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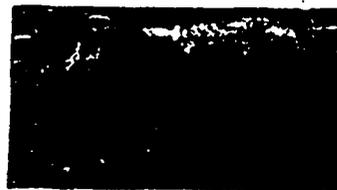
J. A. RUDDICK, KINGSTON, ONT.

...LEADING TOPICS FOR THE WEEK...

Raising Early Lambs. The Cheese Situation. Hired Help on the Farm. Canadian Commercial Agency in England Recommended. Pound Butter Prints Again. The Poultry Industry of Canada. Canadian Export Horse Trade Declining. The Canadian Butter Package in England. The World's Wheat Supply Increasing. Report of the Cheese and Buttermakers' Meeting at Woodstock.

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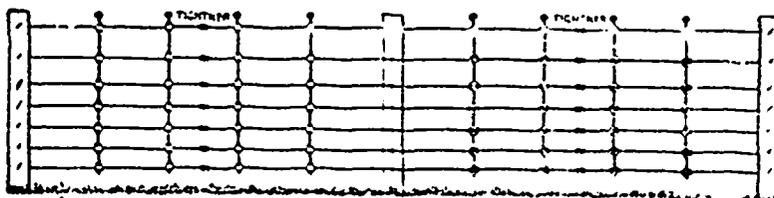


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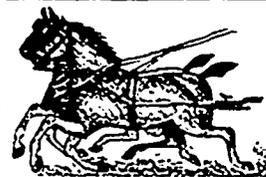
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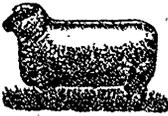
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MARCH 18, 1898

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FARMING

VOL. XV.

MARCH 8TH, 1898.

No. 27.

FARMING

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TOPICS FOR THE WEEK

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Canadian Commercial Agency in England Recommended. Pound Butter Prints Again.

(From our Special Correspondent)

London, Eng., Feb. 24th, 1898.

I have been perusing the market reports for some days with special reference to Canadian products. I intended to have gone this week into the markets myself and to have judged of the articles exposed to buyers, but I have not had the time. Anyway from reliable reports I observe that there has been this week or more, little demand for cheese of Canadian origin, and a difficulty of disposing in many cases of even prime samples.

Now I cannot say the cause for this, and although I mention the matter, I do not consider that there is any cause for alarm. What, however, is curious is that prime samples should, so to speak, go a-begging. There is a generally understood maxim here that a good article always sells. I believe it—within limitations. I mean that unless there is an over-supply the article will and does go off. But I learn that the prime samples in question were sold only "with difficulty." Now here is an important question to my mind. It is no use Canadian farmers learning all about dairying for export purposes, if, when they get their cheque from us they find the balance on the wrong side. That adverse balance is being assisted if our salesmen dispose of Canadian wares "with difficulty." I do not think the goods ought to be sold when the market is flat, but should be kept a few days until it rises. In the case of cheese there need be no difficulty about it, and I think your experts on this side the water ought to give this matter their consideration. If I were one of those experts I should, if in London, go to the markets almost daily and try to induce the salesmen to hold over

the tip top goods for a time rather than let them go off at a loss to the producers. Again, such experts should visit some of our large wholesale houses, and see if they could not make a contract with them for the consumption of Canadian commodities. This result would be difficult and would not be accomplished all at once, but I know it has been done in an analogous case. Indeed I did it myself for certain producers and therefore I know what I am talking about.

But what would be better than all this is to secure a stall or shop in our wholesale markets for the sale of Canadian goods alone. If this were so and the Agent-General here might very well be asked by the Dominion Government to use his efforts in that direction—Canadian producers would be sure of not being fleeced on the score of "commissions," but would have the whole thing under their own immediate control.

In a recent issue of FARMING I threw out the suggestion that pound prints of butter might very well be placed upon our markets. I see that the editor has had something to say in recommending the suggestion. It will interest him and my readers to learn that the matter has now been taken up on this side of the Atlantic where my remarks have been reproduced in our papers. (Canadian agriculturists will see that FARMING has a pretty wide and powerful circulation). The Irish people already go in for pound prints, it is said. That is true, but they only touch the fringe of the butter trade at present. There is still room for Canada to have a look in! Indeed yes; when it is considered how fast our population is growing, and that Canada can produce, in my opinion, a good article quite as cheaply as our Irish neighbors.

The Cheese Situation.

Factories Should not Open till May 1st.

There was an exceptionally large make of cheese last year, and dairymen would do well to adopt such measures for the coming season as will tend to stimulate the market as much as possible at the beginning. One way to do this is to curtail the make of cheese at the outset. If all the factories would agree not to begin making till the first of May it would do more than anything else to stiffen the market and bring higher prices. It would enable holders to dispose of the large quantities of old stock on hand, and thus leave the market clearer for the new goods. Besides, by not opening the factories till, at least, the 1st of May no inferior fodder cheese would be made. This would relieve the situation immensely, and prevent this cheap fodder cheese from interfering with the sale of the old stock, which it usually does, especially when the market is overloaded. The same thing might be applied to the closing of the factories in the fall, and if every factory would shut down at the end of October and only have the factories operated for six months, we would have no poor fodder cheese in the way at the beginning of the season, and no bad flavored, turnipy stuff at the close to tack on to the fall makes.

There is nothing to prevent the factorymen from doing this if they go about it in the right way. Many of the larger factories are now making butter and can continue to make butter till the 1st of May without any difficulty. In fact, everything considered, it will be more profitable for the farmer to make butter and to have the skim milk at home during the early part of the season for his calves than to sell it off the farm. Then the patrons of many factories where there is no equipment for making butter are in reach of factories where butter is made, and can send their milk there till their

own factories open. Where patrons have not these advantages it will pay them as well to keep the milk at home during April and feed it to the calves and pigs as to have it made into fodder cheese that will sell for a low price and injure the prospects for good prices during the summer months.

We speak advisedly in regard to this whole question and believe it to be of vital importance to the cheese industry at the present time and of considerable importance at any time. The whole matter is under the direct control of the producers and furnishes a grand opportunity for them to help themselves. All that is needed is co-operation, and the thing is done. Let the dairymen, therefore, unite in regard to this matter, and agree not to open the factories till the 1st of May, and later in some sections, and an improvement in the market situation will quickly result.

A Canadian Commercial Agency in England.

In another column our special British correspondent strongly recommends the establishment of a Canadian agency in London, England, at which only Canadian goods will be sold. There can be no doubt that such an agency would do much to stimulate the sale of Canadian products in England, and if properly advertised and pushed would greatly strengthen Canada's position in a commercial way. We are doubtful, however, about its being a wise policy to establish, as he says, any place that would interfere with the legitimate business of anyone engaged in the Canadian export trade. Such an agency would necessarily have to be under the control of the Government, and if it engaged directly in the sale of Canadian goods would interfere with private enterprise. What should be done, and we believe there is a strong Canadian sentiment in favor of it, is for the Government to establish a commercial agency, or a number of them for that matter, in the business centres of London, Liverpool and other large cities, where special attention could be given to developing trade with Canada. These need not be places for the sale of Canadian goods, but places where people could get information regarding Canadian goods of all kinds, and from which practical and definite information could be disseminated regarding the resources of Canada and the kinds and qualities of the products she can supply the British consumer. We believe that such agencies are necessary in order to develop to the fullest extent our trade with the Mother Country, and now seems to be the accepted time. At no time in its history has so much attention been drawn to Canada in England as during the past twelve months, and every advantage should be taken of this excellent opportunity for pushing Canadian trade.

Our correspondent also draws attention to pound butter prints again, and mentions the fact that Ireland is trying to develop a trade for butter put up in this way. As he points out, there is plenty of room for Canada also to develop her butter trade in this particular. The more we look into this phase of the export butter trade the more there seems to be in it. If the one difficulty of getting the pound prints on the British market in good condition is overcome, such a method of putting up butter affords a splendid opportunity for establishing a distinctively Canadian style of package for the British markets.

Canadian Export Horse Trade Declining.

We have frequently drawn attention in these columns to the importance of Canadians developing the export horse trade with Great Britain.

From recent reports it is learned that the exports of Canadian horses to Britain have decreased very materially during the past two or three years, while the United States exports of horses have greatly increased. In 1892 Canada exported to Great Britain 1,755 horses, valued at £70,463, and the United States 1,072, valued at £55,690. Canada continued to lead in the number of animals, and to increase her exports of horses till 1895. During that year the United States sent over 10,351 horses, valued at £345,375, while Canada sent over 12,903 horses, valued at £369,157. The number of horses exported from Canada to Britain in 1897 was 11,247, valued at £280,457, as compared with 26,520 sent over from the United States, valued at £793,565. This shows a remarkable falling off during the past year from Canada, while the United States has doubled her exports.

The first cause for this unsatisfactory state of affairs seems to be that our farmers have not given the proper attention to breeding that they should have done. There seems to be a dearth of really fine horses suitable for the British markets. The kinds of horses to be found in Canada to day are, as a whole, inferior to what they were a few years ago. On the other hand, the farmers of the United States have been improving the quality of their horses. This is shown by a comparison of the average values of the horses from both countries in England. The average value of horses from the United States in England is £29 18s. 5d., while the average value of Canadian horses is only £24 18s. 5d. There is no reason whatever why this condition of things should exist. We have just as good facilities for breeding and rearing horses suitable for the British markets as the farmers of the United States have. The fact is, that our farmers have been careless in regard to this whole question, and unless they wake up to the needs of the situation will lose their grasp on the British horse market altogether.

The European buyer wants a large, fat horse in perfect condition. There is a large European demand for horses for cavalry purposes, for which only the highest types of horses will be taken. The Canadian farmer must not only understand how to breed such horses, but he must also understand how to rear those horses and fit them for the British markets. The trouble with the Canadian farmer has been that he has been too careless about the selection of a proper sire and also in regard to the size and types of the mares used for breeding purposes. The consequence has been that we find to day a large number of what might be called "scrub" horses in the country, totally unfit for export purposes. To breed a good horse the very highest types of animals should be selected for both sires and dams, and the offspring should be given every chance to develop into a full grown, perfect animal. A great many good colts are ruined because they are put at work too young. A reasonable amount of training is all right, but when a young horse is put at hard labor before its full growth is obtained it can never become the highest type of animal.

Those who have made a study of the methods of rearing horses in the countries of Europe where the highest types of horses are produced, claim that the Canadian farmer, as a rule, does not know how to feed a horse properly during its growing years. Too many farmers are accustomed to allow their young horses to roam around the straw stack and pick up a living in a hap hazard way. Such a method will never produce a fine horse no matter how good the breeding is. The young colt must be provided with good, nourishing, suitable food during its growing period. If this is done and the breeding is all right there will be no difficulty in our farmers producing the right kind of horses for the British markets.

At the Horse Breeders' meeting in Toronto recently, a committee was appointed to interview the Government in regard to having stallions for service licensed, or to granting a license to those passing suitable inspection. Such a plan would doubtless improve the standard of the animals travelling and cut off many inferior stallions that are totally unfit for service. In Italy the

Government takes this matter under its full control and no stallion is allowed to travel unless licensed by the Government. This system is doing wonders in improving the quality of the Italian horses.

The Poultry Industry of Canada.

By THOMAS A. DUFF, Toronto, Ont.

(Continued from last week.)

EGG PRODUCTION.

Eggs will sell 365 days in the year and bring the cash every time. Those who complain about empty pocket-books should increase the egg crop. It gives a man a very comfortable feeling to turn into silver ten or twenty dozen eggs at the good prices realized this winter. Men who think it a small business go hungry, while their colts are growing and eating. The successful egg producer is a live man, and has little opportunity for small talk at the corner grocery.

For the production of eggs alone, I advocate the keeping of purebred fowl. In making my choice I would select a sitting variety which would lay large brown shelled eggs, and a non-sitting variety which would lay large white shelled eggs, for the following, amongst other reasons:

1. The former, if hatched in April or May, and properly fed and housed, should commence to lay the last of November or early in December, and continue until they become broody, which usually they commence to do towards the end of March. They are then required for the production of chickens for the next season's use. The non sitting variety should also, if hatched in April or May, commence to lay in November or December, but my experience has been, that (unlike the sitting variety) with the first cold snap the majority of those laying stop, and do not give any great return in the way of eggs until March, when they take up the laying just where the others often leave off, and continue until moulting time. With two such varieties a continuous supply of eggs is reasonably assured, especially during the winter months when eggs are scarce and prices high. Without the production of eggs in winter, little or no profit will be the result.

2. Select one variety which will lay large brown shelled eggs, and another which will produce large white shelled eggs, because there are a class of people who can afford to cater to their own desires and palates, and these are the people to please. So far as food properties are concerned, a chemical analysis of white and brown shelled eggs shows there is no difference when both varieties of fowl are fed upon the same kind of food, but there is a class of people who will pay two or three, and even five cents per dozen more for eggs with a brown shell than they will for eggs with a white shell, and *vice versa*. I am a strong advocate of giving the public precisely what they want, so long as they are willing to pay for it.

3. Brown colored eggs are, as a rule, thicker in the shell and less porous than white eggs, consequently they will keep longer. For this reason they are more sought after by dealers who have cold storage facilities, and by those who export. To this branch of the subject I will refer at greater length in a subsequent paragraph, and give the result of an experiment to prove my point.

4. Select layers of large eggs, because they keep longer and better than small eggs, and do not evaporate so rapidly. In addition they will always command a better price.

Have your fowl comfortably housed, and in order to insure best results do not keep more than twenty five or thirty in one pen, giving each bird, when confined to the house during the winter months, at least six square feet of floor space.

Co operation.—The first essential towards a successful business of any kind is co-operation. Unless buyer and seller work together, no good results need be expected. This is nowhere of greater moment than in the egg industry.

How to place eggs on the market.—One of the first points in which you can co operate with your buyer is to have all of your eggs perfectly clean. How much more inviting does a basket of nice

clean eggs look than a basket of dirty ones? For clean eggs, your buyer will be able to get from one to three cents per dozen more than he could get for dirty ones, and so will be able to pay you more. While it is a comparatively easy matter for you to wash your eggs (or such of them as are dirty) when gathered, it would be a matter of utter impossibility for a buyer to wash a large number. All dirty eggs should be washed on the day on which they are gathered; the shell of an egg is porous and very susceptible to smell. For this reason an egg which is left dirty is sure to become contaminated and lose its flavor. Should you find any difficulty in removing the dirt from the eggs, a little soda added to the water will be an advantage. After being thoroughly washed, the eggs should not be dried by hand, but left to dry of their own accord. They will present a much fresher appearance than if dried by rubbing.

Use all faulty eggs at home.—Do not place amongst the eggs you intend to sell any which are abnormally small, or any which have a flat, wrinkled side, and never send a cracked egg to market. Eggs with a flat or wrinkled side have very thin shells and are sure to break in shipment, and perhaps spoil part of a layer in the egg case. All of the above should be used at home.

Raising Early Lambs.

In the United States a large business is done in raising early lambs for the markets in the large cities. Though we have not the same market for early lambs in Canada, it might be profitable for our farmers to rear early lambs for the American markets. A great many Canadian lambs are sent to the United States during the summer and fall and return a profit to the shipper notwithstanding the heavy duties he has to pay. Good early lambs bring a higher price than later ones, and as the duty is no higher there should really be more profit in the former for both the producer and shipper. Then, there is a limited market in our own large cities for early lambs which might be enlarged.

Rearing early lambs requires special attention, but if properly understood there should be no difficulty about it. The Cornell Experimental Station has conducted a series of experiments during the past three years covering the whole subject. To carry on the business successfully it is desirable to have a number of ewes lamb at the same time, in order that one or more pens of ewes may be fed the same ration. If the lambs are all dropped within a short period the labor of caring for them will be much less than if they are dropped throughout a longer period. It is always desirable to have the animals that are fed together as uniform as possible, and especially is this essential in lamb-raising. Whenever the ewes go into winter quarters in good flesh, very little or no grain, and but few roots, should be fed before lambing-time; this will enable the owner to carry the ewes through a critical period with less trouble than if grain or roots are fed liberally before the lambs are born. The feeding of considerable grain and roots before lambing has a tendency to inflame and harden the udders owing to an undue secretion of milk. As the ewes recover from lambing, grain may be fed in small quantities at first, but increased as fast as the condition and character of the ewes will permit. The best results have been obtained at Cornell, everything considered, in feeding grain as described above, and forcing the ewes to their utmost for a period of four to eight weeks after lambing. At this time extra grain and care will bring greater returns than at any time during the year. A little extra food may bring the lamb into prime condition and cause it to sell for the highest market price, while the same lamb, without this increased nourishment, would be only in a fair condition, and sell in the market for not more than two thirds the price of prime lambs.

In New York city the Board of Health requires that the lambs shall have heads and feet removed before shipping as a protection against disease, though it is difficult to see how it does protect. According to *The Rural New Yorker* the best market for lambs for several years past has been during

the months of January and February. Lambs weighing from 40 to 45 pounds usually bring good prices during these months when all sales are by the head and not by the pound. The average price received this year by Cornell University was from \$6.50 to \$7.00 a piece for lambs seven to eight weeks old. The results of the experiments at Cornell are summed up as follows:

It is of the utmost importance that the lambs be fat.

The market early in the season does not require so large lambs as the late market. The best early market commences as soon as the holiday poultry season is out of the way, usually about the middle of January.

Other things being equal, ewes that give the best milk breed the earliest in the season.

The Horned Dorset sheep bred earlier and fattened better than the Shropshires.

There is practically no difference between beets and ensilage as a succulent food for ewes rearing early lambs.

Dressed lambs should reach the New York market as early in the week as possible, as Saturday is retailers' day; the lambs ought to be sold before Friday noon.

As a coarse fodder for the ewes, and also for the lambs, there is nothing better than good clover hay; in fact this is one of the essentials to success in early lamb-raising.

As a rule ewes respond more liberally to forced feed for milk production the second year than they do the first.

The manner in which the lambs are dressed determines to quite an extent their selling price. Neatly dressed lambs are always preferred to those of like quality poorly dressed.

Ewes should not be forced for milk production.

The Canadian Butter Package in England.

A writer in *The Chicago Produce*, who has been investigating the condition of the English butter market, speaks of seeing a number of packages of butter from Canada, the tops of the boxes of which were made of three pieces of wood with a thin piece of wood set across the two ends in a mortice. The dealer stated that it was not a desirable package. The butter box with one board on the top and sides, six pieces in all, suits the trade better. The original Australian box, with the projecting corners, appears to be the favorite according to this writer.

A word to the wise is sufficient. We cannot hope to develop our butter trade with Great Britain unless we give particular attention to packing the butter in a suitable package that will meet the wishes of the English dealer. If it is injurious to the trade to pack butter for export in boxes with two or three pieces in the top or sides then an effort should be made to procure boxes without these drawbacks. In Britain, Canadian butter comes into competition with butter from nearly every country in the world, and if our package is not as good as that from other places we do not stand much of a chance for enlarging our export butter trade with England. Those who are engaged in shipping Canadian butter to Britain should be careful in regard to the character of the package sent over.

Hired Help on the Farm.

Ivan, Ont., Feb. 18th, 1898.

Editor of FARMING:

No doubt Mr. Hobson and several other well-to-do farmers have found the hiring of married men preferable to hiring single ones; but it is impossible for the majority of farmers to do so. I have several times discussed the subject with farmers in the townships of London, Lobo, and Blanchard. They all agree that it would considerably lighten the work of their "women folk," but they do not think that it would pay, as the majority of farmers would have to build houses, which would mean another addition to their (in most cases) heavy mortgages. Then, again, they find it hard enough to pay even a single man his paltry \$100, or more, wages for the seven or eight months for which he is hired; so how could they manage to pay a married man his two hundred and fifty or more dollars? Surely no one could expect a man to board himself and family on a less salary. And is there not already enough poverty in the country without inducing young men to marry in the hopes of obtaining such a situation? If he did obtain one I think he would find it hard enough to make ends meet. No, sir, the fewer the married men that go in for that sort of life the better for the country.

Referring to your first article in the issue of February 1st, your correspondent can have no very good opinion of the farmers in general, for he says (referring to single hired help) that "his morals are very often otherwise than desirable where there are a lot of growing lads," or words to that effect. Now, I have noticed that most of the "hired help" are themselves farmers' sons. Of course, I can understand that being the case where "home boys" are employed, but otherwise I have found them to be as honorable as any of the farmers.

W. T. HARRISON.

We are pleased, indeed, to have both sides of this important subject discussed. There are always two sides to every question, and as this subject is very far-reaching, we hope others will take an interest in it. What our correspondent says in regard to many of the farms being heavily mortgaged is quite true, and that many farmers for this reason would not be able to pay a married man a fair wage may also be true, but we are doubtful. Of course, it is not to be expected that a man on a fifty acre farm could afford such a luxury unless he were engaged in a line of farming which would require considerable manual labor. But on nearly every farm of from 100 acres upwards, and especially where a considerable amount of stock is kept, it will pay every farmer to keep a hired man all the year round, and he, we believe, will get better returns, everything considered, if that hired man has a home of his own, and does not of necessity live with the farmer. We speak advisedly in regard to this matter, and recall the time when, as a boy on the farm, a married man was employed all the year round, and when afterwards a new policy was adopted and a single man engaged for a portion of the year, how the farm work did not seem to go on as satisfactorily as before.

To succeed to-day, the farmer must practise a concentrated system of farming, and consequently must keep a sufficient amount of help to do the work properly. We venture to state that one of the reasons why so many farms are groaning under too heavy mortgages is because the owners do not carry on as intensive a system of farming as they should. If there is any place where a good, steady man can earn his money and give full value to his employer it is on the farm, if his work is properly directed.

Then in regard to the relative amounts of wages which will have to be paid to a married and single man we have this to say. The wages of a married man may look large when considered as a whole, but when it is taken into account that the man has a family to keep that will consume a large share of the products of the farm it presents a different character. The hired man who is married will take a large share of his wages in trade, and thus provides a market for some of the products of the farm near at hand. Then look at the question in another way. Our correspondent states that a farmer usually pays a single man \$100 for seven or eight months' work. This is looked upon as the only outlay. But this man has to be fed and in most cases his washing is done by the women folks on the farm. Now this means outlay, and, considering everything, costs the farmer at least \$10 per month, which amount, added to the cash outlay, would mean \$170 for seven months' work, or \$24.28 per month. On the other hand he states that a married man would require \$250 per year, which is only \$20.84 per month, or a difference of \$3.44 in favor of the latter. There is, then, only \$50 between the actual cost of the married man for a year and the single man for seven months, and if it is not worth that much to any farmer to have a steady man during the five winter months and board himself we are very much mistaken. Besides, no farmer can fully appreciate what it is not to have his home life broken by the presence of the hired man in the home.

In regard to the employment of married men on the farm being conducive to poverty we are inclined to take the very opposite view. There are many steady men with families in our towns and cities making a precarious living, who would be glad of steady employment on the farm all the year round. In England where the most intensive system of farming is carried on nearly all the help live at home and do not board with the farmer, and as this country develops, and as a more intensive system of farming is practised, such a system will become a necessity here. We often wonder why many of the farmers' wives do not rise up in rebellion against a system that entails so much extra labor and annoyance upon the management of the home.

Referring to the moral side of the question we think that in our first article we made sufficient

exception in regard to the character of the average hired man on the farm to include those to whom our correspondent refers. Because a young man is a farmer's son does not necessarily mean that his moral character is beyond reproach or that his influence in the home is of the proper kind. We know many young men who hire out on the farm who are estimable in every way, but then we know as many whose character is not all that should be desired in any home. Besides, we have made many enquiries of those who should know about these things and the opinion almost invariably is that the character of many of the men employed on the farm is not such as tends to the highest type of morals in the young.

NOTES AND IDEAS.

In order to prevent the introduction of the San Jose scale the German Government has passed an order prohibiting until further notice the importation of living plants and fresh plant refuse from America, also barrels and boxes and other objects used in the packing and keeping thereof. The order also applies to fresh fruit or fresh fruit refuse from America whenever the examination at the port of entry may establish the presence of the San Jose scale. The reason given for this is the alleged discovery of the dreaded San Jose scale and other pests on the fruit imported from America. Whether this is correct or not remains to be seen. It may be only an excuse to get back at the Americans because of the Dingley Tariff which shuts out the German beet sugar. The Germans also object to American pork on account of its unwholesomeness and do everything they can to keep it out of the country.

CANADA'S DAIRYMEN.

J. A. Ruddick, Kingston, Ont.

Mr. J. A. Ruddick, Superintendent of the Dairy School, Kingston, though one of Canada's younger dairymen, has had a wider and more varied experience in practical dairy work than many who have been in the business a much longer time. Mr. Ruddick is a careful and cautious observer, and intensely practical in everything he undertakes. Because of this strong characteristic, his advice on all matters pertaining to cheese and buttermaking is eagerly sought for, and the results of experiments carried on by him are given additional value.

Like many more young dairymen, Mr. Ruddick spent his earlier years in an intensely dairy atmosphere. He was born a few miles from Ingersoll, in Oxford county, the birthplace of the co-operative cheese factory, and which was the home of many of those who may be called the fathers of co-operative dairying in Canada. His father, Mr. Lawrence Ruddick, is still living, and is well known in Oxford county.

At a very early age Mr. Ruddick started out for himself, and learned cheesemaking at Vittoria, Norfolk county, during 1880 and 1881. In 1882 he engaged with Mr. D. M. MacPherson, Lancaster, Ont., to manage one of his many factories. Before completing his first season, and when only nineteen years of age, he was selected by Mr. MacPherson from among thirty-four other makers as superintendent of the factories under his control. He acted in this capacity for seven years, thus acquiring a very wide practical knowledge of all the details of the business. During 1889 and 1890 Mr. Ruddick acted as travelling instructor for the Eastern Dairymen's Association, which position he resigned in 1891 to accept a position on the staff of the Dominion Dairy Commissioner. In this latter connection Mr. Ruddick has done valuable work. He managed the first winter creamery in Canada, under Professor Robertson's direction; he carried on extensive experiments in regard to paying for milk for cheesemaking by the percentage of butter-fat, at the Perth dairy station in 1892, and was the maker of the famous mammoth cheese which won such distinction at the World's Fair in 1893. By means of a travelling dairy he aided considerably in the development of co-operative dairy work in Manitoba, the Northwest, and British Columbia. Under Prof. Robertson's supervision Mr. Ruddick had charge of the Kingston Dairy School for two years, and when that institution was taken over by the Provincial Government he became its permanent superintendent. The dairy school has prospered under his management, and the attendance of students each year is increasing. Extensive experiments are carried on during the summer season, and have been productive of good results.

Mr. Ruddick is still a young man, and we may expect even greater results from his future work than have been obtained in the past. He is a careful student, a painstaking experimentalist, and intensely practical in all he undertakes, and richly deserves to succeed.

PROFIT OF THE HEN FOR THE YEAR 1897.

By Mrs. Jos. Yuill, Meadowside Farm, Carleton Place.

I am of the opinion that hens should be tested singly, the same as cows, to ascertain their individual capabilities. With this end in view I made a test of a pullet of 1896. She commenced laying the first week in November, and having selected a nest for herself away from the other hens, I thought it would be a good opportunity to test her.

I began the first of January, 1897, to keep an account of her eggs. In January she laid 25 eggs which sold at 19c. per doz.; February, 23 at 17c. per doz.; March, 26 at 13c. per doz.; April, 26 at 13c. per doz.; May, 24 at 13c. per doz.; June, 22 at 13c. per doz.; July, 21 at 13c. per doz.; August, 12 at 14c. per doz.; September, 14 at 20c. per doz.; October, 23 at 20c. per doz.; November, 21 at 22c. per doz.; December, 20 at 25c. per doz.; amounting in all to 257 or 21½ doz. eggs during the year.

She showed signs of clucking on the 17th day of August, so I put her in the enclosure for clucking hens, fed her all she could eat, and gave her all the fresh water she could drink, and in four days she began to moult. On the 12th of September she began to lay again and continued laying until the 12th of January, 1898. I set her next day, and therefore in a few days I shall know the result. During the year she laid 21½ doz. eggs, at the above prices amounting to \$3.56½. The food she consumed during this period of time cost 67½c. The express charges on the eggs were 14½c., leaving \$2.74½ clear profit. I am of the opinion that it would pay people fully as well to test their hens separately as to test their cows separately. For while I made this profit from this hen I am satisfied I had other hens out of the same clutch which did not do so well.

In the year 1897 I had chicks hatched out in February, March, April and May. February chicks I found paid best. They moulted in August and commenced to lay during the first week in September, and have laid regularly ever since. March chicks moulted in September and did not commence to lay until the latter part of October. The weather being so much colder it was a greater shock to their systems, and they did not get over it so easy as the February chicks did. The April chicks did not moult at all, and are not laying so well as the previous months' chicks. As for May chicks, I cannot say anything about them as I sold them all.

Last year I fed 2½ lbs. clover at \$8 per ton, 1c.; 5 lbs. shorts at \$12 per ton, 2c.; 20 lbs. mangolds at 10c. per bushel, 3½c.; 5 lbs. ensilage at \$2 per ton, ½c.; meat scraps, ½c.; 5 lbs. oats at 20c. per bushel, 2½c., amounting to 10½c. per day. This year I am feeding 2½ lbs. clover at \$8 per ton, 1c.; 2½ lbs. shorts at \$12 per ton, ½c.; 2½ lbs. bran at \$10 per ton, ¼c.; 20 lbs. mangolds at 10c. per bushel, 3½c.; 5 lbs. ensilage at \$2 per ton, ½c.; meat scraps, ½c.; 2½ lbs. oats at 23c., 1½c.; amounting to 9½c. per day.

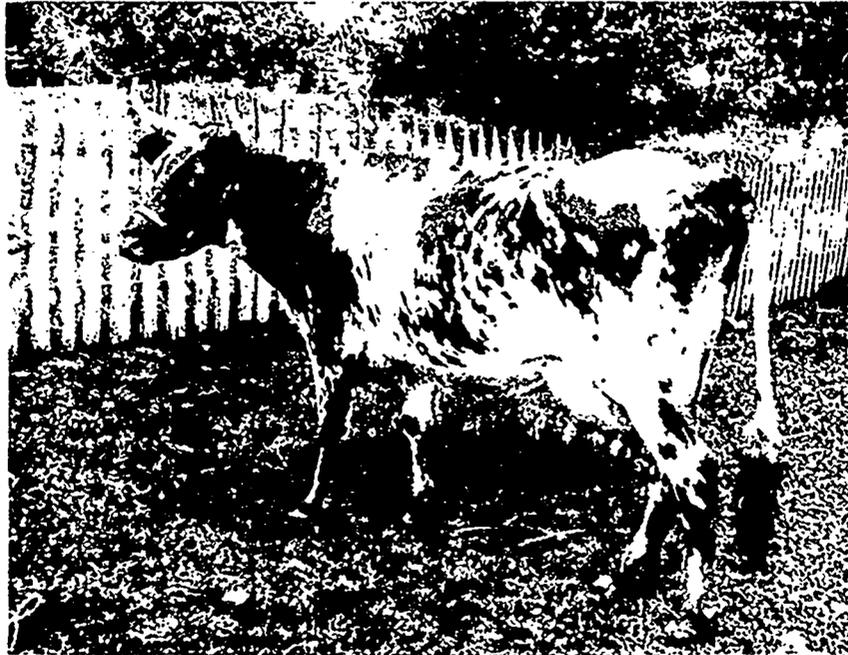
I found that my hens got too fat last year, so by reducing their grain ration they are laying better and are in a

much healthier condition than last year.

I have tried several different breeds of hens, but find that the Barred Plymouth Rocks pay best.

SOW CLOVER THIS SPRING.

Clover seed is cheap this spring, therefore be sure you get enough to seed down all the spring grain you sow. You can't make a more profitable investment. A spring seeding of clover plowed down in the fall will add from 100 to 150 lbs. of nitrogen to the soil per acre. If left as a cover to prevent leaching during the winter and then plowed down in the spring there will be added to the soil about 100 lbs. of nitrogen. The clover will also gather potash and phosphoric acid from the soil and return them when plowed down in a more available form. The potash will amount to from 100 to 150 lbs. per acre and the phosphoric acid to 30 to 35 lbs. The nitrogen which the clover gathers is taken almost wholly from the atmosphere, so that the clover adds it directly to the fertility of the soil. These figures are the results of careful experiments, and



Purebred Ayrshire Cow, Mary, -1871-

Sire, Leo of Norval -314-, Dam, Jenny -837- The property of A. Terrill, Wooler, Ont.

were given by Dr. Saunders at the Fruit Growers' Convention. The nitrogen is worth about 15 cents a pound so the 100 lbs. to 150 lbs. of nitrogen that is added per acre will be worth from \$15 to \$22.50. The seed is worth from 60c. to 75c. per acre, so for an investment of from 60c. to 75c. we are almost sure to get fertilizing value added to the soil to the extent of \$15 to \$22.50. Besides this the phosphoric acid and potash gathered by the clover will be in an available form for the next crop. The next crop on the land will be a much better one. The texture of the soil will be much improved by the clover. The clover crop pays big interest on the investment, if only sown to plow down again in the fall. Its value increases if allowed to grow and a crop of hay taken the next year. Sow plenty of clover.

EXERCISE FOR THE SOWS.

Every farmer knows that the fall litters are usually more even, healthy, and much stronger than those farrowed

in the spring. Why is this? It is believed to lie in the fact that during the summer the sows have plenty of exercise every day, and that during the winter they are too often confined in a close pen without any opportunity of exercise. Let them have the run of the barnyard, if possible, and you will have much better litters this spring. Give the sows some inducement to take exercise. Another point to watch is to see that the sows do not become too fat, or the litters will be apt to be weak. Let them have plenty of exercise.

RAISE CHICKENS FROM EARLY LAYERS.

The progressive poultry raiser will be mating his birds now for eggs for hatching. Many of them will already have hens or incubators at work. The early chicks are the ones that pay the best. They also make the early layers. The most profitable hens are the ones that begin early and lay well during the winter when eggs are a good price. But as they are a good price, they all go to market. By the time the hatching season is along these hens are

TENT CATERPILLAR EGGS.

It is a good plan to examine the apple trees on mild days for eggs of the tent caterpillar. The eggs will be found in clusters on the top twigs. They encircle the twigs, and are in appearance glossy. Each cluster contains several hundred eggs. They are quickly seen by a sharp-eyed man, and can be easily cut off with a pair of pruning shears with long handles. Gather the twigs, with the clusters on them and burn them, and thus save yourself a lot of work next season.

FARM POINTERS.

On stormy days clean up the grain that is to be used for seed so that it will be ready for seeding when the time comes. It will pay to clean it thoroughly. Remove all the light seed and save only the heaviest and best.

It is a good plan to have a lamb-creep in connection with the pen in which the young lambs are running. They soon learn to eat meal and will make extra growth for it. A pig creep is equally as good an investment.

Spring will soon be here. Look over the plows, harrows, cultivators, and other implements, and see what repairs are needed. Have these repairs made at once or you may lose valuable time when you are ready to use them. Have it done right away, before those who make the repairs are loaded up with work for your neighbors.

Examine all the whiffle-trees and have them put in good shape. If you haven't got a few extra ones on hand, get them made and ironed at the earliest opportunity. An extra one may often save a serious delay. Always keep one made up for use in cases of emergency.

See that the clevises on the whiffle-trees are all in good working order. Have an extra one or two on hand. Have an extra large double-tree clevis or two; it will often save time.

REPORT OF THE CHEESE AND BUTTERMILK MAKERS' MEETING AT WOODSTOCK.

By JOHN ROBERTSON, Ingersoll.

Woodstock, Ont., Feb. 23rd.

The first annual meeting of this association assembled in the Town Hall here this afternoon.

Mr. J. T. Henderson, of Pine River, president, called the meeting to order and spoke on the objects of the association. A good deal of discussion followed, after which preliminary arrangements were made, and several committees appointed to consider by-laws and draft recommendations to be submitted at a future session.

Mr. T. B. Miller, instructor in cheese-making at the Dairy School, Guelph, gave an address on the benefits of organization and of the makers co-operating in regard to their own interests. Addresses were also delivered by Andrew Pattullo, M.P.P., Geo. H. Barr, and others.

WEDNESDAY, FEB. 24TH—MORNING SESSION.

The chairman introduced Dr. McKay, M.P.P., Ingersoll, who spoke on the benefits of cold storage for the preservation of our dairy produce, and the great responsibility which rested upon the dairymen and the cheese and buttermilk makers of Canada as to the success of the dairy industry.

Mr. Wm. Agur, Brownsville, read a very good paper on the care and management of steam boilers, and recommended that the tubes or flues be kept clean. The bottom of the boiler should be brushed clean and proper dampers used to shut off the draught from the fire when not needed.

BOX STALLS FOR CALVING COWS.

At this season of the year there are a great many cows coming in. It is a good plan to have a suitable box stall in every stable in which to put cows due to calve. Sometimes more than one cow is due about the same time. Then don't risk things, hoping they will come all right. A few minutes will fix up a temporary box stall so that the cow can have her liberty in a suitable place and you will run less danger of losing either cow or calf, or perhaps both.

Mr. T. B. Millar, as chairman of the committee on rules and regulations, submitted the following report, which was read and discussed, clause by clause:

- (1) The name of the association shall be The Cheese and Buttermakers' Association of Ontario.
- (2) None but those who are engaged in cheese and buttermaking shall be accepted as members of this association.
- (3) All others who are interested will be made welcome to all its public meetings.
- (4) None but members can be elected as officers of the association.
- (5) The board of directors shall consist of a president, vice-president, and seven directors.
- (6) The vice president shall succeed the president in office.
- (7) The nominating committee shall be named by the retiring president.

(8) All officers shall be elected annually, and at least one new member shall be elected each year.

(9) The board of directors shall have the power to appoint a secretary and treasurer.

The following recommendations were made by the committee:

- (1) That makers stand shoulder to shoulder in rejecting milk in a bad condition, and that no maker take in milk that has been rejected by a maker at another factory.
- (2) That circulars be sent to all salesmen and boards of trade connected with the dairy business asking them to make such arrangements as will cause all cheese and butter to be inspected before being sold, and that all sales made on the board are alike binding on both buyers and sellers.
- (3) That cheese and buttermakers shall not be held accountable for any losses that may arise from any want of appliances, from bad curing-rooms, or from unsanitary conditions connected with the factory.
- (4) That cheesemakers shall be liable for any losses caused by negligence or want of proper attention on their part in the manufacture of either cheese or butter.

AFTERNOON SESSION.

Prof. Dean, O.A.C., Guelph, addressed the association on the main points connected with experiments in the dairy school at Guelph during the past seven years. In his opening remarks he said that modern dairying is now such a gigantic business that there are many giants to be slain and removed, such as ignorance, low wages, long hours, unsanitary conditions, etc. These giants can only be removed by proper organization and co-operation.

The principal points investigated are as follows:

In the effects of food on the texture of butter, cotton-seed meal makes the firmest butter. Turnips give a strong flavor to milk and cream, but by pasteurizing the cream and using a starter this strong flavor may be overcome. The separator will make one pound more butter from one hundred pounds of milk than any other system of creaming milk. In the composite milk test, use 7 ozs. of bichromate of potash and one ounce of corrosive sublimate mixed.

In the feeding value there is not much difference between sour and sweet whey; 100 lbs. of whey equals about 10 to 11 lbs. of meal, in feeding pigs.

Mr. Rogers, O.A.C., gave an excellent address on buttermaking, and the principal points to be observed. The milk should be at 100° F. when run through the separator. Cream, when properly ripened, is smooth and glossy, with a good acid flavor and taste. Churn in from 45 to 60 minutes, and use about 6 per cent. of starter.

Mr. J. Stonehouse, St. Mary's, spoke on the "Modern Creamery."

The convention, in many ways, was a success. Officers: President, T. B. Millar, Guelph. Directors, E. Agur, Brownsville; J. T. Henderson, Pine River; G. H. Barr, Sebringville; G. C. Goodhand, Milverton; W. W. Brown, Attercliffe Station; J. Morrison, Stratford; T. Baird, Ingersoll; and John Brodie, Mapleton.

THE CANADIAN HORSE SHOW FOR 1898.

The annual spring Horse Show this year will be a combined horse show and military tournament, and will be held on May 4th, 5th, 6th and 7th, 1898. This is later than it was last year, and too late for the breeders, but it is the best that could be done. The military authorities intended holding a big

military tournament, and wanted The Armouries for drill, so that it was impossible to get it for the Horse Show. Therefore the committee in charge decided that it was better to join with them, if possible, and hold a combined show and tournament. This has been accomplished, and no efforts will be spared to make it the show of the season, though somewhat late for breeding horses.

The prize list is a good one, and should bring out a fine showing of horses, seeing that there is a revival of interest in horse breeding. The prizes for horses in harness, tandems, four-in-hands, saddle horses, hunters and jumpers, roadsters, ponies, are the same as last year, with an increase in the prize money in two cases and the dropping out of the class for polo ponies.

The breeding classes are well sustained; a few classes in which the entries have been small are dropped. These are particularly the classes for youngsters in the Thoroughbred, Coach and Standard bred classes. Prizes for Shires are the same as for last year, with the addition of a special for best stallion, any age. Two prizes for young stallions are also dropped in the Hackney class, which is otherwise a very full one. Clydesdale classes are practically the same as last year, with the change of a \$25 prize for the sweepstakes stallion instead of a gold medal.

The Horse Show Committee consists of: Root, Davies, chairman; G. W. Beardmore, Dr. A. Smith, J. K. Osborne, C. W. Clinch, Capt. Forester, W. Barwick, C. Bristol, H. N. Crossley, W. Hendrie, jr., S. B. Fuller, G. Pepper, S. Houston; H. Wade, secretary.

NOVA SCOTIA FRUIT GROWERS' CONVENTION.

The thirty-fourth annual convention of the Nova Scotia Fruit Growers' Association was recently held at Wolfville, N.S. In his address the president, J. W. Biglow, called attention to the comparative failure of the Nova Scotia apple crop in 1897. It only amounted to \$5,000 bbls., while in 1896 over 500,000 bbls. were shipped. Insect pests had not been as bad during 1897 as in previous years, perhaps due to more systematic and intelligent spraying. They had no San José scale yet, and hoped to have a law passed prohibiting the importation of foreign fruit trees.

Professor Sears, the new director of the School of Horticulture, gave two good papers, one on spraying and another on pruning, which brought out spirited discussions. He claimed that the damage to grass land or to the apple crop by spraying was nil. The San José scale came in for a good share of discussion. Mulching fruit trees as a means of subduing weeds and conserving soil moisture in an orchard was recommended by Mr. Henry Shaw, of Waterville.

The discussion on marketing fruit in England was led by Mr. J. E. Starr and Dr. DeWitt. Both gentlemen thought that the unsatisfactory returns were due to two causes, packing and transportation. More careful packing was required in the orchard and better transportation facilities. Mr. Starr recommended that every shipper should have his name on the barrels he ships, and believed it best to select one particular firm with which to do business and stick to it. Mr. Innes seemed to think that what was wanted was a shipping company with suitable warehouses, etc., to handle the whole fruit crop as though it were one consignment. Express tariffs were up for discussion, the general complaint being that they were too high. Mr. R. Robertson, superintendent of the Nappan Experimental Farm, made a good address on the necessity of keeping stock in connection with the orchard as a means of supplying manure.

The new officers for 1898 are: President, J. W. Biglow; vice-president, P. Innes;

secretary, S. C. Parker; and treasurer, G. W. Munro.

QUESTIONS AND ANSWERS.

DANGER OF SPRAYING POISONING PASTURES.

E.A.C., Colpoys Bay: 1. I wish to seed down my orchard to red clover and orchard grass, especially the latter, and pasture with pigs. Now, in spraying the fruit trees would there not be danger of poisoning the pigs? How long would it be necessary to keep the pigs out of the orchard for safety?

2. In shipping eggs in the winter, when they are dearest, to the most profitable points, would there not be great danger of their freezing on the way? Is there any economical way of avoiding this danger?

3. What is the most convenient sized bone cutter for from 100 to 200 fowls, easily worked by hand?

4. Supposing fowls to have all the meat they need, what is the best substitute for bone?

5. A bone cutter for cutting up green bones is the best, I suppose. Who are the makers?

6. Is there any kind of harrow sold light enough to harrow corn after it is sown in hills or drills without displacing it, or to harrow grass seed?

7. In using a mower with a pea harvester attachment you can only use it in one direction, can you not? That direction is generally from an easterly quarter to a westerly one, as peas generally fall over towards the east. Can two men and a team work it without shelling too many peas?

1. Most of the spraying in which Paris green is used will be done before the pigs will be out to pasture. The quantity that finds its way to the grass is so small that the pigs would require to eat an impossible quantity of grass to be affected by the poison.

2. The only precaution observed is to ship the eggs in the regular egg crates by express, in moderate weather. There is no danger of them freezing then if properly handled.

3. One of the larger sized hand machines would be required to cut the necessary quantity in a short time.

4. Broken oyster shell or old plaster.

5. J. S. Pearce & Co., London, and J. A. McMartin & Co., Montreal, make good machines.

6. Any light harrow will work satisfactorily on the corn. We know of no harrow made on purpose for this work. Grass seed very seldom needs to be harrowed in. If necessary to harrow it in make a brush harrow.

7. It is nearly always possible to cut two sides of a field of peas, very frequently three sides, and often all four sides. Cut them before they get down too far. Two men and a team can do the work well if there is a buncher attached.

COLOR IN BREEDING.

David Carr, Owen Sound: 1. There is considerable difference of opinion in regard to the color question in the cross-breeding of pigs in this locality. Some contend that if the sire is purebred the progeny should follow him in color, even although the dam may be purebred also. Others do not believe that this is always the case. Any information you can give on this subject will be thankfully received. Berkshires, Chester Whites, and Yorkshires are the pigs specially referred to.

2. I would like to know also if there is any truth in the statement that if I breed a purebred sow of one particular breed to a hog of another breed for once only that I would never be able afterward to have any of her stock registered, although bred from a boar of the same breed as herself.

3. What is the difference between thoroughbred and purebred as applied to pigs?

Free Seeds

Given for New Subscribers to "Farming"

WE have made special arrangements with the old and reliable seed firm of JOHN S. PEARCE & CO., London, Ont., whereby we are able to offer the following valuable collections of seeds as premiums for new subscribers.

These seeds are of the best varieties and are specially for our patrons.

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10 Packets Vegetables. Price, 50c.

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

Given for one new yearly subscriber at \$1.

COLLECTION B.

10 Packets Flowers. Price, 50c.

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

Given for one new yearly subscriber at \$1.

COLLECTION C.

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

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

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

COLLECTION D.

20 Packets Vegetables. Price, \$1.

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

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BARLEY

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

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Stratford, Ont.
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T. L. Walworth, Vancouver, B.C. MONTREAL, CAN.

Questions and Answers. (Continued.)

1. You have touched one of the knotty problems in breeding. A good many breeders hold to the opinion that the sire transmits the external characteristics of his breed to the progeny, while the dam transmits internal peculiarities. There is, however, much conflicting evidence on this point, and this rule or law, if it be such, does not always hold good. No infallible rule can be laid down. Of the breeds mentioned the Yorkshire is probably the most prepotent. We would expect the progeny to be white if the sire was a Yorkshire and the dam a Berkshire. If the sire was a Berkshire and the dam a Yorkshire we would expect that the strong prepotency of the Yorkshire blood would override the influence of the Berkshire somewhat, and would look for considerable white in the progeny. Then the influence of a previous impregnation sometimes comes in to change things in an unexpected way.

2. You can register the progeny. Should, however, any influence of the out cross show itself in the succeeding litter, as it sometimes will, those animals showing it should not be registered, although you could legally do so. They should be treated as only grades. It would not be to the interest of any breeder to dispose of them as purebred.

3. Purebred is the proper term; thoroughbred should not be used.

It is a mistake to have a half dozen branches to the grape vine where there should be but one. The one should give fine, large berries, and bunches which would weigh just as much as the fruit on the half dozen shoots which usually adorn the old vine. Try pruning freely.

Publishers' Desk.

The Results Were Extraordinary.—Wapella, N. W. T., Feb. 13, 1897. — I keep your Gombault's Caustic Balsam in stock. I have sold it for the last three years. I have been in the drug business in Ontario and this country, but it is not known to the majority. I sold a bottle which I saw used under my own supervision, which gave most universal satisfaction. The results were extraordinary. I sell it here at \$1.50 per bottle. I am quite a horseman, and would be pleased to use my pictures of the noted racers of the day, to our mutual benefit. — J. A. MACDONALD.

Central Canada Exhibition Association.—Special prizes will be offered this year at the Ottawa Exhibition for the best pen of bacon hogs, not less than five, suitable for the export trade. Prizes amounting to \$45, divided into three prizes, will be given by the George Matthews Co., Limited, and Mr. J. W. McKee. A member of the Pork Packers' Association will be chosen to judge the exhibits in this class. Special prizes will be given by the American Shropshire Association for Shropshires, and by the Holstein Friesian Association of Canada for a milking test. Preparations are being made for a good show. C. McMahon, Ottawa, secretary.

To Know It is to Use It.—"Diamond Grid Fence.—A new departure has been made of which no doubt hundreds of farmers will take advantage. The expense of machines and farm rights for making wire fence for farm use has been entirely overcome. The Canada Fence Co., of London, Ont., not only offer to furnish material for what they claim is the best wire farm fence made, but also give a machine and license to all their customers with the material for the first hundred rods of fencing purchased from them. This is not all, as they also sell the material at a price that cannot but interest and be of great advantage to all requiring fences. Full information about fence and prices on application.

Stock Notes

N. Dymally, Clappison Corners, writes: My stock are doing nicely. Drummond, 2036, is a bull of good type, good size, and you will soon hear from him and his stock. He will soon be two years old, and is going to make a good one. I have a few nice two and three-year-old heifers on hand, and a nice call out of Brer Banks Susie. I believe the Ayrshire Association made a step in the right direction when they decided to do away with the appendix.

NATIONAL SHROPSHIRE RECORD ASSOCIATION.—At the meeting of the National Shropshire Record Association, held at Lansing, Mich., February 22nd, a number of enthusiastic Shropshire breeders were present. Rules of entry, constitution, and articles of association were adopted which embrace features of record keeping business that will tend to higher quality,

uniformity and purity of blood in Shropshire sheep. Rules of entry, constitution, etc., will be printed and sent free of charge to all members of the Royal Ginnon's, President, HERBERT W. MUMFORD, Agricultural College, Michigan, Secretary.

MAPLEHURST DAIRY FARM, SMITH'S FALLS, ONT. The main business of this farm at present is the production of finey butter. As a fitting adjunct to this is a small quantity of the most valuable cheese for some time being bred Berkshire swine of the most approved and correct type. When the foundation of the present Berkshire herd was laid the owners worked upon the principle that the best was none too good; as a result of this early last fall all surplus stock had been disposed of to well satisfied purchasers. At the head of the herd is "Western Beau," a very lengthy boar with good depth and thick knees, bred by Mr. J. G. Snell. He was sired by the famous Baton Lee, 4th. Jack the Ripper is a very promising year-old boar of good form with markings right, bred by Mr. C. T. Garbutt, Clarendon. Among the sows are Josephine, bred by Messrs. Snell; she is of nearly perfect form and has given birth to three litters of eight young ones. "Canadian Yet" and "Juliet," both bred by Mr. G. Snell, are five fancy dams of nice form. In "Jill," a fourteen months old sow, the progeny have one of the most likely animals in eastern Ontario. There is an almost universally prevalent opinion that Berkshires are among the most if not the most unprofitable of all breeds of swine, this is contradicted in the case of this herd, as nearly every litter numbers nine or over. Young stock from this herd, which just now numbers about thirty head, are offered for sale elsewhere in this issue. Prospective customers may rely on getting straight business treatment in their dealings with this firm.

Mr Simmons' Dispersion Sale.

Mr Simmons' sale is likely to be one of the features of the stock business of the month, and will present an opportunity to buyers seldom enjoyed. In our sketch of Mr. Simmons last week we stated that he had been breeding Shorthorns for nearly thirty years. His first purchases were made from George Miller, Markham, and consisted of two good heifers, Mora 5th and Maud 1st, and a pair of the finest animals in eastern Ontario. Mr. Simmons has always had a long eye on Cruickshank blood when making additions to his herd, or when choosing a sire to head it. The success of his herd is due to the leading show-stamps him as a careful breeder, who knows what he is about. He has not been carried away by any craze for fancy points, but has steadily held to a useful type of animal, and now has his reward in having a herd combining high production qualities and a very large measure of milk production also. The herd comprises representatives of such families as the Minas, Goldendrop, Strathallan, Elvira and Cleopatra. There are perhaps more Strathallans in the herd than of any other family. The foundation stock of this family was purchased from John Miller, of Brougham in Rose of Strathallan 3rd, out of Red Rose of Strathallan by the Doctor (Imp.). This cow was a good investment for Mr. Simmons, as she raised him fourteen calves. Her eldest daughter, Daisy of Strathallan, by Victor Regalias (Imp.), has inherited the good qualities of her dam, for five of the females in the herd are her daughters. They show the solid color of the family very well, and are by noted sires, as Mina Chief (the sire of the herd of four calves that won first place at Toronto, 1894), Royal Saxon (first as aged bull, Toronto, 1894), Hampton M. and Blue Ribbon. Other daughters of Red Rose of Strathallan 3rd have been famous. The sweepstakes female at the leading shows last fall was a daughter of hers, and one in the herd now. Daisy of Strathallan 13th, by Hampton M., is no stranger to high honors in the show ring. All this family are noted for their deep, blocky frames, evenly covered with deep, firm flesh. No one can make a mistake in securing any of this family as foundation stock. Of the Goldendrop family there are a number of good representatives. The original Goldendrop was by Hampton Hero, out of Fancy Drop (Imp.). Of her sire, Hampton Hero, we need make no comment. The Mina family are represented by two grand cows of conformation and fleshing that is liked everywhere. A herd headed by Royal Saxon is the other member of this useful family. Of the Elvira family there are a few good representatives fit for the show ring. The present stock bull, Blue Ribbon (Imp.), is by Royal James, dam Rosalita. He comes of famous breeding. He is now doing service for the second season in the herd. His progeny prove him to be a valuable sire, as they are all coming in solid colors, very smoothly built and uniform in fleshing. All the young stock are good ones. No one can make a mistake in purchasing stock at Mr. Simmons' sale, for his long training as a feeder of cattle early taught him the form and quality necessary for highest results in beef production, and these Mr. Simmons has secured in his herd in a very large degree. The sale will be on March 18th, at Ivan, seven miles from Midleton, on the L.H. & B.R.

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A CATTLEMAN to take charge of a herd of 100 head of Cows; one who thoroughly understands the breeding of and caring for dairy cattle.

A VEGETABLE GARDENER A thoroughly competent man; one who is clean, tidy and trustworthy men need apply. References as to character and ability must accompany applications.

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"The Spramotor"

Illustration of a person using a sprayer device. It has received the Highest Awards wherever shown, and also received the First Place at the Government Spraying Contest at Grimby.

CERTIFICATE OF OFFICIAL AWARD:

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

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The Ontario Agricultural Gazette

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

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

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

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

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

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

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

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

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

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

Farmers' Institute Department.

Reports concerning the work of the Farmers' Institutes in Ontario will be published weekly under this head; also papers prepared for this department by Institute workers. Secretaries and officers having announcements to make are invited to send full particulars to the Superintendent.

PLANTING AND CARE OF SHADE TREES AND WIND-BREAKS.

BY ALP BROWN.

Farmers generally do not take advantage of the very easy and sure way of adding value to their real estate by planting our native trees in neat lines along road-sides and lanes, around buildings and yards, in clumps on waste or unsightly places, or bluffs that are too rough for cultivation. These places planted with black walnut I believe will be as good an investment as the same area of apple orchard on suitable soil, although dividends will not be realized from the walnut timber as early as from the apples. American black walnut can be grown better by planting the nuts directly where the trees are wanted, as the walnut is a little difficult to transplant owing to the large tap-root and the absence of fibrous roots. This condition applies to most of the nut-bearing trees. The walnut begins to bear at Picton when planted from the nursery in about eight to ten years, and although the nuts are quite strong flavored they are relished by some people. For planting, the nuts should be gathered when ripe and not allowed to dry. They can be kept out-doors by packing in a box of sand, or may be planted directly where desired. Cover the nuts three inches deep, mulching lightly; keep down grass and weeds, and use plenty of manure. When once started the trees increase in diameter about half an inch every year. American sweet chestnut is grown for commercial purposes mostly in its natural state, but when planted in the clearance makes a good shade tree. The leaves are nicely serrated and glossy, giving the tree a beautiful appearance.

Hickory nuts have become quite popular in the markets, and in selecting for planting, only use from trees bearing good sized plump-meated nuts. These and the chestnut require the same treatment as mentioned for the walnut. Basswood, when planted in the clearance, forms a pretty compact

shaped head, and besides being valuable as a timber, shade and ornamental tree, it is a source of the best crop of honey produced by any plant grown in Canada, and as our forests are being destroyed it would be wise to have the basswood planted extensively for the encouragement of apiculture, for trees are valuable to fruit-growers and farmers as they insure fertilization of flowers. Basswood grows readily from seeds.

Sugar, or hard maple, our national emblem, should be planted broadcast everywhere where there is room for a tree, as it may be had in most localities for digging. It grows a symmetrical-shaped head when properly planted and pruned. The soft maple grows very rapidly and will succeed on a greater variety of soils than the hard maple. Trees in our yard planted eight years are six inches in diameter and give plenty of shade for the hammock. Maples can be dug best with a strong, sharp spade, cutting a circle around the tree 25 to 30 inches in diameter and lifting out the plant with what soil and leaves adhere to it. Cut off all branches and saw off the top not more than seven feet from the roots. The trees that have given us the best growth were one and a-half to two inches in diameter a foot from the ground when planted. When growth starts rub off all buds except a few at the top of the bare trunk to form a head.

Norway spruce is the best evergreen for practical use in Ontario, either as a windbreak or as an ornamental tree. It makes a dense upright growth of uniform shape and is very attractive planted alone or alternately with deciduous varieties. Keep trees well mulched which comes nearest to their natural condition. The writer does not favor planting trees any thicker than they are to remain, except where straight long trunks are required for timber, for it requires more courage than most men have to thin out a row of trees when once they are established. The farmers at the Institute meeting at Glen Allen, estimated a farm having 100 shade trees well arranged would sell for \$500 more than a similar farm along side, other improvements being the same. Where young trees can be found not more

than a mile from the place where needed, the 100 trees can be selected, dug, trimmed and planted for \$5, if the work had to be hired, but most farmers are strong handed enough to plant 100 trees every spring.

Possible injuries.—(1) Where planted too thickly so as to form a wind-stop, which is not desirable. A free circulation of air might be prevented and thus encourage insects and fungus growth. (2) Encroachment—adjacent crops will certainly be injured, but a good windbreak or line of ornamental trees are well worth the land they occupy.

Decided advantages.—Evaporation is lessened and the moisture in the soil assimilated by growing crops instead of being hurried in the air by heavy winds. For illustration of this point, refer to Prof. Panton's experiment in the Report of the Superintendent of Farmers' Institutes for 1895-6, page 60, which shows that wind hastens the moisture out of the soil. (2) Protection of bloom from cold, rough weather will ensure a good crop, which might from exposure result in a light yield. (3) Snow and leaves are retained and help to retard fruit bloom in localities subject to late spring frosts. (4) Less injury is sustained from wind when trees are loaded with ice which ruins so many fruit trees; also the loss from windfalls is reduced. (5) Erect growth in fruit trees is difficult without protection from prevailing winds. (6) Encouragement of insectivorous birds. This advantage alone is worth the land and care required to have a good windbreak where the birds will build their nests and bear their young largely on insects that destroy our crops. These birds and their nests should be protected by legislation, including the extermination of the English sparrows which are driving useful and friendly birds out of the country by destroying their eggs and taking possession of the nests for their own use. (7) A farm beautified by shade trees is enjoyed both by the travelling public and by the farmers themselves.

Ontario Agricultural College.

Announcements concerning the College work will be published weekly under this head.

FRUIT GROWING AT GUELPH.

By H. L. HUTT, B.S.A. Horticulturist.

The climatic conditions at Guelph render this section far from being what might be called a fruit section. For this reason the results of fruit tests made here will have a wide application, as what will succeed at Guelph may reasonably be expected to succeed in almost any other part of the province.

In the horticultural department at the college an effort is being made to ascertain what may be done there in all possible lines of fruit growing. An orchard was set out last year made up of apples, pears, plums and cherries, which contains all of the leading varieties, and many of the newer ones which

may be expected to be of value. In the course of a few years this orchard should become the source of much valuable information to the farmers and fruit growers of the province, and particularly so to those in the less favored fruit sections.

In grape growing it has already been proven that only the earliest ripening varieties may be expected to properly mature in the average season. Varieties ripening with, or later than, the Concord, cannot be depended upon in one season out of five. A new vineyard will be put out this spring, made up of all the earliest varieties that can be obtained, in order to find out by practical test which of these will be of most value for those parts of the country where the Concord is too late.

With the small fruits, however, there is hardly a section of the province in which the most of these, such as strawberries, raspberries, currants and gooseberries cannot be grown in great abundance. Large collections of the different varieties of these are already under test at the college, and will be reported upon from year to year in the annual report. In the report just issued is given the results of last year's tests with 150 varieties of strawberries, as well as a report on the first crop of a large number of varieties of raspberries, currants and gooseberries.

TUBERCULIN.

By F. C. HARRISON, Bacteriologist, O.A.C., Guelph.

The tuberculin manufactured by the Bacteriological Department of the Ontario Agricultural College is now sent out either concentrated or diluted. Those applying should state whether they require the concentrated, which possesses good keeping qualities, or the diluted, which does not keep so well, but is ready for immediate use. To veterinary surgeons the cost is ten cents per dose, diluted or concentrated, but to farmers desirous of testing their own cattle the tuberculin is free. In all cases the applicant is asked to fill out a blank form arranged for recording temperatures, and return it to this department. No name or address is asked for, simply the record of the test.

The department has recently purchased a large incubator, or fixed temperature chamber, where a temperature that will not vary a degree in months may be maintained as long as desired. With this addition it will be possible to manufacture a much larger amount of tuberculin.

The manufacture of mallein, a substance similar to tuberculin, but used for diagnosing glanders in horses, has also been started, and in two or three weeks' time a supply will be ready. During the last three months 853 doses of tuberculin have been sent out to farmers, and sixty-three doses to veterinary surgeons.

Trees pruned in the spring when growth is active heal most rapidly.

MARKET REVIEW AND FORECAST.

Office of FARMING,
44 and 46 Richmond street W., Toronto,
March 7th, 1898.

The number of buyers attending the spring millinery openings in Toronto was probably the largest that ever attended, and if it had not been for the elections the attendance would have been larger still. Besides this there has been liberal buying of a better class of goods and heavy sales of dry goods. The large wholesale distributing houses report large sales. Millinery and dry goods values are firm. Hides are one-half cent lower, and another drop of one-half cent is expected soon.

Wheat.

The wheat situation continues to be problematic. Mr. Leiter controls so much wheat that the market is practically at his command. By withdrawing his large amount of wheat from the market he has made a scarcity; then by manipulating the market he is able to put up the price to what he wants it. The sudden ups and downs of the market are a sure indication that a speculator is working the market for the benefit of his own pocket. Stocks are said to be larger now than they were a year ago, and there is, therefore, no need to fear a famine. A little over four months and new wheat will be on the market. This don't look much like famine. The prospects for winter wheat are good the world over. It is a little too early to tell what it is like here in Ontario. Leiter says wheat will touch the \$1.50 mark yet this spring. Early in the week wheat dropped to 86c. to 87c. at Toronto, and has remained at these figures. Not a great deal of business is being done, however. Exporters don't want to pay more than 85c., while holders are asking 88c. to 89c.

Manitoba wheat has been sold at figures equal to \$1.10 at North Bay. No. 1 hard is quoted at \$1.09 at Midland.

Barley and Oats.

The market for barley is a little better at 42c. for No. 2, 35c. for No. 3 extra, and 35c. to 36c. for feed outside.

Oats are about the same as they were last week; 29 1/2c. for mixed and 30c. to 31c. for car lots of white north and west seems to be the ruling price. According to the Montreal Trade Bulletin, since May last Canada has shipped from Montreal, St. John, and Portland about 7,000,000 bushels, against about 4,000,000 bushels for the corresponding period last season. Prices have been considerably higher this season than those realized last year. A good business is being done in Canadian oats in England, and good prices are likely to be sustained.

At Montreal oats out of store are quoted at 34c. and 35c. to 35 1/2c. afloat for May oats, and at 32 1/2c. to 33c. along the line for export.

Peas and Corn.

Peas continue steady but quiet; 56c. to 57c. for cars north and west seems to be the ruling price. Ten cars sold recently for 57c. At Montreal they are quoted at 65c. to 66c. afloat in May.

Corn is reported steady at 31c. for Canada yellow, west; American corn at 37c. At Montreal, American mixed corn is quoted at 40c. to 40 1/2c. for No. 2, and 36 1/2c. to 37c. for May corn afloat.

Buckwheat and Rye.

Buckwheat is steady at 36c. west. It is reported that a lot was sold at 40c. for delivery in May. Sales have been made at Montreal at 41c. to 41 1/2c.

Rye is firm at 51c. to 52c. for cars north and west. At Montreal the receipts of rye are a little larger at 61 1/2c. to 62 1/2c.

Bran and Shorts.

Bran is quoted at \$12.50 per ton in car lots west. Shorts are \$14.50 per ton. At Montreal, Ontario bran is quoted at \$12 to \$14.50 per ton in bulk, and shorts at \$15 to \$16.

Timothy and Clover Seed.

Red clover seed is quoted at \$3.50 to \$3.80, alike at \$3.25 to \$4, and timothy seed at \$1.25 to \$1.35.

At Montreal, red clover is quoted at \$3.25 to \$4; alike at \$3.50 to \$4.25; and timothy at \$1.50 to \$2.

Potatoes.

Potatoes are quiet at 58c. to 60c. for cars on the track. Out of store they bring from 65c. to 70c. At Montreal they are quoted at 60c. on the tracks and 70c. to 75c. in a jobbing way.

Poultry.

The offerings are small and the demand not very strong. Nice fresh turkeys bring 11c. a pound, chickens are worth from 50c. to 60c., ducks 75c. to 80c., and geese 6c. to 8c. per pound.

Eggs.

The receipts of new-laid eggs are more liberal and the market is somewhat easier at from 15c. to 20c. Lined eggs, 14c. to 15c.

At Montreal the egg market is also a little easier; 18c. seems to be the ruling price, with dealers looking for lower prices.

Cheese.

Nothing new in the cheese trade. The market is quiet and steady at the present low prices. It is, however, characterized by a little more enquiry, which has resulted in sales of about 2,000 boxes at 7 1/2c. to 8c., and a lot of choice western colored cheese at 8 1/2c. Some sales have been made over the cable at 8c. The heavy consumption of Canadian cheese still continues, and is likely to continue now that the strike is over. D. M. McPherson has decided not to allow any fodder cheese to be made in any of his factories. All the factories should follow his example. It will mean better prices next season.

Butter.

The butter market is looking up. At Montreal goods of fine quality find ready sale at from 19c. to 20c. A sale is reported of a well-kept lot of October butter at 18 1/2c. to 19c., and early-made creamery at 18c. to 18 1/2c. The cause of the advance in the market, according to *The Trade Bulletin*, has been a better export demand. This soon absorbed the offerings of the finest butter, and competition at once was begun between the local and export dealers. A few lots of new Eastern Townships dairy butter of extra quality found ready sale in single lots at 21c. to 22c.

Roll butter has been in good demand at an advance of 7/2c. to 1c. a pound. A lot of choice rolls have been placed at 17c., and a fine lot in baskets at 17 1/2c. The supply is limited and all receipts are quickly taken up at from 16c. to 17c. At Toronto, good butter is scarce, and is quickly picked up. Choice rolls and tubs bring 18c. quickly. Good creamery brings 20c. to 22c.

Cattle.

The receipts at the cattle market on Tuesday were very light on account of the elections. Prices, however, were good and six carloads were taken for Montreal. Friday's market was a very large one and prices were well sustained. The bulk of the stock offered was butchers' stuff and a small amount of export stuff.

Export steers are bringing a little higher prices, 5 1/2c. to 4 1/2c. per pound. At Montreal export stock bring 4 1/2c. to 4 1/2c. Export bulls bring 3c. to 3 1/2c.

Butchers' stock is in good demand and prices have advanced a little. Choice lots bring from 3 1/2c. to 4 1/2c. per pound. Good ones run at about 3 1/2c. and common down to 3c. Stockers and feeders. Several small lots of stockers changed hands at 3c. to 3 1/2c. Feeders bring from \$3.50 to \$3.90 per cwt.

There is going to be a heavy demand for cattle for the mining regions and prices for prime butchers' stuff are likely to continue very good.

Sheep.

The market is practically unchanged. Export sheep bring 3c. to 3 1/2c. per pound. Lambs bring from 5c. to 5 1/2c. per pound, also from \$2.75 to \$5.50 each. At Montreal export sheep bring from 3 1/2c. to 3 1/2c. and lambs from 4 1/2c. to 5c. per pound.

Hogs.

The market is improving, and shows an advance in spite of the fact that 3,677 hogs were offered on Friday's market. Choice bacon hogs are quoted at 5 1/2c., light fat hogs at 4 1/2c., heavy fat hogs at 4 1/2c., and sows at 3 1/2c. per pound. At Montreal choice bacon hogs bring 5 1/2c. to 5 1/2c.

Dressed Hogs

Are about the same as last reported.

Hay and Straw.

There is no change in prices as quoted last week.

\$10.00

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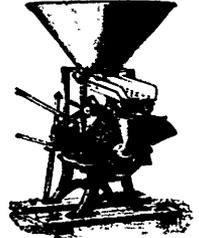
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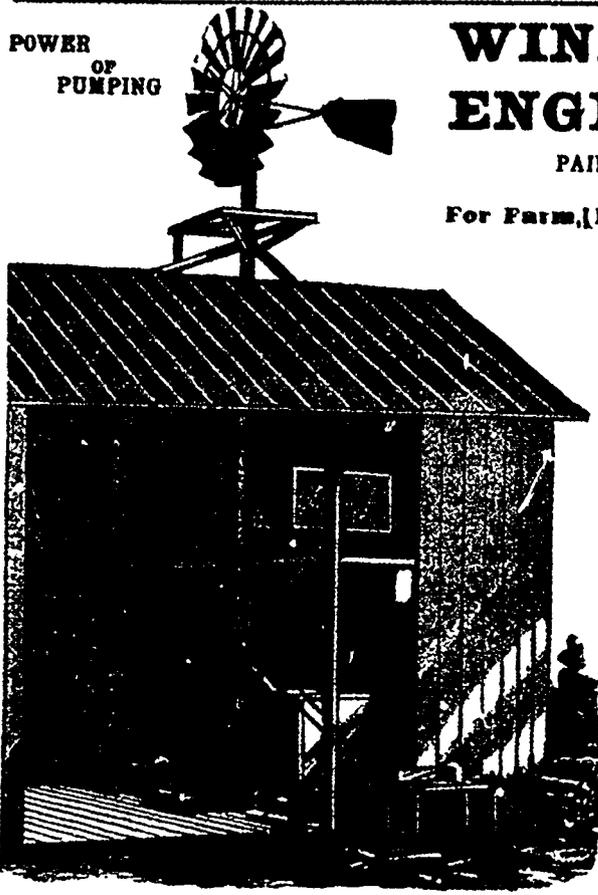
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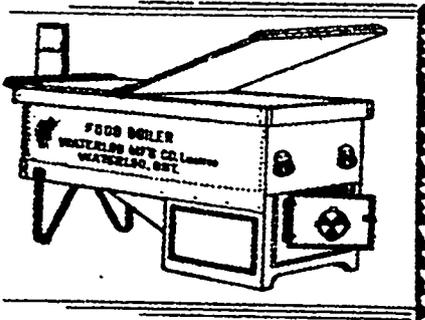
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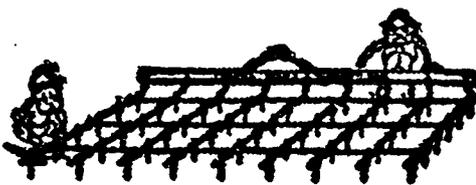
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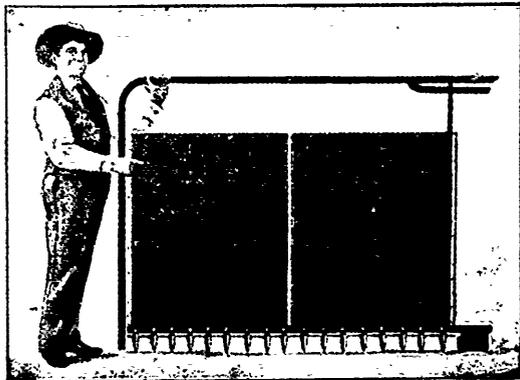
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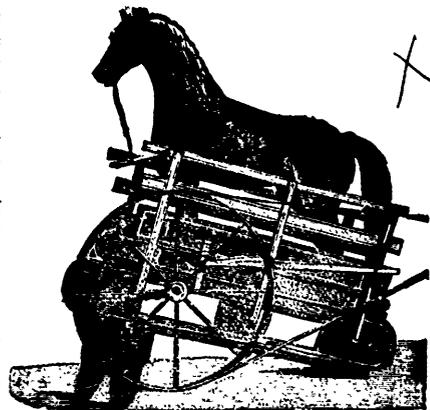
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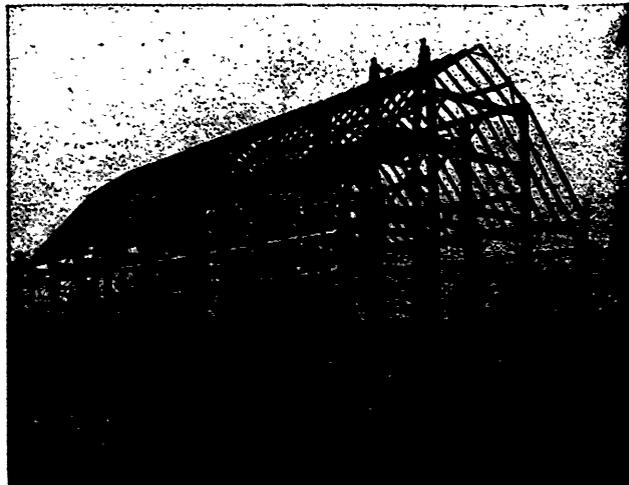
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