are trained high with nothing near the ground to prevent the winter winds from sweeping the snow away. But the trunks of such trees should be banked up with earth in the fall so as to prevent mice from gnawing the bark and thus destroying the trees. Neither should grass or mulch be allowed to lie under the trees in winter, as this makes just the kind of harbor that mice like. If the limbs hang low some of them may be weighted down by snow; and the tender bark on the small branches will suffer. But this is better than leaving the mice to eat the bark around the trunk as they will often do, thus destroying it entirely. We have seen the same destructive work by mice where corn stooks were made in orchards, and left as winter came on near the trunks of young trees. A corn stook is a favorite hiding-place for mice in winter, as it furnishes both shelter and food. But mice have a strong liking for the sweet bark of young apple trees, and will not miss any chance given them of getting it when the green food that they find abundant in summer cannot be had.—*Mass. Ploughman.*

Farm Bookkeeping*

By J. G. Cowie, Caledonia

Bookkeeping is a subject considered by some of little importance to farmers. It is all very well, they say, for the manufacturer or the business man to keep books, but for the ordinary farmer they are unnecessary, and they can get along very well without them.

It may be true that many men have made farming a success in the past without the slightest knowledge of bookkeeping, and even at the present time such work is not absolutely necessary. But there are many things not absolutely necessary which we find profitable, and I firmly believe that every farmer would find it both interesting and profitable to practice some simple system of bookkeeping.

I have been making inquiries among a good many farmers lately and have been amazed to find how many there are who keep no accounts whatever, and the only idea they have of the year's profits or losses is arrived at from the number of dollars they have in their pocket at its close or the bills which they cannot pay. A man tells me there is no money in farming, and I ask him what yearly income he derives from his farm, and he cannot tell me. The cry of hard times is sometimes raised and the poor farm is blamed for it when too often it is not the fault of the farm, but mismanagement or extravagance in some other direction.

Now bookkeeping will not make a poor man rich nor a lazy farmer industrious, but it will assist one in ascertaining where his chief sources of income are and what return he is getting for the money invested. But someone will say that in order to keep books we will need to go to college and acquire a business education. It is possible that a term spent in a business or agricultural college would be a paying investment to most of us, but my present purpose is not to advertise colleges, nor am I going to recommend any elaborate system of bookkeeping to farmers, for I well know that the most of us have neither the time nor the education for that. To keep a thorough and complete set

*A synopsis of an address prepared for Farmers' Institutes in Ontario, condensed for publication by the Superintendent.

of books by the double entry system, opening accounts with every field and with all classes of live stock would not only require considerable business education, but would also necessitate the weighing and measuring of all crops produced and all food consumed by different kinds of stock. With ninety-nine farmers out of one hundred such work is out of the question, but though we may not be able to go so far, there is a great deal any of us may do which for all practical purposes will prove almost as beneficial.

The first year I did any such work an ordinary diary was used, in which a very brief record of each day's work was kept, unusual occurrences in the weather, and any business transactions. In pages ruled for the purpose the receipts from everything sold off the farm during the year were entered. At the end of the year these were classified, and I was able to tell the exact receipts from cows, hogs, sheep, poultry, grain, etc. The amounts were so much larger than I supposed that the next year I attempted to keep account of the expenditure to see what had become of it. Even if I never went further, I would consider the time well spent in continuing this from year to year, but in keeping the accounts I have made some additions and improvements. At the present time I use what is sometimes termed a special column journal ruled as shown in the sketch below :

RECEIPTS.								
Month.	Day of month.	ARTICLE SOLD.	Dairy.	Hogs.	Poultry.	Sheep.	Grain.	Miscel.
Jan.	2	55 lbs. butter at 20c.....	11 00					
"	"	14 doz. eggs @ 25c.....			3 50			
"	5	64½ bush. wheat at 70c.....					44 94	
"	9	50 lbs. butter at 20c.....	10 00					
"	"	2 bags potatoes at 65c.....						1 35

EXPENDITURE.						
Date.		Farm Expen.	House Exp.	Clothing, etc.	Religious and Charitable.	Miscel.
Jan.	1	Expen. to market, 60c.: team shod, \$1.00..	1 60			
"	"	Pr. Boots.....		3 00		
"	"	Groceries, etc.....	2 40			
"	4	Insurance on buildings	10 60			
"	6	To Church treasurer...			10 00	

N. B.—In a properly ruled book the receipts and expenditure would be on opposite pages.

Any number of columns may be used and at the end of the year it is only the work of a few moments to get the total receipts from each department. It will readily be seen that one cannot in this way find the profits from different branches, because unless we have kept account of the actual cost of our cows, hogs or sheep for the year we cannot tell the actual gain. But if we desire to know the profits derived from the whole farm, it may be done without much difficulty.

At the beginning of the year I take stock. This is nothing more than placing a value upon the farm live

stock, implements, grain on hand, etc. After the first year this is comparatively easy. During the year all expenditure in connection with the farm is added to this, such as wages, taxes, insurance, running expenses, feed, etc. At the end of the year stock is again taken and the receipts of the year are added to this and the difference between the two amounts is the returns we have received from our work and the interest on the money invested. By allowing a fair amount for wages for the different members of the family we may then tell whether the money invested is yielding any dividend or not.

That this system is incomplete I do not deny, but because it gives me much information that I desire, I would recommend it or something similar to others.

There may be many farmers who do not feel disposed to this work who have boys whom they wish to interest in farming. Get them a book and let them keep the accounts and if it does as much to create in them an interest in farm life as it did in me you will be amply repaid.

Two Meals a Day Enough

By John Suggitt

Having been in the business of feeding cattle for the British market for fifteen years, and having a love for the work, I have been endeavoring to get on the inside track of how to secure the most profit out of the feed, and have concluded that two meals in one day is all that a beast can profitably consume. In the first place, night and day are all the same to a beast that is tied up. Exercise is done away with, and they must have time to chew their feed over well. I find that in feeding three times a day the noon meal is given when the cattle are chewing over the first one. It is not a question with me how much feed I can put through a beast, nor how little I can get him to live upon, but to get him to take the good out of what he eats.

Since I adopted this plan six years ago I have not had a beast off his feed nor irregular in his digestive organs. When feeding three times a day I had trouble. We hear a great deal now about cattle forming habits, especially in the dairy line. We milk our cows twice a day, and we feed our calves twice a day. If we feed our young stock twice a day, while in the stable, they will not look for any more when we come to fatten them.

My plan of feeding is first to look in the crib to see that it is clean. Then we give 25 lbs. of turnips and let them pulp them themselves. When they eat them we give wheat straw harvested on the green side and well saved. Cut up 15 lbs., mix with $1\frac{1}{2}$ lbs. pea meal and 2 lbs. of oats ground fine. This is for the morning meal, and the same in the evening. We try them with water, and sometimes they drink and sometimes they do not. With the right kind of cattle, and care, a beast should gain in six months on an average 325 lbs. This ration is for a beast weighing 1,100 lbs. when beginning to feed.

Productiveness Not Constant in Variety

The facts are, as shown by the Experimental Farms Report, 1898, that the variety of pease, Arthur (46 bushels per acre), which was highest at Ottawa, was the second lowest (28 bushels per acre) of all the varieties at Indian Head, N.W.T.; and the variety, White Wonder (20 bushels per acre), which was the lowest in yield of all the varieties compared at Ottawa, was second highest at Agassiz, B.C. (39 bushels per acre).

The variety, Harrison's Glory (59 bushels per acre), which headed the list for productiveness at Brandon, Man., gave the lowest yield of all the varieties tested at Agassiz, B.C. (22 bushels per acre); and the variety, Creeper (23 bushels per acre), which was at the very foot of the list of all the varieties tested at Brandon, Man., was included in

the list of the twelve highest at Indian Head, N.W.T. (43 bushels per acre). These are only instances, and the evidence of the whole of the lists is in the same direction.

It is the most convincing evidence I find anywhere that the variety, in regard to productiveness, varies with the locality where it is grown, or varies in degree as it happens to hit the conditions of the locality, or as it adapts itself to them. Could anything be more convincing?

There is much more evidence on the subject, all showing that the productiveness of a variety depends on whether it happens to fit into the conditions of the locality where it is grown, or adapt itself to them. Take, for instance, the relative place as to productiveness of some varieties, grown on the Central Experimental Farm, Ottawa, and on the Experimental Farm at the Ontario Agricultural College, Guelph, Ont.

Of 52 varieties of pease compared on the Experimental Farm at Guelph, Ont., a variety named White Wonder stands at the head of the list for productiveness on the average of eight years' tests; it stands third on the list there for productiveness in 1898. The variety named White Wonder stands lowest on the list of the varieties compared at the Central Experimental Farm, Ottawa, in 1898.

The variety Early Britain stands third lowest (55th) on the list of varieties of pease compared as to productiveness on the Central Experimental Farm, Ottawa, in 1898; whereas it is the variety which gave the highest yield per acre of the varieties of pease tested by experimenters of the Experimental Union throughout Ontario in 1898; and it stands second highest on the average for eight years of all the varieties grown on the Experimental Farm at Guelph, Ont.

What is true of pease appears to be true also regarding other farm crops.—*Prof. Robertson.*

Autumn Work in the Garden

It seems hard and needs a good deal of resolution to start fall work in the garden, but it is necessary for the well-being of the plants, and for the neatness of the borders. Stems and tops of herbaceous plants must be cut off and well rotted manure dug into the soil. Hardy roses should be kept pruned into manageable shape, and before very hard frost they will be the better for having earth heaped around them, as well as tender varieties. When autumn leaves can be gathered over them, they make a good warm blanket, and can be kept in place with a few branches. Clematis should be cut back to within two feet of the ground, and protected in the same way. Cannas, dahlias, gladioli and other tuberous plants should be dug up and dried a little in the sun, then stored in a dry cellar, but away from furnace heat. Wherever bulbs are to be planted the ground should be prepared carefully, and all rubbish taken off. Plans must be made for next season and herbaceous plants set accordingly. Grape vines can be pruned, and a little later they may be put down from the trellis and covered with earth. All dead wood should be cut from shrubs, shade and fruit trees. It is a good time to take off the rings of the tent caterpillar, so destructive last spring in orchards. Only the other day a thoughtful apple picker when bringing in the rosy fruit brought also a handful of rings that she had taken from the trees. As each contained several hundred caterpillars, it was easy to estimate the value of this act of forethought. Vegetables, too, should be taken out of the ground and dried before storing. While the land is always better for being dug or ploughed in autumn, at the same time planning for a rotation of crops, onions do well on the same ground year after year, but most of our vegetables improve by a change. Wood ashes should be applied, and any manure well dug in will show results in spring. If changes are to be made in the herbaceous border, it can be done as soon as the leaves fall, and the same rule applies to shrubs and trees.—*Selected.*

Does Farming Pay?

The article on "A Farmer's Balance Sheet for 1898," which appeared in the *Review of Reviews* for last March, shows the net profits on 6,000 acres of Iowa grain-farming to have been \$50,855.22.

Ruben and Lucien Bradley were born and reared on a Michigan farm. This farm had been cut from the woods by the father, and endless toil had been expended in bringing it to a fair state of productiveness. But, even when the boys became of age, it produced only a scant living for the family.

The problem of a livelihood and a vocation forced itself upon Reuben and Lucien. They were strong, steady and industrious.

They had graduated from the village school. The father was not able to set them up in business. They knew it and did not complain. He had done the best he could. Reuben was tired of the country. He went to town and apprenticed himself to a harness-maker. Against the advice of his young friends, Lucien bought sixty acres of land and ran in debt for it.

In a year Reuben was earning a dollar a day. After the day's work he wore a white shirt and collar and pointed shoes because other people did, not because they were more comfortable. He had no debts. Lucien had fair crops, but they yielded little more than enough to pay the interest on the mortgage. He wore a ragged shirt and patched breeches and cowhide boots. People said that Reuben was making a gentleman of himself and learning a trade in the bargain.

In two years Reuben had completed his apprenticeship. He is now earning ten dollars a week. He boarded in a house that had a fancy verandah and green blinds. His clothing improved. Lucien was still ragged; but he paid his interest and \$300 on his principal. People said that Reuben was bound to come to the front.

Reuben became foreman of the shop at \$50 a month. He bought a house and lot on the instalment plan and paid for it within five years. The country people called upon him and ate dinner when they went to town. Lucien paid off the mortgage and owned the farm. People said that Reuben and Lucien were good citizens.

In ten years more Reuben was still foreman of the shop. He received the same wages. He lived in the same house. He wore the same cut of shirt and same kind of pointed shoes. He smoked Havana cigars. Lucien built a new house and barn. He had a good carriage and a driving horse. He smoked a pipe. The neighbors saw that every year he made some improvement on the farm. The barn was full of tools. He wore a white shirt when he went to town and he had a pair of button shoes. People said that Lucien was becoming a prominent man; and his word was good at the bank.

Reuben began to complain that harness-making was too confining. His health was breaking down. The proprietor of the shop was selfish and would not die and leave the business to him. Harness-making was not what it used to be. Lucien bought more land. He went fishing when he wanted to. Reuben came out now and then to spend a Sunday. The birds seemed to sing more sweetly than ever before, and the grass was sweeter. Lucien endorsed Reuben's note.

Lucien has pigs, cows and sheep and chickens and turkeys and horses. He raises potatoes and beans and corn and wheat and garden stuff and fruits. He buys his groceries, tobacco and clothes. Reuben buys everything.

At the close of the year Lucien puts \$100 to \$300 in the bank; or he takes a trip to Boston. Reuben does well if he comes out even. Lucien does not fret. Reuben grumbles.

The moral is that the \$200-a-year income farm is a more important factor in the national welfare than the \$50,000 income farm is. The one is in the reach of any industrious and intelligent man. The other is in the reach of the few. The one is safe and steady. The other is speculative and

uncertain. We need the moderate and modest farm to make citizens. We use the other to make money. The large money making farm is a useful object-lesson. It shows that business and executive ability can make money from the land as well as from a salt mine or a bicycle factory. But it is a fallacy to hold it up as the ideal in American farming.

CORRESPONDENCE

Commercial Fertilizers

Information Wanted About What to Use

To the Editor of FARMING:

Seeing a good many articles in FARMING about artificial manure, and never seeing any used on grain crops, I would like to give some a fair trial. I have a piece of land that I want to seed down the coming spring. It is not poor nor yet is it as rich as I would like. It is clean and free from all foul seeds. It is now well fall plowed. I intend to sow it thin with spring wheat so that the grass seeds will get a fair show. I have no manure suitable to put on it, therefore I would like to try some artificial. The soil is a clay loam and has been timbered with pine and hardwood. A good deal of limestone was once in it. As to the kind of manure and quantity to use I would like to have your opinion and that of others.

VERITAS.

Questions like the above are usually answered in our Questions and Answers column, but as our correspondent desires information from any of our readers who know anything about or have used commercial fertilizers, we insert the letter here and will be pleased to publish information in regard to it.—EDITOR.

The Dominion Live Stock Commissioner

To the Editor of FARMING:

Referring to the recent appointment of a Live Stock Commissioner for the Dominion, I do not hesitate to say that the Minister of Agriculture did a very wise thing in making the appointment. Those who know something of what has been accomplished during the last few years in connection with the Department of Agriculture in Toronto and the Live Stock Associations of Ontario, are in a position to judge of the extent and importance of the field which opens before the new Dominion Live Stock Commissioner. I cannot think of any more important work for the Department of Agriculture than the promotion of interprovincial trade in cattle, sheep, hogs, and horses; the regulation of railroad and steamship rates, etc., for the benefit of the live stock industry; and the opening up of markets for our animals at home and abroad.

The work is important; and there is no doubt that F. W. Hodson is one of the best men that could have been chosen for the position. He possesses many qualifications. He has had ample experience as a stock raiser, agricultural editor, and secretary of the Live Stock Associations of Ontario. He is a worker, a most persistent and untiring worker. He is an excellent organizer and a good executive officer; and he has the valuable art of managing men so as to secure their assistance in carrying out his plans. In a word, I think I may say that he knows what to do and how to do it; and I congratulate the Dominion on securing Mr. Hodson for what many consider one of the most important positions in the country.

Yours,

JAMES MILLS.

Agricultural College,
Guelph, October 30th, 1899.

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.

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

Annual Membership Fees:—Cattle Breeders' \$1; Sheep Breeders', \$1; Swine Breeders', \$1
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' Associations 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 animals. Should a member fail to do this his name will not appear in that issue. The data will be published in the most condensed form.

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

FARM HELP EXCHANGE

The Farm Help Exchange has been started with the object of bringing together employers of farm and domestic labor and the employees. Any person wishing to obtain a position on a farm or dairy, or any person wishing to employ help for farm or dairy, is requested to forward his or her name and full particulars to F. W. Hodson, Secretary, Live Stock Association. In the case of persons wishing to employ help, the following should be given: particulars as to the kind of work to be done, probable length of engagement, wages, etc. In the case of persons wishing employment, the following should be given: experience and references, age, particular department of farm work in which a position is desired, wages expected, and where last employed.

These names when received together with particulars will be published FREE in the two following issues of the "Agricultural Gazette" and will afterwards be kept on file. Upon a request being received the particulars only will be published, the names being kept on file.

Every effort will be made to give all possible assistance, to the end that suitable workers, male or female, may be obtained. Every unemployed person wishing to engage in farm or dairy work is invited to take advantage of this opportunity.

Help Wanted.

Mr. L. F. Staples, of Ida, desires to employ by the year an industrious, pushing, honest man who thoroughly understands farm work, and the care and management of horses and cattle. The situation here offered is a very desirable one, and one particularly suited to a man who wishes to obtain a really good and permanent place. a

A good reliable stockman wanted. Must be accustomed to taking care of both cattle and horses. No. 152. b

Dairyman and live stock man wanted to take charge of a large dairy herd and other stock on a 260-acre farm, Minnesota. No. 148. b

Married man wanted as farm manager. Must be pushing, careful and entirely trustworthy. Give particulars as to position or positions held during the past four or five years. References wanted. No. 150. b

A first-class shepherd wanted to fit flock of Shropshire sheep for auction sale in United States. Services will be wanted until after the sale. None but experienced men need apply. Some of the young men of the Province may obtain good experience wages by taking charge of this flock. No. 155. a

Domestic Help.

Working housekeeper for widow on farm. Must be first-class plain cook and laundress, tidy about person and work, and able to go ahead without overseeing. No other need apply. Wages to begin with \$8 per month. If satisfactory a permanent situation. Family of six. Apply to Mrs. A. M. B. Stevens, Peebles, Ont. b

Situations Wanted.

An experienced herdsman and poultryman wishes a situation. Was brought up on a stock farm. Age, 21 years. Wages, \$20 per month. First class references. Apply to Wm. Quirie, Ivan P.O., Ontario. a

Married man with long experience in mixed and stock farming wishes a situation. At liberty after April 1st, 1900. Age, 33 years. No. 153. a

Married man, 37 years of age, no family, wishes a situation as farm foreman. Reply stating wages. Best of references. No. 154. a

A young man used to mixed farming wishes a situation. First-class references. No. 149. b

Married man, having experience in both Ontario and Manitoba, wishes a situation as foreman of a farm. Accustomed to the care of all kinds of live stock, including poultry. No. 151. b

N.B.—Where no name is mentioned in the advertisement apply to F. W. Hodson, giving number of advertisement.

Institute Memberships.

The following is a list of the Institutes from which names have been received since the last list published:—

Algoma East	1
Essex North	41
Kent East	3
Lenark North	1
Peterboro' East	2
Simcoe Centre	2

Stock for Sale.

The next list of stock for sale will be published in FARMING, November 21st. Members of the associations are requested to forward their lists of stock for sale to the secretary not later than November 14th.

Association Car of Thoroughbred Stock.

A number of applications have been received for space in a car for Manitoba and the Northwest. It is expected that a car will leave about the middle of November. Any person wishing to send registered cattle, sheep, swine or horses to Manitoba or the Northwest should make application for space at as early a date as possible. Full particulars may be obtained from F. W. Hodson, Parliament Buildings, Toronto, Ont.

Ontario Provincial Fat Stock, Dairy, and Poultry Show.

The Ontario Provincial Fat Stock, Dairy and Poultry Show is this year to be held in the city of London on the dates given in the prize list, which are from the 11th to the 15th of December. The exhibition will be formally opened at 8 a.m., December 12th, and will close at 3 p.m., December 15th. The milking competition, which extends over forty-eight hours, will take place on the 12th and 13th of December. All animals competing in this class are required to be milked dry in the presence of the judges at 6 o'clock on the evening of December 11th. During the week of the exhibition the following associations will hold their annual meetings in the Farmers' Pavilion, Exhibition Grounds, London, viz.:

Dominion Cattle Breeders' Association, on Monday, December 11th, at 7.30 p.m. After election of directors and other routine business, an illustrated address will be delivered by Mr. J. S. Woodward, Lockport, N.Y., entitled "The Ideal Dairy Cow." Mr. Woodward is a very successful and widely-known farmer and dairyman in New York State, and is an excellent public speaker.

Dominion Swine Breeders' Association, on Wednesday, December 13th, at 7.30 p.m. After routine elections, etc., Prof. G. E. Day will deliver an address, dealing with the "Requirements of the Home and Foreign Markets for Pork and Pork Products." Addresses will be delivered by the judges in the bacon classes and other experts.

Dominion Sheep Breeders' Association, on Thursday, December 14th, at 7.30 p.m. Before the close of this

meeting Prof. John A. Craig, of Ames, Iowa, will deliver an illustrated address entitled "An Ideal Mutton Sheep." Addresses will also be delivered by the judges of the carcasses in the sheep department.

Judging in all classes will commence at 10.30 a.m. on the 13th, and it is hoped will be completed by noon of the 14th. Heretofore the owners of steers, bar.ows, and wethers have been required to record them in Canadian, English, or American Records. This no longer is required, but the dam and sire of such animals must be recorded, and the owner must furnish a written statement showing the breed of the animal, and the name of the sire and dam, giving the record numbers of each. The entry fee in the cattle department is \$2; the sheep and swine 75c. per entry.

The rules governing this exhibition will be strictly enforced, clauses 63 and 64 read:

No animal deemed unworthy by the judges shall be awarded a premium; but no premium shall be withheld merely because there is no competition.

All animals, except those exhibiting in the dairy classes, shall be judged from a consumer's standpoint. The awards shall be given to the animal most valuable from a consumer's point of view.

The following special arrangements have been made for exhibitors coming a distance of over one hundred miles:

SPECIAL TO EXHIBITORS COMING A DISTANCE OF OVER ONE HUNDRED MILES.

Any exhibitor requiring to bring his stock over one hundred miles from any point in Ontario will be entitled to a rebate equal to the freight charges on his shipment for the distance it was carried over one hundred miles. In order to avail himself of this privilege, an exhibitor must write the secretary at least three weeks before the show is held, giving full particulars as to the point of shipment, the distance from the show, and the carrying line. The exhibitor must also at the time of the show furnish a receipt showing the amount paid, the point of shipment, and the number and kind of animals included in the car. No rebate will be allowed unless the above conditions are complied with.

A NEW FEATURE.

Ten per cent. may be added to the prizes won by any exhibitor in any class if he furnishes the secretary, within fourteen days after the close of the exhibition, with a detailed statement setting forth how his animal or animals were bred, and how and what fed, and how cared for from the time of birth to the date of the show. If possible, the cost of the feed consumed should be given, if not exactly, approximately. An exhibitor of cattle who furnishes acceptable data concerning his cattle,

shall have the prizes won by him in the cattle department increased by ten per cent., but if he wins prizes in the sheep department he must furnish similar data concerning his sheep before the prizes won by him in the sheep department shall be similarly increased. An exhibitor of swine or of poultry will be dealt with in like manner. The exhibitor furnishing the most valuable information in the cattle department shall receive an additional prize of five dollars. A similar prize of five dollars will be given in each of the other departments, viz., sheep, swine, and poultry. If the statement furnished by an exhibitor is considered unworthy of publication by the judges on account of it not being practically valuable to the public, the writer shall not be allowed the additional ten per cent., nor be allowed to compete for the five dollars offered for the best statement in each department.

N.B.—Ten per cent. will be added to the prizes offered by the Dominion Cattle, Sheep and Swine Breeders' Association only.

No entry will be required to be made for the above.

BLOCK TESTS.

The block tests in the sheep and swine departments and the dressed poultry exhibition will be a marked feature of this show. An expert from Prof. Robertson's department will be present and have on exhibition a coop of birds being fattened by the most approved methods, also a cramming machine. This gentleman will deliver several addresses, at the time and place to be designated in the forthcoming programme, which we expect to publish in our next issue. The birds in his charge will be fed each day at 9 a.m. and 5 p.m., on the 12th, 13th and 14th; and at 9 a.m. on the 15th they will be slaughtered and packed. Prof. Robertson will also have on exhibition a case each of chickens, ducks, turkeys and geese, dressed and packed as they should be for shipment.

All exhibits sent to this exhibition will be carried by the various Canadian railroads at half rates. Half fare passenger rates have also been arranged for. This exhibition promises to be the most interesting and largest fat stock show ever held in America, as well as one of the largest and most interesting institute meetings heretofore held in Canada.

A special feature not heretofore mentioned, but interesting to dairy-men, will be a cream separator daily run by a gasoline engine.

Guernseys at Mount Vernon.

Guernsey breeders will be glad to know that the milk hereafter sold at Mt. Vernon, the historic home of the first President, George Washington, will be furnished from a herd of Guernseys. The managers of the

estate have recently purchased a number of Guernseys to replace the cows formerly used. Visitors to this beautiful place will now find Guernseys occupying the stable and fields which were once the delight of Washington. What can be more pleasing than the fawn and white markings so characteristic of our favorites, amid the beautiful green of that well preserved plantation, and what more enticing than a glass of milk of that rich golden color, which that from the Guernsey has to a greater extent than any other breed. May good fortune attend the Guernseys in this honored home.

Women's Institutes of South Ontario.

At Whitby on the 29th of June last a meeting of the ladies of South Ontario was convened by Mrs. J. L. Smith for the purpose of organizing a Women's Institute. There was a fair attendance, considerable interest was manifested and a partial organization was effected. A short time later another meeting was called, officers were elected and the Women's Institute of South Ontario was fairly launched.

On October 12th the first regular meeting of the Institute was held in the Council chamber at Whitby. The officers and nearly every person interested in this new venture were very anxious that everything should go off well and they spent much time and energy in preparation for the meeting. Their efforts were splendidly rewarded. The room was already well filled when Dr. Hare, President of the Ontario Ladies' College, arrived with a bevy of young ladies, and extra chairs had to be provided. The President, Mrs. S. L. Brown, after explaining the objects of the association, proceeded to carry out the programme which had been provided. Mrs. W. Ayres, organist of the Methodist Tabernacle, rendered most successfully two instrumental solos, and Mrs. T. J. Jackson's vocal solo was appreciated by all. The President then called upon Miss Meen, of Whitby, who read an excellent paper on "Winter Window Gardening." The subject was well treated, and many useful hints were gathered by the ladies present. In this country, where our winters are so long and where so much of our time is spent in the house, we are eager to learn how to keep plants and flowers and have them thrive well in our rooms. Miss Meen helped us by her paper, and we hope to hear from her again.

Miss Laura Rose, Instructor at the Ontario Agricultural College, Guelph, was then called on for an address on "Bread Making." This lady has such a pleasing manner and was so thoroughly in earnest that her remarks were listened to with the closest attention. She discussed the kind of flour to select for family use, the making of yeast, the setting, kneading and baking

of bread, also the care of bread after it is baked. This was followed by a lively discussion, in which many of the ladies took part.

Miss Blanche Maddock, a graduate of the dairy department of the Ontario Agricultural College, was also a delegate to the meeting. She spoke on "Bacteria as They Affect the Home, the Soil and the Dairy." Miss Maddock's address was well received, and all were sorry that time did not permit of a longer discussion on this very important subject.

Miss Ross again came forward and took up the second part of her subject, namely, "Butter Making." The care of milk, the different methods of setting, skimming, airing and churning were all explained. Throughout her entire address she was listened to with the closest attention. The Secretary of the Institute writes: "The delegates you sent us were most helpful to us, and the ladies will be heartily welcomed when they come to Whitby again." At the business meeting the list of officers was completed, and the paces of holding local meetings were discussed. Pickering, Port Perry, Greenbank and other places were mentioned, and the Executive is likely to hold other meetings in the near future. It was also proposed to confer with the officers of the local Farmers' Institute, which holds a meeting in Columbus in December, to see if arrangements could not be made to hold a joint meeting at that place. The following is a list of the officers of South Ontario Women's Institute: Honorary president, Mrs. J. L. Smith; president, Mrs. S. L. Brown; vice-president, Mrs. Purves; secretary, Mrs. Wm. Anderson; treasurer, Mrs. J. B. Mitchell.

In closing her report, the Secretary says: "Judging from this, our first meeting, I think we may safely say that the Women's Institute of South Ontario is likely to become, at an early date, a very successful and useful organization."

As the Twig is Bent the Tree Inclines.

By Miss H. M. Corman, Stony Creek, Ont.

"As the twig is bent so will the tree incline," is an ancient maxim and one well worth considering. Its application reaches far and wide. Its boundary must, of necessity, be unlimited. Let us pause for a moment beside the vegetable world and see if it will apply here. Examine the tiny seed before it is put into suitable condition for growth. The seed germ is there in perfection, but, to all appearances, lifeless, yet we know that life or the power of life and growth is wrapped in that little case awaiting only the opportunity for development. Apply this and who can tell the result. It may be a thing of beauty or it may be the majestic oak which shall grace field and

forest, affording valuable shelter alike to beast and bird; or the stately pine which shall sail the ocean. But let the conditions be unfavorable and what a dwarfed, perverted and sickly plant it becomes, dying before it has fulfilled the mission for which nature designed it.

Leaving the plant, let us turn our attention to the animal kingdom, and does it not apply here also? As the plant, so the animal requires certain conditions for the best development. It must have good shelter, food and care, so that healthy nerve and muscle may form. The care of the animal will affect not only its physical structure but largely its disposition. Let the calf or colt run loose and untrained for two or three years and then try to handle it; what a task the training becomes! But begin while the animal is young, how easily it is then accomplished, showing that the capabilities are more easily bent while young and more lasting the habit when formed. This thought leads us to consider another animal of a higher order, "man," with all his possibilities, endowed as he is with mind, intellect and will, possessing a moral and a spiritual nature, made in the image of his Creator and able to be a blessing or a curse to his generation. Man was placed upon this earth for progress; there is no neutral ground; the development of some is a boon to the human race, that of others is a lasting blight. Why these things? Let us examine the early environment. Is it because one child is born with an evil nature, inherited from some ancestor, carrying out the divine injunction that the sins of the fathers are visited upon the children? The other child is born in this world, blessed with all good qualities. While it is true that the child begins life with certain tendencies which in childhood are very plastic, if trained and guided under ennobling environment may develop into one of the world's illustrious personages. On the other hand, the same child placed under degrading environment, with little or no training, will, in all probability, grow up a disgrace to the name it bears. A poet has said: "I am a part of all that I have seen or heard." Think of it. If that be true how carefully should the young, sensitive and tender human plant be guarded! Early ideas take deep root and make or mar the coming years.

The question arises, how much can the Women's Institute do towards training the young to consider the questions of Domestic Science? Can not this Institute in some way develop an outside interest and not wait for people to become members before thinking of interesting them? There should be an undergrowth reaching out its branches in all directions. Domestic Science, as any other question of the day, must be brought prominently before the public before any measure of success can be hoped for. If the young minds could be set

thinking along practical lines, the older people might be reached through them. If the ladies of this Institute will permit a proposal, I would suggest that they consider the advisability of publishing some of the papers read at their regular meetings and thus be the means of arousing the inmates of many a home, reading subjects of which they have not yet heard. Of course they will meet with opposition; every good work does. There are always those who never lend a helping hand but can tell their neighbors all the weak points as they see them. Please come to our meetings and tell us there, you may do the Institute good and at the same time receive some new idea yourself which will lighten your whole week's work while your mind dwells upon the thought. We are sorry that more of the girls do not appear to think they might gather some useful thoughts which could be turned to account in the days to come. We hope they will see that life consists of something besides being amused.

Perhaps some are prevented from becoming members because they may be laughed at for going to the cooking school, as some choose to term it. Never mind; let me tell you something. I have heard of a man who said to his wife that she could go to the cooking school until she began to shorten the allowance of pie, and then she must stop, for he did like pie. I'll venture there is not a man in this house to-night who would object to his wife or daughter or sister going to the cooking school if he thought she would learn some new and dainty dish with which to coax his fastidious appetite. Now, ladies, if any of you are unfortunate enough to have the good man of the house troubled with indigestion, just comfort yourself by thinking that his mother very innocently laid the germs of disease in childhood. A grandfather recently said in reply to a remark about his grandchild, scarcely a year old, making a dinner on fried fresh pork, "It is better to pay the butcher than the doctor." Perhaps some other grandfathers have said the same. He paid the butcher and now you pay the doctor.

A Valuable Guernsey Publication.

For many years the Guernsey Breeders' Association, composed of gentlemen residing in the vicinity of Philadelphia, have held meetings for the discussion of subjects of interest to Guernsey breeders. This association has done a great deal of good, and its proceedings have been very interesting. They have now in press a book which will contain a full record of the valuable papers and discussions they have had. It will be of great value to all Guernsey breeders. Particulars will be given of it in our next issue. It can be obtained through the club's office, or direct from the secretary of the association, Mr. Wm. B. Harvey, West Grove, Pa.

The Farm Home

Information Wanted.

By way of opening up a discussion that we think will be very helpful to all concerned we would like to have as many short articles as possible from the readers of these pages, dealing with the following topics. Contributors can write on any one or all of the subjects, as they see fit:

1. How can the long winter evenings in the farm home be most profitably spent?
2. What are your ideas as to entertainment for young people in the country?
3. What would be the best plan for arranging a reading circle in the farm home so that every member of it who could read could take part?

Dear Farmist,—In reply to your "Information Wanted," I shall not discuss any of the subjects, but shall tell of some ways some of the young men spend the winter evenings. Picture, if you can, the country store and in it, seated on nail kegs and soap boxes, perched on the counter, and with chairs drawn up to the wood fire, a group of men—young men and some not so very juvenile; men married, and men single. They are taking a certain amount of pleasure from the society of their neighbors (Man is a social animal!), but are they profitably spending the time? The intelligent host in one of these general stores said to me: "There are men and boys come in here night after night from the surrounding farms. They talk and smoke, and during the whole evening they never once get out of the barn-yard."

Girls and boys, let us get out of the barnyard, and join the Farm Home Circle around, I was going to say, the open fire-place, but I suppose around the library register would be more appropriate. You have ideas; please don't be selfish, but pass them on, as the boys at school do with the apple, so that we each may have a bite. What old school boy or girl will be next?

MEG.

Home Department of Farmers' Institutes.

By Anna Barrows in American Kitchen Magazine.

Usually this is called the "Woman's Section," and is held at the same time as the main institute in another hall, but the general verdict is that the men as well as the women should have an opportunity to hear and discuss such papers.

In the past there has been a tendency toward essays of a sentimental order, of which the following sentence is a type: "The model housewife

never gets tired, but always looks sweet and well dressed on a small allowance; she should always be gentle and never dictate." Fortunately, now, more practical topics are treated in a sensible fashion. Where State appropriations are made for this purpose annually, it is not too much to ask that at least one-tenth of the whole amount be expended for expert instruction in home science.

In a two days' Institute the evening may well be devoted to lectures, illustrated by the stereopticon if possible, on the "Home Garden," "Care of the Sick," "Bacteriology in Farm and House," "Plans for House and Grounds." Such lectures would be as entertaining, if rightly handled, and much more instructive than the usual evening programme of music and readings. The forenoon session of the second day, where numbers warrant it, may be held in two sections—one for the men, the other a demonstration in cookery for the women. In the afternoon time may well be spared for a brief demonstration before the whole assembly, with question box and general discussion afterward.

Perhaps to follow this some local club or grange will assume the expense of additional lessons in cookery, but it is seldom wise to have these entirely free, for they may be confused in the public mind with those intended merely to advertise some new food product.

The lecturers should have had most thorough training, and be specially practical and familiar with the details of everyday life. One can seldom explain a process clearly unless it has been worked out with both head and hand.

The utensils should be simple, but the best of their kind; there should be charts for illustration of food values.

The danger of arousing prejudices is slight under an experienced teacher. Subjects should be adapted to the locality. Every process should be reduced to its lowest terms.

There is a demand for this work, although the need of food study and sanitation is less felt in country than in cities. In the country families may exist under conditions where life would be impossible were there less fresh air. Less money would be spent for patent medicines in our land if the people understood better how to feed themselves.

There is a commercial aspect, also, which we do well to consider. The farmers yet will find it pays to go further still in the preparation of food where it is raised. A southern railroad has found it worth while to equip a train with all manner of appliances for the preparation of crops for market and send it through the South

with trained workmen to show the people how to make the best use of their crops. Many manufacturers of food products have sent out graduates of cooking schools to show the people how to use their wares.

The educational side of this work need not stop at the close of farmers' institute. In several states farm home reading clubs have been arranged and in others travelling libraries on household economics are available.

The Cow that Kicked Melinda.

She went to milk the cow with her hair fluffed round her brow,

And a happy little smile upon her lips;
Her hands were brown and strong, and she trilled a happy song,

But—how many of the safest of us slips.
The hired man ran in and made a fearful din,
As he hammered on the little cook-house window,

And he filled the house with fright as he yelled with all his might,

"The cow has kicked Melinda!"

That silence for a while could be heard for half a mile,

And the horror of it sunk in every heart;
But when the shock was over, like bull calves into clover,

You ought to've seen that little household start.

They found the story true, for she was black and blue;

And her granny piped an order thro' the window:

If the milk she milked is spilled, then the animal must be killed,
The cow that kicked Melinda.

In splendid halls adorning you sit to-morrow morning,

And spread your little napkin for a feed;

If you're disappointed much and your teeth do frequent touch

Something that is very tough indeed;

As you struggle and you sigh, to masticate you try,

And the trolley gong is sounding thro' the window,

Your spirits I might sear if I whispered in your ear,

"That's the cow that kicked Melinda!"

—The Khan.

The Farm Reading Room and its Contents.

By Megyra.

How few are the farm homes that contain a study, library, or reading room! Among all the farm houses I have visited I can recall not even one that had a convenient room, sufficiently large to accommodate two or three people when engaged in reading and writing, though often a room that would answer this purpose is set aside for a guest chamber, and is used only two or three times a year.

I have met with the small office for the private use of the manager. I have sometimes seen a writing desk and a few book-shelves in the dining or sitting room, and have often seen the paper rack in the kitchen, where the entire family wait until the supper

dishes are washed before they can get a chance to begin their study or reading. I have oftener seen some members trying to read or write, while others keep up a continuous, trifling conversation, and have not been surprised when the disgusted boy would go to his unwarmed room to study in peace if not in comfort.

The cosy, warmed, well-lighted, comfortably furnished study, where those members of the family who desire to do so may retire and read, write or meditate, undisturbed by foreign sounds, is a room not found in the majority of farm houses. Why?

I should think, especially where there are school children, it would be a much greater comfort than the spare room or the parlor. Some careful housekeepers consider books and papers should never be anywhere but on their proper shelves. To these a library would be a delight, for then the other rooms would always be in order. I enjoy a room in which something readable is always within reach.

There are few homes in the present day in which some books and papers do not appear. There are many, where the number is fewer than twenty and the papers are none but the local weekly. This state of affairs is oftenest found in the handsomest houses. I was amused recently by hearing a man who has plenty of lands and money at interest, saying, "What is the latest war news? I don't know what is going on now, our paper run out a couple of months ago, and I always forget to call and have them send it on again." I feel sure no one who reads this has been depending on the local weekly as sole literature. As well might a preacher of the present day attempt to benefit his audience, without some study of his trade papers as for a farmer to expect to keep progressing without reading farm journals, as many of them as he can afford. I suppose it is not likely that preachers will read this, so I can say that a good farmer is of much more importance than even the good preacher and he requires and deserves as good a library as any person of any other profession. Is he not working harder to-day and doing

more for his fellow-men than any one, except perhaps his wife? He needs and is entitled to books and papers other than those bearing directly on his profession; he cannot afford to let any part of his brain lie idle and undeveloped any more than he can afford to keep his best land occupied with stumps and dead roots or his best stock running idle and unproductive. He should cultivate breadth and depth of thought, and in order to do this he must come in touch with other thinkers, and owing to his isolated life this can be accomplished best by reading, not farm journals only, though some of the most useful thinkers of the present day are to be met with there; he must also read the newspapers, not simply the newsy gossip, about the neighbors, which is the least useful class of literature. He should read the important news of the world, thus learning of the changes that are taking place, the political events, etc., etc.

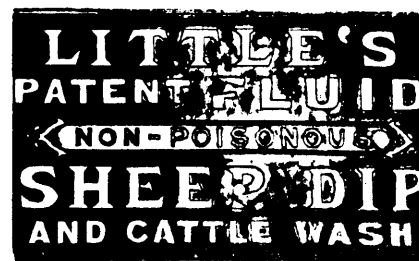
In the many magazines, we get the doings of the literary world, the musical and the artistic worlds, and much interesting matter that is presented in a convenient form, and novels should not be considered unimportant, for when reading them we can secure the mental rest which is so conducive to bodily rest. We get too, striking ideas, expressions and graceful, pleasing language, a knowledge of people and places, customs and manners and a breadth of thought that we, as a class, sadly need.

Mustard Pickle.

One quart each of small whole cucumbers, large cucumbers sliced, green tomatoes sliced, and small button onions, one large cauliflower divided into flowerets, and four green peppers cut fine. Make a brine of four quarts of water and one pint of salt, pour it over the mixture of vegetables, and let it soak twenty four hours. Heat just enough to scald it, and turn into a colander to drain. Mix one cup of flour, six tablespoonfuls of ground mustard, and one tablespoonful of turmeric with enough cold vinegar to make a smooth paste, then add one cup of sugar and sufficient vinegar to make two quarts in all. Boil this mixture until it thickens and is smooth, stirring all the time, then add the vegetables, and cook until well heated through.—*American Kitchen Magazine.*

Oyster Soup.

Pick over one quart of oysters, parboil them until they begin to separate and shrivel on the edges. Drain them and when cool lay aside the soft part to be used later. Chop the hard part fine, and put it with the liquor on to boil. Add one cup of chopped celery, a small slice of onion, a bit of mace and bay leaf. Let them simmer fifteen



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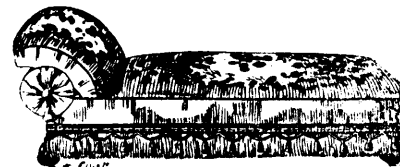
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minutes, then turn them into a strainer and press as much as possible of the oyster and celery through. Put the liquor on to boil again and add to it one pint of thick white sauce, made by stirring one pint of milk gradually into two tablespoons of butter and two of flour cooked together. Season with a dash of cayenne, one saltspoon of black pepper and salt to taste, the amount depending upon the saltiness of the oysters. Add the soft parts of the oysters, and when they are heated through serve at once, with browned crackers. Common crackers split and buttered and browned in the oven, or oyster crackers colored a delicate brown in the oven are more suitable than croutons for an oyster soup.—*American Kitchen Magazine.*

Frying.

Although very bad for chops or steaks, the frying pan is indispensable for some things, such as veal cutlets, lamb chops (sometimes), fish, pancakes, etc. Most meats and fish are usually fried with egg and bread crumbs. The frying pan must be kept clean. This is very essential, as the dirt that sticks to the pan absorbs the fat, prevents the meat browning, and turns it a nasty black color. Have a clear, brisk fire, as the quicker meat is fried the tenderer it is. According to what is to be fried, put little or much fat in the pan; fish and pancakes require a considerable quantity. The fat must always *boil* before putting the meat into it; if not it coddles. For veal cutlets a little butter is best and most economical, as it helps to make the gravy; but even this expense may be dispensed with, if incompatible with the income of the family, and yet the cutlets be well cooked. Most have a few slices of bacon with either cutlets or liver; the fat from this, if the bacon be not rank, will do very nicely; and if the meat be well flavored and fried quickly, and some nice gravy made to it, few persons would know the difference. Some like thickened and some plain gravy to these fried meats; some a large quantity, others very little; all these must be accommodated. To make these gravies, have ready a little burnt sugar to brown with; empty the pan of the fat, if it be, as is most likely, too rank to use; put some warm water, as much as you wish to make, in the pan; mix very smoothly sufficient flour and water to thicken it to taste; into this put as much butter as you like to use (a little will do, and more will make it richer); pepper and salt it sufficiently; stir it very smoothly into the pan, while the water is only warm; stir it well until it boils, and brown it with the burnt sugar to your taste. This will be a cheap and very nice gravy for all fried meats; and where meat is short, children are very fond of such over potatoes, haricot beans, or even bread in their plates; and, not being too rich or greasy, it will not disagree with them. Care

must be taken after the gravy is boiled not to let it boil fast for any length of time, as all *thickened* gravies, hashes, etc., boil away very fast and dry up; neither must it stand still in the pan; a whitish scum then settles on the top and spoils the appearance of it. On the plainest and humblest table dishes may as well look inviting.

N.B.—For all frying purposes be particular that the pan is thoroughly hot before using.—*Ideal Cook Book.*

If Wishing Were Having.

Hey, little lasses with eyes of blue,
And brave little laddies with eyes of brown!
What if a fairy should come to you
And show you the way to Grown-up Town!
Now tell me truly if I have guessed
That this is the gift your heart holds best.

Would you drop your dolly and leave your ball,
And quit your frolics in field and glen,
For the sake of feeling yourselves grow tall,
For the bliss of being real women and men?
Say, little lasses, and laddies too,
Now isn't this just what you would do?

Tell me, oh women with wistful eyes,
And men who plod on life's toilsome way,
What if kind fate, in some fairy guise,
Should grant the wish of your heart to-day?
Weighed in the balance of time's true test,
Which, of all gifts, would you count the best?

Would you leave the crowded city mart,
The glitter of gold, the crown of fame,
To sport as a child with care-free heart,
And eyes unclouded by grief or shame?
Tell me, oh world-tired women and men,
Would you be, if you could, a child again?
—*Ida Goldsmith Morris, in the October Ladies' Home Journal.*

Say each of the following six times:
Six thick thistle sticks.
The sea ceaseth, and it sufficeth us.
Mixed biscuits.
A growing gleam glowing green.
Mrs. Smith's fish-sauce shop.

"Wife," said a man, looking at the telegraph wires, "I don't see, for my part, how they send letters on them 'ere wires without tearing 'em all to bits."

"Oh, you stupid!" exclaimed his intellectual spouse, "why they don't send the paper; they just send the writin' in a fluid state."

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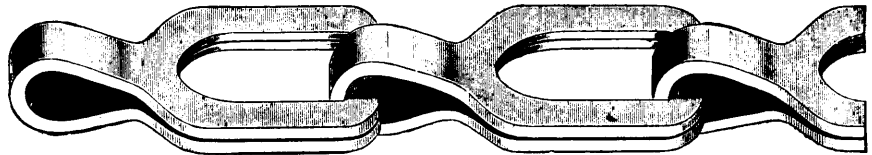
The annual meeting of this association will be held at the Sherman House, Chicago, on Thursday, November 23rd, at 2 p.m., when it is hoped that a large attendance of the members will be present. Volume 9 of the Stud Book is now going to press, and will be ready for distribution in January next. The secretary, Mr. Alex. Galbraith, of Janesville, Wis., in announcing the meeting, says: "The country's prosperity, the renewed interest manifested in breeding, and the substantial advance in the price of horses of all kinds, combine to inspire our Clydesdale breeders with confidence in the future; indeed, it is generally and confidently believed that no period in the past has presented a brighter outlook for the intelligent horse-breeder than right now."

Chicago Poultry Show.

The fourth annual exhibition of the National Fanciers' Association, of Chicago, will be held on January 22-27, 1900. A first, second, third, fourth and fifth prize will be awarded in all poultry classes, and a first, second and third in all pigeon, cat and pet stock classes. In addition to the regular prize list a number of valuable special prizes will be given. The prize list will be issued about December 1st. Mr. Fred. L. Kinne, Morgan Park, Ill., is secretary.

Two physicians at the bedside of a patient disputed as to the nature of the disease. At last one of them ended the discussion by saying: "Very well, have it your own way now, but the *post-mortem* will show that I am right." The patient was somewhat discouraged.

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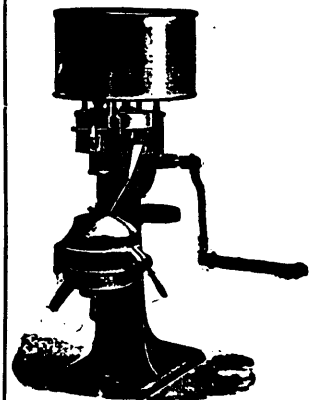
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The Difficulties of Farming.

The difficulties that confront the farmers in Canada, as I see them, are mainly of five sorts; and I believe that if they understand the fundamental principles of growing crops successfully, they will overcome these difficulties successfully in most years. But if they trust to a series of prescriptions or rules to guide their work, they will not make progress in crop growing.

These difficulties I put down as follows:

(1) Those that arise out of the growing of crops. (These are becoming greater every year from the partial exhaustion of the soil, from the increasing prevalence of weeds, and from the more vicious and general attacks of insect and fungus pests.)

(2) Those that come from the necessity of meeting the demands of markets for better qualities in everything.

(3) Those which grow out of the changed conditions of life, and which require the farmers to carry on more varied, mixed or diversified classes of farming. (These come from the growth of population in cities and towns; from the people becoming better off and more fastidious and exacting in their tastes; and through cold storage giving them an opportunity to market perishable things abroad.)

(4) Those which have come with low prices for general farm products, and which are beyond the control of the people of this country; and

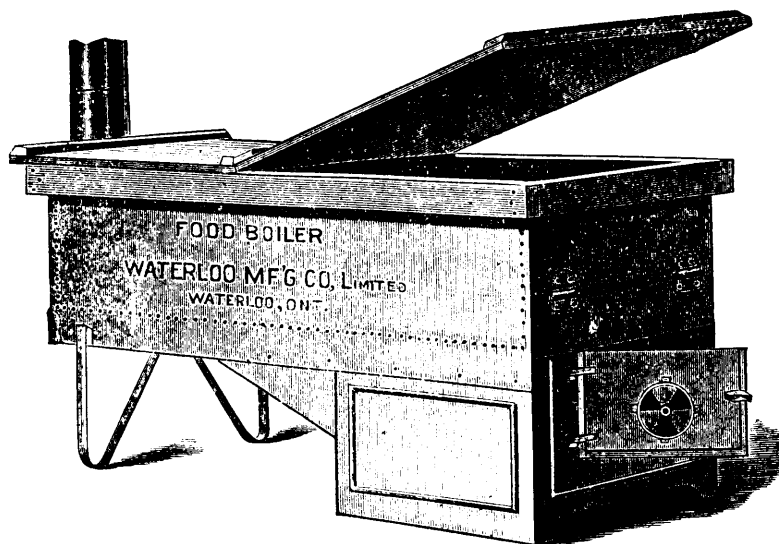
(5) Those that are inseparable from maintaining the fertility of soil economically.—*Prof. Robertson.*

Hedgehogs.

Hedgehogs in the wilds of Yorkshire are cooked as follows: A hole is dug in the ground, in a dry spot, and a big fire is made, into which several large stones are thrown. When these are red-hot the hole is first lined with them and then with ashes, and the hedgehog having been previously caught and wrapped in stiff clay, so that there are no spines projecting, is dropped bodily into the hole, after which more hot stones and ashes are heaped upon it, and the rest of the fire is shovelled over the lot. The cooking takes about half-an-hour, and at the end of that time the hedgepig is dug out and found to be perfectly baked, the clay having protected it from burning, and having also acted as a skinner, so to speak, for the skin and spines come away with it. This method of cooking is likewise used for preparing elephants' feet, these being eaten in every country where those animals live. The dish is about as indigestible as quartz, but is as pleasant to the taste as it is indigestible, tasting more like hot beef tea jelly than anything else that we can think of.—*Caterer and Hotel Keepers' Gazette.*

The "Waterloo" Food Boiler

Used chiefly by Stock Feeders, Butchers, and for General Farm Use.



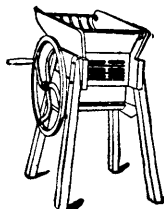
For Simplicity, Durability, Economy, and Saving of Time and Labor, it has no equal. Write for circulars.

WATERLOO MANUFACTURING CO., Limited.

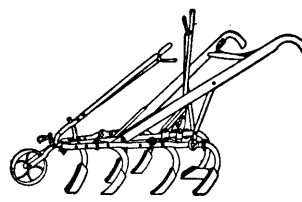
WATERLOO, ONT.



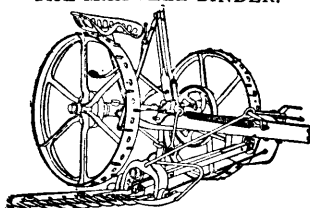
THE MAXWELL BINDER.



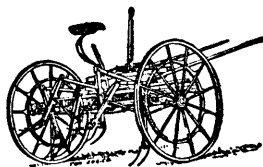
ROOT CUTTER.



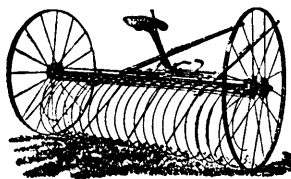
SCUFFLER.



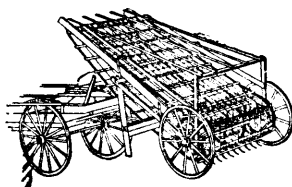
THE MAXWELL MOWER.



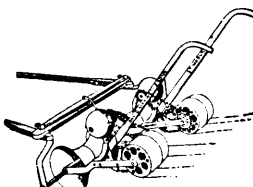
TEDDER.



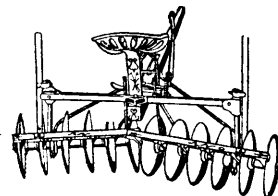
STEEL HORSE RAKE.



LOADER.



TURNIP SOWER.



DISK HARROW.

David Maxwell & Sons

ST. MARYS, ONTARIO, CANADA

MANUFACTURERS OF BINDERS, MOWERS,
REAPERS, HAY RAKES, HAY TEDDERS,
HAY LOADERS, SCUFFLERS,
DISK HARROWS, TURNIP SOWERS, ROOT
CUTTERS, WHEELBARROWS, ETC.
RESPONSIBLE AGENTS WANTED IN ALL
UNOCCUPIED TERRITORY.

Humorous.

The conductor on a slow train said: "Madam, your boy can't pass at half-fare; he's too large." "He may be too large now," replied the lady, "but he was *small enough when we started.*"

An Irish workingman being at a lodging house and having to rise very early for work, arranged to be called. After he had gone to sleep some of his "pals" blacked his face. When Pat got up and looked in the glass he exclaimed, "Arrah! and shure they've called the wrong man."

Faithful to his friend.—A story is told of two canny Scots wending their way home, each carrying a pretty good load of "whuskey," when one lost his equilibrium and rolled into the ditch.

"Help me oot, Donald," he cried, and Donald, not quite sure of his own standing and yet loyal to his friend, replied:

"I canna help ye oot, Dugal, but I'll e'en lie doon wi' ye."

A Scotch parson once upbraided the blacksmith of the village for not paying his church rate.

"But I never go to the kirk," said the blacksmith.

"That is your fault," said the minister; "the kirk is always open."

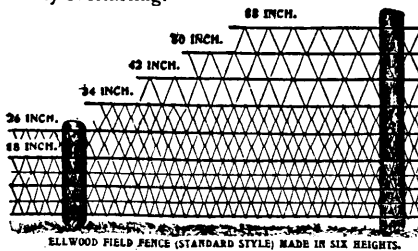
A few days later the blacksmith sent a bill to the minister for shoeing his horse. The minister indignantly protested that his horse had not been shod.

"That's your fault," said the smith; "the forge is always open."—*Exchange.*

The Ellwood Woven Wire Fences

have had a remarkable season of prosperity, so far the present year sales of all the various styles being much more than double any previous record.

That the woven wire fence has come to stay and must inevitably supersede all other forms of fencing in the near future is a foregone conclusion. A properly constructed woven wire fence, properly put up (that is to say stretched perfectly taut, with posts so braced and anchored that there can be no loosening), is a form of fencing that is practically everlasting.



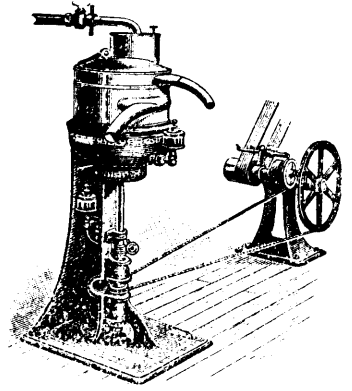
ELLWOOD FIELD FENCE (STANDARD STYLE) MADE IN SIX HEIGHTS.

Of course this is true only in cases where fences are made of a high quality of wire and galvanized so heavily as to be absolutely proof against rust. The Ellwood fences are made of a tough spring steel wire, made especially for these fences direct from the ore, and thus the guarantee of satisfaction given by their manufacturers is based upon absolute knowledge of the quality of steel and the rigid system of inspection under which not a single rod of fence is shipped unless it is absolutely perfect in every detail.

The Ellwood fences are sold by local agents in almost every city of the United States and Canada, but should no agency have yet been placed in your town, persons needing an efficient farm, field or ranch fence, secure against outbreking horses, cattle, hogs, pigs, sheep, dogs, poultry or rabbits, should address the manufacturers, American Steel and Wire Company, Chicago or New York.

In these days of keen competition, honest merit and actual superiority of results, obtained under severest tests, must alone recommend. . . .

Alpha De Laval Cream Separators



Belt Power Machine.

In numerous tests by leading creamerymen and farmers in competition with other machines, the "Alpha" has produced most butter from a given quantity of milk. The cream was of better churnability and commercial smoothness. The process of separation is perfection. The "Alpha" was more easily operated, requiring less power. Its speed was from 1000 to 20000 revolutions per minute less than its would-be competitors.

"Alpha" De Laval Separators are made in all sizes, either hand or power, suitable to all requirements.

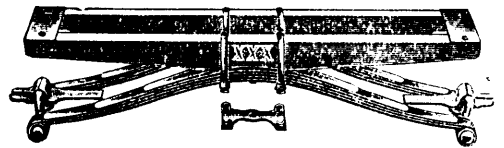
Write us for Catalogue and prices of these celebrated machines.

The Canadian Dairy Supply Co., MONTREAL, QUE.

Carry your Stock and Farm Produce on Waggon fitted with the celebrated

"XXX" Bolster Springs

They are the only perfect spring made. In comparison with these all others are useless. Address J. H. MORROW, General Sales Agent, Brighton, Ont. Special inducements to introduce where we have no agent.



AMMUNITION

A Clearing Sale at Cut Prices



500 only 38 Centre Fire Winchester Shot Cartridges, reg. price \$1 box, special 75c.

2,000 only, 38 Rim Fire Short Shot Cartridges, 50 in box, reg. price 60c., special 25c.

1,500 only, 32 Centre Fire Smith & Wesson Shot Cartridges, 50 in box, reg. price 90c., cut price 35c.

If you need anything in the shooting or hunting line, we have it, and at right prices, too.

SHOT 5c LB.

100 bags Best Finished Drop Shot, any size in stock, 25 lbs. in bag, special \$1.25 bag.

POWDER

We stock 19 different brands of powder; among them are Dead Shot, Curtis & Harvey, U.S. Navv, Snap Shot, Ducking, Blasting, and Schutz Smokeless, special cut prices in keg lots to gun clubs.

Mail Orders receive prompt attention

If you have a 38 calibre, rim fire revolver or rifle we will give you some cut prices in ammunition for it. Write us.

RUSSILL'S AT THE MARKET

159 KING ST. EAST, TORONTO



10,000 Empty Shells, gauges, 12, 16 and 20. Ely's reliable English goods, special at 50c. hundred.

LOADED SHELLS, \$1.55 hundred

We carry a most complete line of loaded shells of the best makers in a great variety of loadings.

SNIDER Ball Cartridges,
special 2c. each; shot, 2½c. each.



750 only, 32 Centre Fire Winchester Shot Cartridges, 50 in box, reg. 90c., special at 50c.

5,000 only, 28 Rim Fire Short Cartridges, reg. 60c. box, special 30c.

3,000 only, 38 Rim Fire Long Cartridges, reg. 70c., special at 35c.

Stock Notes

SOME GOOD WINNINGS.—A. Terrill, Wooler, Ont., writes: "I noticed in FARMING of Oct. 24th that N. M. Blain won a lot of prizes this fall, and I thought I would let you know what I have done. I showed Ayrshires at three fairs, made 33 entries, won 16 firsts, 10 seconds, 7 thirds; Oxford sheep at five fairs, made 39 entries, won 28 firsts, 8 seconds and 2 thirds; and Berkshires at five fairs, made 31 entries, won 22 firsts, 7 seconds and 1 third. Total, 103 entries, won 66 firsts, 25 seconds, 10 thirds, only having two blanks. I only missed 4 firsts in Ayrshires, 2 firsts in sheep and 1 first in pigs."

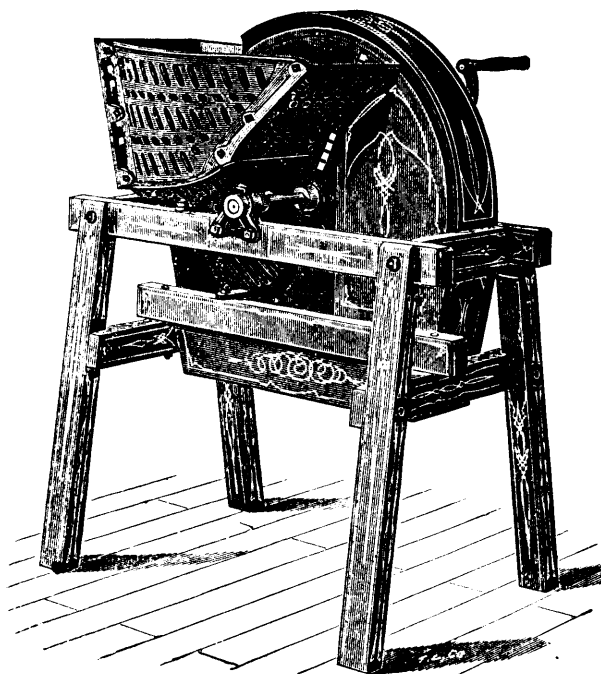
A SPLENDID RECORD.—J. E. Brethour, Burford, Ont., writes: "The Oak Lodge herd of large Yorkshires has completed its annual round of the various exhibitions for the season, and it has met with even greater success than usual. The lion's share of prizes offered for this breed at all the large exhibitions in Ontario fell to the credit of this celebrated herd. The Oak Lodge herd has fully maintained its reputation as being the best that can be produced from the fact that of the various pigs shown they were all of Oak Lodge breeding with only two exceptions. My aged herd proved invincible, winning first in even competition, headed by Oak Lodge Conqueror and imported Lady Mollington, with that grand yearling Oak Lodge Cinderella 3rd. The second herd prize at Toronto Industrial also fell to the honor of Oak Lodge. This is an achievement which, I think, has never been attained by one breeder, at least not within my recollection, which is strong evidence that I am breeding pigs of the highest quality. The first prize pen of bacon hogs of any pure breed and also sweepstakes for pen of bacon hogs of any breed, grade, or cross, was won by a pen of pure-bred Yorkshires bred and shown by me. I have now on hand a grand lot of young sows, which I am breeding to my best boars for the spring trade."

CLYDESDALES FOR CANADA.—Mr. Wm. Reid, Burnside, Braco, has sold his well-known prize mare Nelly Signet (13586) to Messrs. Dalgetty Bros. for exportation to Canada. This mare was bred by Mr. Reid, and got by Mr. W. S. Park's well-known prize horse Royal Signet, out of the fine tribe of mares which Mr. Reid has owned for many years. Nelly Signet gained numerous prizes in her youth at the Stirling and Perthshire Shows, and is likely to prove highly popular in Canada. Messrs. Dalgetty Brothers have also purchased a well-bred horse in Prince Niddrie from Mr. David Wilkie, Dollar. He was got by Mr. William Park's Prince of Brunstane, out of a good mare by Stafford (3212), grand-dam by that typical Clydesdale horse Paterson's Glancer (342). This colt was bred by Mr. T. M'Skirving, and should do well in Canada.—*Scottish Farmer.*

Scottish Shorthorn Sales

NOT within the memory of the younger Shorthorn breeders of Scotland has there been such a series of sales as were conducted there during the early part of last month. The high averages made were most gratifying, and the effort made to retain what was best in the Bates foundation for future Shorthorn breeding met with the approval of all breeders. "If you want style," said Mr. Thornton on one occasion at a sale, "you must have a bit of Bates." "No cattle," says the *Scottish Farmer*, "are healthier, or more like health, than the hardy northerners; but they might be made to carry their heads with greater gaiety and style and they would not be worse cattle." The averages of the sales are noteworthy. At the top stood Mr. Duthie with £89 1s. 2d. for 38 head, one of which went at 305 gs. Mr. W. S. Muir was next with an average of £79 5s. 6d. for 30 head, and was followed by Mr. Gordon, of Newton, with an average of £66 19s. 6d. for 14, and 200 gs. and 180 gs. for bull calves.

CLYDESDALE STALLION FOR THE ARGENTINE.—On Saturday last, the 14th October, Messrs. Alfred Mansell & Co., live stock exporters, Shrewsbury, shipped per the S.S. *Britany* from Liverpool, the fine three-year-old Clydesdale stallion Horatius 10357, the



New Root Cutter (Pulper and Slicer combined)

**THE
NOXON
CO.**

(LIMITED)

Ingersoll, Ont.

MANUFACTURERS OF

**HIGH - CLASS
FARM
IMPLEMENTS**

Please write for
Price List and Descriptive Catalogue

TOLTON'S

NO. 1 DOUBLE ROOT CUTTER



Points of Merit :

1. To change from pulping to slicing is but the work of a moment.
2. There are two separate wheels, one for pulping and the other for slicing.
3. The united force of both wheels is always used in doing the work in either capacity.
4. The hopper is between the wheels, and does not choke.

THE ONLY DOUBLE ROOT CUTTER MANUFACTURED.

Fitted with Roller Bearings, Steel Shafting and all that is latest and best in principle, material and construction.

TOLTON BROS., - - GUELPH.

Cossitt No. 2 Root Pulper and Slicer With Ball Bearings....



Manufactured with Double Hopper and two sets of knives. There is a partition in centre of hopper to turn roots to either side desired. Turn the crank one way to pulp and the other to slice. A great seller.

See Cossitt No. 1 Pulper and Slicer with Six Knives. Knives can be adjusted to either pulp or slice. This is one of the best cutters in the market, and is sure to give splendid satisfaction. We can recommend either one of these Pulpers and Slicers.

Send for catalogue and prices.

THE COSSITT BROS. CO
LIMITED
BROCKVILLE, - ONT.

Glenkens premium horse of last season. Horatius was bred by Mr. John McMeekan, Knockneen, and got by the celebrated Macgregor 1487 out of Susie III. of Knockneen, by Prince of Wales 673.

UNRESERVED AUCTION SALE.—Messrs. Reid & Co., Hintonburg, Ont., and J. G. Clark, Ottawa, will together hold an unreserved sale of pure-bred live stock at Maple Cliff Farm on Tuesday, November 28th, 1899, at 10 a.m. The sale will consist of the following: 10 Ayrshire bulls and bull calves from two months upwards, including Glencairn of Maple Grove (Imp.) 6973, the sire of Nellie Osborne of Burnside, 8507, the two-year-old heifer that sold for \$415 at Mr. Dan. Drummond's sale in February last. The younger bulls are a fine lot, several of them being prize-winners at Ottawa.

In addition to these valuable Ayrshire cattle a number of pure-bred hogs of the different breeds will also be sold, including 20 Tamworths of different ages from good sows and sired by such boars as Red Fellow, 879, winner of first at Ottawa Fair, 1897-98, and 2nd prize in 1899, and Amber King, 876, winner of the first at Ottawa, 1898-1899; 20 imported Yorkshires, several of them prize winners at the late fairs; 10 large English Berkshires, some of which are by imported stock; 10 Chester Whites, 12 Duroc-Jerseys and 8 Poland Chinas. The pigs are composed of boars and sows, ranging in age from 2 months upwards.

This important sale to be held by such reputable and old-established breeders as Messrs. Reid & Co. and J. G. Clark offers a splendid opportunity to parties desiring to secure good foundation stock in Ayrshires and the breeds of swine mentioned above. The sale will be a *bona fide* one and everything mentioned in the catalogue will be offered without reserve. Parties desiring full particulars will be furnished with a catalogue giving pedigrees and full descriptions by writing either of the proprietors.

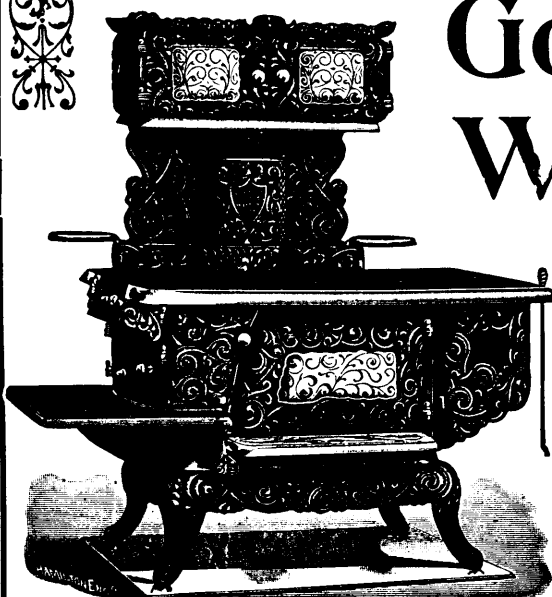
Maple Cliff Farm is located at Hintonburg, a suburb of Ottawa, and can be reached without difficulty. Messrs. Reid & Co., the proprietors of this farm, announce that they can spare a few Ayrshire heifers or young cows which can be seen at time of sale and will be offered privately.

AMERICAN SHORTHORN BREEDERS.—The Secretary of the American Shorthorn Breeders' Association, Mr. J. H. Pickrell, Springfield, Ill., writes that the annual meeting of this organization will be held at the Auditorium Hotel, Chicago, on November 22nd at 7:30 p.m., for the purpose of electing their directors and transacting any other business that may properly come before the meeting. In addition to the above there will be meetings of other live stock associations as follows: Tuesday, November 21, 7 p.m., American Polled Durham Breeders' Association, Saratoga Hotel; Tuesday, November 21, 7:30 p.m., American Hereford Association, Sherman House; Wednesday, November 22, 7:30 p.m., American Aberdeen-Angus Breeders' Association, Leland Hotel; Thursday, November 23, 9 a.m., American Live-Stock Association, Auditorium Hotel; Thursday, November 23, 3 p.m., American Cotswold Record Association, Sherman House; Thursday, November 23, 7:30 p.m., American Galloway Breeders' Association, Sherman House.

WON FIFTY FIVE PRIZES.—Mr. N. Dymont, Clappison's Corners, Ont., writes: As the shows are over I thought I would write a few notes. My stock are doing well. The cows are milking well in spite of the dry summer, and the young animals are doing well. I will be in good shape for winter. I have had good success at the fairs this fall, having won fifty-five prizes; thirty firsts, sixteen seconds, eight thirds and one fourth. Among the prizes won were diplomas for bull and female, any age; four firsts for best dairy cow, any age or breed, two being silver medals. I have some good cattle for sale at reasonable prices.

Alexandra Turbine.—During the past few months there has been one of R. A. Lister & Co.'s New Alexandra Turbine Separators working at the Government Experimental Farm Dairy at Ottawa, and it has given so much satisfaction that the Department has decided to purchase it.

"BY VIRTUE AND BY WORD."



Good Words

We would like everybody who has a range or ever expects to have one, to be in possession of a little booklet entitled "It has never failed." It tells you what just 159 people have to say in praise of

The **Aberdeen**
for Coal and Wood

The **Victorian**
for Wood only

It emphasizes the strong points in an honest and concise way—the unsolicited testimony of people who have tested the merits of these excellent ranges. Drop a card for a copy.

The Copp Brothers Co., Hamilton

BRANCHES—TORONTO AND WINNIPEG

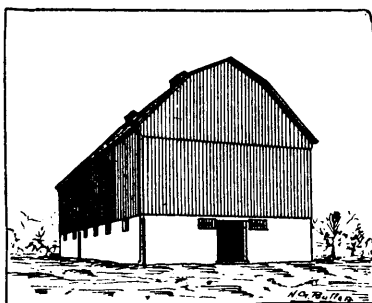


110 for 10 Cents

This book contains one hundred and ten of the best humorous recitations, embracing the Negro, Yankee, Irish and Dutch dialects, both in prose and verse, as well as humorous compositions of every kind and character. Sent post-paid, with our illustrated catalogue of books and novelties for only ten cents.

Johnston & McFarlane
71 Yonge St., Toronto, Can.

Thorold Cement....



Do you intend building Barn Basements, or Stable Walls, or Walls of any kind? If so, use "Battle's Thorold Cement," which can truly be called the

Farmer's Favorite Cement

Mr. J. V. Cooper, of Cedarville Stock Farm, Picton, Ont., the well-known breeder of Shorthorn Durhams and Oxford Down Sheep, who used a large carload, says: "Your cement is a credit to you, and I am more than pleased with my concrete walls."

Write us for
Free Pamphlet and Prices

ESTATE OF JOHN BATTLE
THOROLD, ONT.

The Razor Steel

SECRET TEMPER, CROSS-CUT SAW



WE take pleasure in offering to the public a Saw manufactured of the finest quality of steel and a temper which toughens and refines the steel, gives a keener cutting edge and holds it longer than by any process known. A Saw, to cut fast, "must hold a keen cutting edge."

This secret process of temper is known and used only by ourselves.

These saws are elliptic ground thin back, requiring less set than any saws now made, perfect taper from tooth to back.

Now, we ask you, when you go to buy a saw, to ask for the Maple Leaf, Razor Steel, Secret Temper Saw, and if you are told that some other Saw is as good ask your merchant to let you take them both home and try them, and keep the one you like best.

Silver steel is no longer a guarantee of quality, as some of the poorest steel made is now branded silver steel. We have the sole right for the "Razor Steel" brand.

It does not pay to buy a Saw for one dollar less and lose 25 cents per day in labor. Your Saw must hold a keen edge to do a large day's work.

Thousands of these Saws are shipped to the United States and sold at a higher price than the best American Saws.

MANUFACTURED ONLY BY
SHURLY & DIETRICH
GALT, - ONT.

For Sale.

A Yorkshire White Boar—"Oak Lodge Mighty," No. 2813, bred by J. E. Brethour, Burford. Farrowed Sept. 2nd, 1897. Price, \$15.00. Apply to

DAVID CARR,
OWEN SOUND, Ont.

Stock for Sale.

One Boar, two years; six Sows, from one to three years; eleven three months old, both sex; twelve one month old, both sex. I have a flock of Cotswold Sheep, twenty ewes and ewe lambs. Three Rams and seven Ram Lambs. Register and will register.

Wm. M. THORNDIKE,
OAKWOOD, Ont

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, On

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.

IMMENSE COMBINED Auction Sale

Ninety Head of Registered Stock,
AT MAPLE CLIFF FARM,
Tuesday, Nov. 1st, 1899

CONSISTING OF

10 Ayrshire Bulls, 6 Bull Calves, 20 Tamworths, 20 Improved Yorkshires, 10 Large English Berkshires, 10 Chester Whites, 12 Duroc Jerseys, 8 Poland Chinas, Boars and Sows of different ages.

Write for catalogue giving pedigree and description of each lot to the proprietors.

R. REID & CO., Maple Cliff Farm, Hintonburg, Ont.
J. G. CLARK, Woodroff Farm, Ottawa.

Maple Cliff Farm is within one mile of Ottawa city. Electric cars run to farm. **NOTE—No Reserve.**

ONTARIO VETERINARY COLLEGE, Limited

Temperance St., Toronto, Can.

Affiliated with the University of Toronto.

Patrons: Governor General of Canada and Lieutenant-Governor of Ontario. The most successful Veterinary Institution in America. Experienced Teachers. Classes begin on Wednesday, October 18th, 1899. Fees, \$65 per session.

PRINCIPAL, PROF. SMITH, F.R.C.V.S.,
TORONTO, CANADA

DES MOINES INCUBATOR Co.

The **BEST** and the **CHEAPEST**

95 PER CENT. hatches are often reported by those who use these Incubators. One reason for this record is absolute uniformity of temperature in egg chamber. Correct instructions for operating; has fire-proof lamp. A great mistake it would be to purchase an Incubator or Brooder without first getting a copy of our 148-page Catalogue. Send 3 cents for Illustrated Catalogue of Incubator, Brooder, Poultry and Poultry Supplies.

THE POULTER'S GUIDE, New Edition, 15c. per majl.

O. ROLLAND, Sole Agent for the Dominion, 24 St. Sulpice Street, Montreal.

Large English Berkshires For Sale



Two large service boars, six sows in farrow. Young stock, all ages, both sex, at a bargain for October and November. Call and see stock or write for prices.

C. R. DECKER, Chesterfield, Ont.
Mention FARMING.

NORTH BRUCE HERD.

IMPROVED LARGE YORKSHIRES.

Boars fit for service. Sows in farrow and ready to breed. Sired by Oak Lodge Clarence 2nd (28-95) and Oak Lodge Royal King [imported] (3044) for sale.



WM. HOWE, - - North Bruce, Ont.
Port E'gin Station and Express Office

Coldspring Herd Tamworths



Seven select young sows, about 200 lbs. The choice of March and April farrow. One boar, dam Della, first at Toronto, a herd header. Young stock from four months down. Write for prices. Feed scarce. We mean business.

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

Large English Berkshires



Are of the long bacon type. My herd is headed by three grand young boars, of different strains. My sows are all a grand lot of the long English type. Have twenty-four first-class young sows from four to six months old. Have a few young boars left for sale. Also the First Prize Boar under a year at London, and five other shows. One Yorkshire Boar, six months old, never beaten in his class. Price \$35.00. Pedigree furnished. Write for prices. Address, or come and see stock.

T. A. COX, Brantford, Ont.

Wm. Butler & Son Dereham Centre, Ont.

Oxford
Herd
of
Poland
Chinas

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

Write for prices.

W. & H. JONES,
Mt. Egin, - - Ont.

The
Home
of
the
Winner

FORSALE —AT— Maitland Stock Farm

Large English Yorkshire Pigs of the best types. Young stock on hand from one month to ten months old. Prices to suit the times.



Francis Rusnell, Cedarville, Ont.

YORKSHIRES...



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

Leicester Sheep and Berkshire Swine

DAVID BENNING
WILLIAMSTOWN, ONT.

HERMANVILLE ..TAMWORTHS.. WHO WANTS ANY?

YOUNG STOCK, 1 to 3 months old, generally in house, **FOR SALE** at prices ranging from \$5 to \$10 each. Stock delivered at all chief Canadian centres if necessary. Address

HERMANVILLE FARM
Hermanville, P.E.I., Can.

Importers and exporters 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. Persona inspection preferred. Prepay express charges and guarantee stock as described.

D. C. FLATT, Millgrove, Ont.

Oak Lodge Herd of Large Yorkshires

The Oldest Established and Largest in America.



J. E. BRETHOUR,

BURFORD, Ontario

Look up the record of this herd at the larger exhibitions—more prizes won than all others combined.

Sweepstakes over all breeds in class for bacon hogs, two years in succession.

Winner of Championship and Gold Medal at the Royal, also several prize winning boars and sows personally selected from noted English breeders. Oak Lodge Conqueror and Oak Lodge Challenge, two of the best boars in Canada, are in this herd. Stock from these boars are winners. Improve the quality of your stock by securing some of the Oak Lodge Blood.

Market Review and Forecast

Office of FARMING,
Confederation Life Building,
Toronto, Nov. 6, 1899.

General trade at some country points is being retarded by bad roads, which affect the delivery of produce and other goods. In most wholesale circles a better feeling is reported. During the past few weeks there has been an improvement in remittances which is a good feature. Money continues firm for call loans at $5\frac{1}{2}$ per cent. Discount rates remain steady at 6 to 7 per cent.

Wheat.

The general tone of the wheat market is about the same, with Chicago ruling low all week. With the estimates of this season's crop much lower than last year, it is somewhat surprising that there has not been a flurry in market circles. But no unusual excitement prevails. The *Liverpool Corn Trade News* publishes the following table of comparison of the world's wheat supplies for the past three seasons:

	1899. Bu.	1898. Bu.	1897. Bu.
Europe.....	1,416,400,000	1,579,280,000	1,141,526,000
America.....	728,800,000	886,800,000	726,320,000
Asia.....	274,000,000	310,000,000	338,800,000
Africa.....	32,000,000	45,840,000	28,800,000
Australasia..	45,200,000	54,224,000	33,912,000
Total.....	2,496,400,000	2,866,144,000	2,269,352,000

The visible supply of wheat in Canada and the United States continues to increase and is now 49,562,000 as against 15,476,000 at the same time last year. As noted elsewhere the world's supply in sight is now 36,646,000 bushels larger than it was at this time last year.

The English market continues dull and dealers are not purchasing beyond present requirements. Wheat is lower at Montreal where it is expected that the export demand will fall off as soon as navigation closes. The market here shows no special activity. Red and white is quoted at 66 and 67c. north and west, and goose at 69c. On the Toronto farmers' market red and white bring 70 to 71c., spring life 68c. and goose 70 to 71c. per bushel.

Oats and Barley.

The English market shows a firmer feeling for Canadian oats, but, owing to the lack of ocean space and the difficulty of getting cars on the C.P.R. and G.T.R., there is a weaker feeling for all coarse grains. At Montreal oats are 1 to $1\frac{1}{4}$ c. lower on the week. White oats are quoted here at 25 to 26 $\frac{1}{2}$ c. West, and on the farmer's market bring 30 to 31 $\frac{1}{2}$ c. per bushel.

Barley is lower and slow of sale at Montreal and quoted at 52 to 53c. for No. 1, 49 to 50c. for No. 2, and 46 $\frac{1}{2}$ to 47c. for feed. No. 2 quality is quoted here at 41c. West and feed barley at 35 to 36c. On the Toronto farmers' market barley brings 43 to 45c. per bushel.

Peas and Corn.

As with other coarse grains, so with peas. Trade at Montreal is dull owing to a falling off in export demand. Peas are quoted here at 56c. North and West for immediate shipment and on the farmers' market bring 61c. per bushel.

There is no material change in the corn situation. The quality of the Western crop is good but the yield disappointing. American corn is quoted here at 40c. on track Toronto.

Bran and Shorts.

Ontario bran is firm at Montreal at \$15 to \$15.50 per ton in large lots. Shorts are quoted at \$17 to \$18. City mills here continue to sell bran at \$13 and shorts at \$16 f.o.b. Toronto in car lots.

Eggs and Poultry.

The egg markets continue steady, with a fair demand at Montreal for export. A lot of inferior quality shipped to Montreal lately is blocking matters somewhat. New laid stock is steady there at 20c. wholesale and 22c. to farmers for small lots. Choice new laid eggs are quoted here at 17 to 18c. in a wholesale way and bring 20 to 25c. per dozen on the Toronto farmers' market.

The dressed poultry trade has not assumed very large proportions. Choice turkeys are quoted at Montreal at 9 $\frac{1}{2}$ to 10c., chickens at 8 to 9c., and ducks at 8 to 9c. per lb. On Toronto market turkeys fetch 9 to 11c. and geese 5 to 7c. per lb., and ducks 60 to 70c., and chickens 40 to 60c. per pair in large lots. On the local farmers' market the following prices prevail: Turkeys, 9 to 11c., and geese 6 $\frac{1}{2}$ to 7c. per lb.; ducks, 50 to 90c., and chickens 40 to 75c. per pair.

Potatoes.

These are quoted in Montreal at 40 to 42c., and 50c. per bag in a jobbing way. In car lots here they bring 35c. per bag, and on the farmers' market 40 to 50c. per bag.

Apples.

The reports referred to by us last issue as to Canadian apples arriving on the other side in poor condition are borne out by later cable reports which show that many shippers will come out with little more than their expenses. Receipts of apples continue liberal at Montreal, and there is a limited demand for fall varieties at \$2.50 to \$2.75, and \$3 to \$3.50 for winter varieties. Apples are quoted here at \$1 to \$2 per barrel. Mr. R. H. Ashton, Toronto, representing the Manchester Fruit Brokers, Limited, received a cable last week showing values there as follows: Baldwins, 16s.; Greenings, 15s.; Spys, 16s. 6d.; and Kings, 18s. per barrel.

Hay and Straw.

Baled hay is in good demand at Montreal, and the market is firm at \$7 to \$7.25 for No. 2, \$8 to \$9 for No. 1, and \$6.75 to \$7 for clover in car lots. Baled hay in car lots brings \$8.50 to \$9 per ton here, and straw \$4 to \$5. On the Toronto farmers' market hay brings \$11.50 to \$14.50, sheaf straw \$9, and loose straw \$4 to \$5 per ton.

Seeds.

These are steady. Red clover seed is quoted at 8 to 9c. per lb. at Montreal. On the Toronto farmers' market red clover brings \$4.25 to \$5; alsike, \$5 to \$7.20; white clover, \$7 to \$8; timothy, \$1 to \$1.25; and flailed timothy, \$1.50 per bushel.

Cheese.

Though there is not the activity in the cheese market that one would expect at this season the situation on the whole is strong, and there are good reasons for believing that prices are as low as they will be. Shipments are falling off, and some careful estimates place the stocks on hand in Canada at about half what they were last year at this time. Holders of cheese, both in Great Britain and Canada, do not seem anxious to sell, and are confident that present values will be maintained and likely greatly improved upon. English cheese seems to be scarce and prices are high, which is turning buyers more to Canadian. The English market is quiet, and those who have to buy are very cautious and loth to pay prices asked here. At Montreal there is a better feeling, but there is no activity, owing to cable limits being below what holders are asking. Finest Easterns are quoted at 10 $\frac{1}{2}$ to 11c., and finest Westerns at 11 $\frac{1}{2}$ to 11 $\frac{3}{4}$ c. Most of the factories east of Toronto are pretty well sold out. The ruling prices at the local markets during the week have ranged

from 11 to 11 $\frac{1}{4}$ c., with white cheese running lower.

Butter.

The butter situation is not so strong. The English market is weak and demoralized owing to the arrival of continued liberal receipts from Australia. There is a further decline of 2s., and finest Canadian creamery is quoted at 10 $\frac{1}{4}$ s. to 10 $\frac{1}{2}$ s., and good to fine at 9 $\frac{1}{4}$ s. to 10s. The extra high prices this season have caused a falling off in consumption, which has also weakened the market. Present prices are, however, high and should bring good money to producers. Buyers on the other hand are loth to buy in large quantities at the lower values, as they consider them even yet too high. With the closing of many of the cheese factories may come an increased supply of butter, but there are signs of an increased home demand.

The market has been quiet at Montreal with sales of finest creamery reported at 20c. to 21c. Shippers complain of difficulty in getting ocean space. The market here is hardly as strong, creamery tubs are quoted at 20c. to 21c., and prints at 22c. to 23c. Choice dairy tubs bring 17c. to 18c., and lb. rolls 18c. to 19c. in large lots. On the Toronto farmers' market, lb. rolls being 20c. to 25c. each.

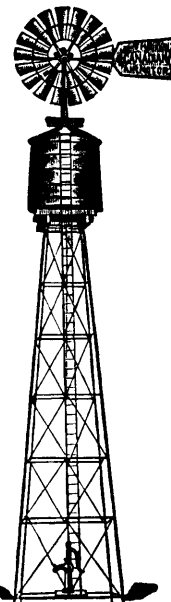
Wool.

Canadian wool is firmer at Montreal but still it is hard to get more than 18c. per lb. for it. Canadian pulled is quoted at 20c. to 21c. and fleece at 17 $\frac{1}{2}$ c. to 18c. There is no change in values here.

Cattle.

The cattle situation shows little improvement over a week ago. In fact the export trade is almost demoralized. Prices in Britain are lower, and as space is scarce on ocean vessels exporters are not wanted. The weakness in the export market is causing some excitement among feeders at Chicago and the West. The Buffalo market has been slow. At the Toronto cattle market on Friday receipts were light, the bulk offered being feeders and dstockers. The quality of fat cattle was

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only middling, too many unfinished being offered. Trade for the better qualities of beef cattle was good and they were quickly bought up. Few exporters are coming forward and few are wanted.

Export Cattle.—Choice lots of these sold at \$4.60 to \$4.85, and light ones at \$4.25 to \$4.40 per cwt. The bulk of exporters sold at \$4.30 to \$4.70 per cwt. Heavy export bulls brought \$4 to \$4.25, and light ones \$3.40 to \$3.65 per cwt.

Butchers' Cattle.—Choice picked lots of these, equal in quality to the best exporters but not so heavy, sold at \$4.25 to \$4.35; good butchers' cattle at \$3.60 to \$3.70; medium at \$3.40 to \$3.50; common at \$2.85 to \$3.12½; and inferior at \$2.60 to \$2.80 per cwt.

Buffalo Stockers.—Yearling steers, weighing 500 to 600 lbs. each, were easy at \$2.50 to \$2.75, and heifers and white and black steers of the same weight sold at \$2 to \$2.50 per cwt.

Feeders.—These are in good demand. Heavy choice grade steers in good condition, weighing 1,100 to 1,200 lbs. each, for farmer's purposes, where not numerous, sold at \$3.75 to \$4, and rough steers of the same weights for the byres sold at \$3.50 to \$3.75 per cwt. Light steers, weighing 800 to 900 each, sold at \$3.25 to \$3.40, and feeding bulls at \$2.75 to \$3.25 per cwt.

Milk Cows.—Fourteen cows were offered a few of which were extra good quality. They sold at \$30 to \$50 each.

Calves.—These bring \$4 to \$8 each.

Sheep and Lambs.

Prices for sheep were easier at \$3.25 to \$3.40 for ewes and \$2.50 to \$2.75 per cwt. for bucks. Butchers' sheep brought \$2.75 to \$3 each. Lambs were also easier at \$3.50 to \$3.85 per cwt., with a few choice ewes and wethers going at \$4.10 per cwt. At Buffalo on Friday 50 loads of Canadian lambs were offered. Yet the demand was active throughout, with prices pretty well maintained. Canada lambs sold on the basis of \$5.20 to \$5.25 per cwt.

Hogs.

Prices for bacon hogs have dropped 12½c. per cwt., as intimated last week. Receipts were steady on Friday, with prices steady at \$4.25 for select bacon hogs and \$3.87½ for thick and light fats. Essex and Kent corn-fed hogs bring \$3.87½ to \$4 per cwt. It is reported that prices will be lower this week. At Montreal choice hogs bring \$4.25 and heavy hogs \$4 to \$4.10 per cwt. The *Trade Bulletin's* cable of Nov. 2 re Canadian bacon reads thus: "The market is weak and is lower at 41s. to 45s. for No. 1 pea-fed and 39s. to 43s. for No. 2."

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"What has occurred?"

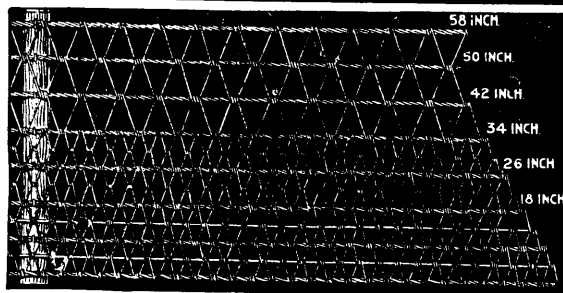
"I was explaining to him my success in demonstrating the power of mind over matter. I was telling him how I had brought my will and my intellect to bear upon a corn, and how I had subjugated the delusion called pain, when he deliberately stepped on my foot."—*Washington Star*.

"Remember, boys," said the master, "that in the bright lexicon of youth there's no such word as fail."

After a few moments a boy raised his hand.

"Well, what is it, my lad?" asked the master.

"I was merely going to suggest," replied the youngster, "that if such is the case it would be advisable to write to the publishers of that lexicon and call their attention to the omission."—*Stray Stories*.



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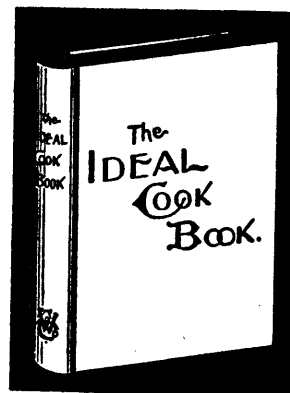
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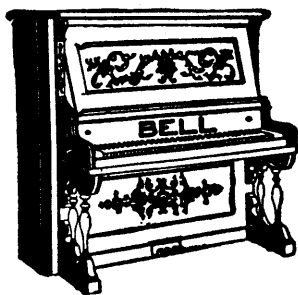
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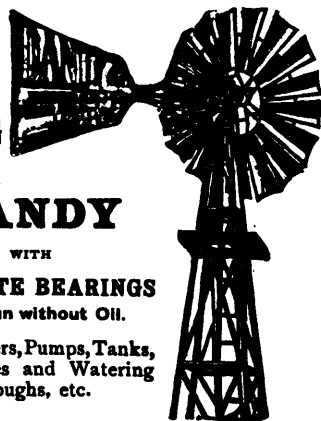
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