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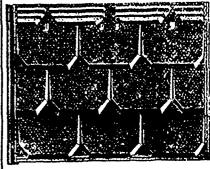
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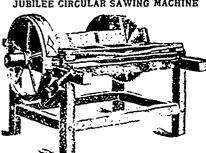
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FARMING

Vol. XV.

APRIL 12TH, 1898.

No. 32.

FARMING

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

Published every Tuesday by

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TOPICS FOR THE WEEK

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Agricultural News and Comments.

The American farmer is returning to sheep breeding, and many United States journals refer to it as a new epoch in American agriculture. We believe also that there is a somewhat similar desire in Canada. Every farmer should keep more

Illinois is likely very soon to become a sugar producing state. The initiative work in regard to it promises good results. The promoters, instead of building the factories and trusting to the farmers to supply the beets, as has been done in most places, have decided to grow the beets first and show the farmers just what may be expected in labor and cost.

The farmers of the great corn belt of the United States have formed what is known as the American Maize Propaganda for the purpose of enlarging the market for that cereal. The scheme is a sort of huge co-operative organization for the benefit of corn growers.

The people of Jamaica are very much concerned in regard to the cane sugar industry of the island. The cultivation of sugar cane is the mainstay of the country. The development of the sugar beet trade has lowered the price of sugars to such an extent that it is not profitable to make it from the cane. The Board of Management of the local Agricultural Society have petitioned the British Government to impose a tax on beet sugar coming into the United Kingdom, or to adopt some plan that would lead to the abandonment of the bounty system.

An American firm has received an order from the Greek Government to supply 10,000 plows to be used in the cultivation of the districts of Thes saly devastated by the Turks during the late war.

It is the intention of the Greek Government to open up extensive corn fields in these sections. This is the largest order ever given by any foreign Government for American agricultural implements.

The Belgian Government has issued new orders relative to the inspection of fresh and other meats imported into that country. These orders provide for a minute examination of all packages containing fresh or other meats at the port of arrival, at the frantier towns, and at certain other places which may be designated as special. These orders would appear to be specially anned at hams, bacon, etc., shipped from America to Antwerp

An American exchange points out that every farmer has on his premises one of the best super-phosphatemanures known. The elements are found in the old bones scattered carelessly over the yard, garden and farm, and common wood ashes generally allowed to go to waste. If the bones are gathered, placed under shelter, mixed with three or four times their bulk of ashes, kept moist with water enough to make a good lye, and occasionally stirred and mixed, they will in a few months become so tender and friable that they may be pounded into powder, and in this state they form a valuable manure, better than many fertilizers that seem so expensive. The ashes should be mixed with the bone.

During the last financial year in Great Britain no horses have been bought for the cavalry in England outside of Brita n. The cost of cavalry horses has averaged in England \mathcal{L}_{40} , in Egypt Les to L30. in South America, L23 5s, and in South Africa, L35 to L40

A recent writer gives an ingenious explanation for the habit of shying in horses. Shying, he states, is a relic of a valuable ancestral instinct. The wild horse feared few enemies when out on the plains, where speed was his protection. But every bush or tuft of long grass might, and often did, contain a fierce foe lying in ambush. Many a time must the wild horse have saved his life by a sudden swerve and leap in the opposite direction the moment he heard the rustle of the leaves. In this way the habit of shyness in a horse is a relic of the instinct of his ancestors.

Our British Letter.

(From Our Special Correspondent)

London, Eng., March 31, '98.

FARMING IN GREAT BRITAIN.

I had occasion yesterday and to-day to peruse and digest certain official information in regard to farming matters in Great Britain, which, if perused and properly digested by our agricultural community, would not only open their eyes (the metaphor seems a little mixed, but it will pass, I dare say), but should cause them to alter many of the methods by which they now eke out a liveli-To properly understand farming matters in Great Britain, those outside our shores must remember that a farmer within them is a man who pays rent for the land he tills, and is not like so many men in other countries who have no rent at all to pay. Thus he, the former, starts with an expense not common, for instance, to thousands of farmers in commental countries. It is rather strange that he does not seek to become his own freeholder, but, somehow, he prefers to jog along in the old way. Then, again, the farmer here pays, generally speaking, a much higher wage for the labor he hires than does the continental cultivator, and, moreover, he works very much less arduously than the latter. In two respects, therefore, at least, the British agriculturist is apparently handicapped, viz., (1) by the payment of a none-too-low rent, and (2) by the payment of a none-too-low wage for hired labor. It may naturally he asked by some who are unfamiliar with agricultural conditions over here, how, under such circumstances can the British farmer expect to cope with outside competition, and I certainly feel it incumbent on me to say a word or to on the subject. Now, I am one who has travelled my own country a great deal, and who has come into contact with all classes of agriculturists; and I find that, whilst unquestionably those in Great Britain do have to suffer unjustly from a foreign competition to which they have never been parties in forcing it upon the nation, they are, as a class, lacking in initiative, etc. In Scotland matters are somewhat better than in England, but it is, in my opinion, mainly owing to two facts. In the first place, the Scotch farmer is usually one who not only sees his men work, but he works himself and he works with In the second place he is a more skilful cultivator and better at driving a bargain. These qualities are possessed by many of the agriculturists just south of the Scottish border. But lower down than that, you will (I speak in the main) get them only in the smaller class of farmers, those, for instance, who cultivate 50 to 100 and

I have said that our farmers are lacking in initiative. Is it not true? There is Lord Winchilsea, one of our big landowners, who some three years ago started a movement on a national scale to get farmers to combine both for political and social objects affecting the class. The result of the organization he founded exists still, but that is all that can be said for it. It is of absolutely no force, whether from the social or the political point of view. It ought to have been quite the opposite. Now, on the other hand, in Scotland about a twelvemonth since, the butchering fraternity took it into their heads to boycott those farmers who dared to sell to any of the co-operative stores. In this they were supported by the auctioneers of cattle. The Scotch farmers, like a Douglas or a Bruce, were at once "up and at 'em." They determined to try and do without the butchers and without the auctioneers. Result? Butchers and auctioneers cried "Peccavi," and the farmers have been winning ever since all along the line. Other instances could be given in numerous matters where the English farmer might do better than he does if only he would take a resolve to be more active in the daily affairs of his life.

Let me give only one other instance, and this from the educational standpoint rather than what I may term the propagandist. The British (I refer now chiefly to the English) farmer is not at all great on education. He thinks he knows all about it-knows more than the scientific man above can tell him, and quite as much as the man who has practice with which to back up the science. A Frenchman, a Dane, or a German (and I hope a Canadian) would use somehow or other the information procurable from outside sources. Not so the English farmer. He has the Saxon instinct and accordingly is slow. He thinks "slow and sure" still a good motto, meanwhile he is gradually lagging behind, and even he feels something is wrong when his pocket becomes touched, though he ascribes this to everything but the right thing.

Well, well, what's to be done? Only this I am afraid, viz., to have hopes that the rising generation of cultivators will prove a little better than their fathers. You cannot, perhaps, put new wine into old bottles, or new ideas into old heads; but there is, it is pleasing to believe, a ray of hope that the youngsters will prove as good agriculturists in the future as their parents were in their younger days. That is our chief hope, combined with a full appreciation of the merits of co-operation. On this point I may yet have something to say.

Cheap Money for the Farmer.

The announcement in the Budget Speech at Ottawa last week that after July 1st next, the interest allowed on deposits in the Government Savings Bank would be reduced to 2½ cents should meet with favour among the agricultural classes. This announcement means cheaper money for those who are carrying on the business of the country. One of the drawbacks to business progress is dear money. It hinders business men from undertaking larger things because of the high rate of interest, and so to a certain extent trade is hampered.

The reduction in the rate of interest may be felt somewhat severely by the depositors, but these are not the most important class in the community. What this country needs is more money invested in business enterprises that will develop its resources. Not only is this true in regard to our mineral and timber resources, but in regard to our agricul tural resources; and it is to the last named to which we wish to draw particular attention at this juncture.

There can be no question but that agriculture in this country has been hampered very much during recent years because of the want of cheap money. While as a rule the busness man, if his credit were good, could get money at a reasonable interest, the farmer has not been able to do so. There are many farms to-day groaning under heavy mortgages just because the owners could not get money to purchase stock when required, or to carry on the farming operations in the very best way. Many farmers are working their farms along unprofitable lines just because they have not been able to bor row a few hundred dollars at a rate of interest that would enable them to have a little profit out of the transaction. If the action of the Government in reducing the rate of interest will tend to bring about cheaper money, no class should profit as much by it as the farmer. If he were placed in a position so that he could borrow a few hundred dollars at any time at a rate of about 4 or 5 per cent. the average Canadian farmer would soon bet ter his condition.

The larger number of our people are farmers, and if they are prosperous the rest of the community will benefit by their prosperity. We therefore think that they should be given a chance to make the very best out of our agricultural resources, and if need be, the Government should adopt some plan whereby every farmer who needs money to carry on his farming operations in the best way could get it as cheaply as possible. We venture to state that, if during the next ten years, every farmer in this country could borrow money on reasonable security at not over 4 per cent. there would be such an impetus given to Canadian trade that would surprise even the most optimistic All our farmers need is a fair chance. They are as a rule reliable and trustworthy, and taken on the whole are above the average farmer of any other country, with the exception, perhaps, of Great Britain, in business ability.

Then there is the question of security for money borrowed. Though it was not so fifteen or twenty years ago it is a fact that to-day moneyed institutions look with considerable suspicion upon farm security. There is no doubt a reason for this in the fact that farm property has greatly depreciated in value; but we believe that farm security is much better to-day than one-half the business enterprises in the country to which our banks and moneyed institutions will loan money freely. It is only recently that in the city of Toronto a bank loaned from \$70,000 to \$80,000 to a business concern which, upon invastigation in the courts, was proven to be anything but good security. If a farmer went to the same bank to borrow a few hundred dollars to carry on some legitimate enterprise it is ten chances to one whether he would get it without asking some of his wealthy friends to back his note. There is, then, a good opening for the Government to do a good turn for the farmer by helping him to get cheap money on a reasonable security. By doing this it will be helping every other business in the country.

The Poultry Industry of Canada

By THOMAS A. DUFF, Toronto, Ont-

(Continued from last week.)

UTILITY BREEDS.

This subject has been pretty well covered by what I have already written. For egg production I would recommend the use of pure breeds altogether. The Leghorns, Minorcas, Andalusians, Rocks, Wyandottes, Javas, Brahmas, Langshans and Red Caps are all good layers of a nice sized egg.

egg.

For table use I like the Dorkings, Rocks, Wyandottes, Brahmas, Langshans, Cochins, Javas and Games, but, as I said before, I prefer the first cross of two varieties of the one color of skin.

METHOD OF HOUSING AND FLEDING TURKEYS.

As the farmers of the province are going very extensively into the rearing of turkeys for market, it will perhaps be not out of place to say a few words in regard to their management. I have not, of course, had any personal experience in regard to this class of poultry, but I will endeavor to explain how one of Canada's foremost breeders (Mr. W. J. Bell, Angus, Ont.) houses and feeds his stock.

Housing.—On interrogating Mr. Bell in regard to what degree of warmth the building in which the turkeys are confined should be kept, I was informed that his experience had taught him that it was better to have it rather cold. He stated that one year he had kept them in a pretty warm building, but they became sick and died. Since then he has kept them in a building constructed of single boards only, but well protected from winds. There must, however, be plenty of light. Since adopting this course he very rarely loses a specimen.

Mr. Bell also has what I consider an excellent method for housing and feeding. The building is constructed as follows: It is erected on the south side of the barn, and might very properly be called a "lean to." Where it is joined on to the barn it is probably twelve feet high, and slopes to the front, where it is about six and one-half feet in height. The total length is probably about twenty five feet, and the width something over twenty feet. Along the front (at the top) a board is run. The bottom is boarded up to a height of about two feet, and then wire netting is stretched along the entire length.

The inside is divided into two main parts, the "run" and the pens. The outer compartment or and the pens. The outer compartment or "run" is about four feet wide. Its front is the wire netting above mentioned. Its rear opens by sliding doors and by windows into the pens. one end of the run is a door opening into the yard, and forming the main door of the turkey house. On the inside of the "run," and about a foot from the ground, a trough is constructed, out of which the turkeys feed. The inner compartment is then boarded up solid and divided into three pens, where the turkeys roost. A large window provides light for each compartment, and a big sliding door gives free ingress and egress. Mr. Bell says he has found this to be the best arrangement he has yet seen. He thinks it most important that turkeys should be at liberty to run out every day. It is well known that if not watched they will roost on fences or buildings, and This he does not consider advisable to in trees. allow, as it is dangerous; and, moreover, the effect of feeding is, to some extent, lost. turkeys roost outside one might easily be carried away, and they are subject to all kinds of weather, which often impairs their health. At night, therefore, Mr. Bell's turkeys are driven into the outside enclosure and there fed. The door of the run is then shut, and the large sliding doors leading into

the inside or sleeping apartments left open. The birds are thus compelled to roost there during the night, where they are protected from foxes and the weather. They are again let out in the morning. Setting Turkeys.—Mr. Bell informed me that he

Setting Turkeys.—Mr. Bell informed me that he generally sets the hen in the place where she makes her nest. He gives her about seventeen eggs, and these are usually eggs laid by herself. Before giving her the eggs the nest is given a thorough dusting with insect powder, and a day or two before the eggs are due to hatch he dusts her with

the powder.

Feeding.—After the young poults are hatched, they are lest for twenty-four hours in the nest, and then the mother and youngsters are taken to a larger box, which is boarded up solid on all sides. They are confined in this for a day and are taught to eat bread crumbs, soaked in milk, from the They are fed five or six times during the day. For the last two meals a little shorts should be mixed with the bread crumbs and milk. The next day they are removed to a large coup, the front of which is made of slats. The hen is confined here, and the poults allowed to run in and out through the slats at will. The coup is set in a place where the grass is cropped quite short. The reason of this is that in the mornings the long grass is full of dew, but on short grass the dew dries off more quickly. It is important that the poults should not get wet. A scarecrow is placed near the coup to keep away hawks and crows. Mr. Bell informed me that the most important thing in turkey raising is to move the coup in which the mother is confined the width of itself every morning, so as to have it on clean ground each day. The feed given after the first couple of days for five weeks is shorts, mixed with any kind of milk. The poults are fed five times during the day. Twice each day dandelions and onions are cut up fine and mixed with the shorts. Mr. Bell is strongly of the opinion that the feeding of dandelions keeps the bowels in good order, which is of the utmost importance in turkeys, and the onions are fed to keep up the appetite. Half milk and half water is always before them for a drink. After the poults are five weeks old the hen is given the liberty to go where she will. She is, however, always confined at night. In the morning shorts are fed and the hen and poults allowed to wander. During the day they pick up numerous insects and grasshoppers, and after they are brought home at night they are given all the wheat they will eat.

Keep More Sheep.

Professor Thomas Shaw, in a recent issue of the Farmers' Voice, makes a strong plea for the extension of the sheep industry of the United States. He points out that the importance of this industry cannot be estimated by the mathematician, and that it would be unfair to the sheep industry to say that the maximum of its value is represented by the number of sheep in the country valued at so much per head. This arises from the intimate relation which exists between fertility and the production of maximum crops. It has been the practice in reckoning the profit on sheep growing to place a value on the lamb crop and on the wool, and to deduct from that sum the cost of main-This mode of reckoning only tells half tenance. tne story, for the service rendered by each animal in destroying weeds and in fertilizing the soil is oftentimes fully equal to the cash returns which it gives the owner.

In reference to sheep as scavengers, Professor Shaw recommends utilizing a portion of land every year in growing a succession of pastures for them, when they will clean the farm more effectually than could be done at large outlay, in destroying weeds and in other ways. Sheep devour weeds because they relish them, and therefore it is no hardship to utilize them for this purpose. When the weeds become woody and produce seeds, sheep will gather the seeds with great diligence when they refuse to eat the woody stem which produces them. As distributers of fertility on the farm, sheep have never had an equal since the world began. The abandoned farms of New England are being

reclaimed by the restorative power of sheep. Professor Shaw maintains that at least one-half of the \$50,000,000 that is being paid out annually in the Eastern States for commercial fertilizers could be saved by the multiplication of sheep on these Eastern farms.

Professor Shaw's views in connection with the sheep industry of the United States are just as applicable to Canada. If it will pay the farmer of the United States to keep more sheep, it will pay the Canadian farmer also, and for the same reasons. As we have pointed out frequently in these columns, there are many Canadian farms that need some kind of a weed scavenger in order to make them look respectable and clean, and why not utilize sheep for this purpose? Then again, the question of keeping up the fertility of the land and of restoring it on many impoverished farms, is equally important. The value of sheep as destroyers of weeds and as restorers of the fertility in the land should make them one of the most valuable ani mals on the farm. Coupled with this is the fact that sheep will return a profit on the wool produced and the lambs raised, which gives them an additional value. Then there should be no hesitation on the part of our farmers in regard to the advisa bility of increasing their flocks of sheep. A great many of our farmers estimate the profits from sheep rearing only on the amount of wool produced This gives only one side of their value There is a good profit all along the line that cannot be estimated directly in dollars and cents.

The sheep industry of the United Stateshas made rapid advancement during the past years. Some are apprehensive as to the outcome, and fear the industry will be overdone. On this point Professor Shaw states that in all the United States there are fewer than ten sheep for everyarable farm. This, he states, is not enough to adequately supply the farmers' homes with mutton for one year. Mutton should be used more for food on the farm. If there are fewer than ten sheep to every arable farm in the United States, we are quite sure that the number of sheep to every arable Canadian farm does not exceed that There is then ample room for greatly extending the sheep industry of Canada and for our farmers to "keep more sheep."

Hired Help on the Farm.

Editor FARMING:

Will you kindly allow me a few lines on this subject of hired help on the farm.

It has been truly stated that this is a broad question and

Agreat deal can be said on it.

Mr. Harrison is against young men marrying to qualify themselves for the situation of a farm laborer. Well, I am too, but we must admit that the majority of young men and those with the greatest amount of intelligence are desirous. of marrying when they come to maturity, and if their em-ployment is not steady they will very soon move in some other direction and join some other line of business which will furnish steady employment the year round and permit them to establish the desired home.

Now, Sir, I am of opinion that there is not a fertile 100 acres of land in the Province of Ontario which will not furnish a good living for two families and something to spare providing it be properly managed.

I agree with Mr. Harrison when he says that most of our hired men are farmers' sons, and he could have gone on and said that many of them commence working out while quite young, having received a vigilant training by honest parents. The young man hires out for seven or eight months and gives good satisfaction; he gets interested in his master's work and becomes familiar with the whole farm just about the time he must quit work. He is paid off, and receives an invitation to come lead the next enging and he would get a solution to come lead the next enging and he would get a solution to come lead the next enging and he would get a solution to come lead the next enging and he would get a solution to come lead the next enging and he would get a solution to come lead the next enging and he would get a solution to come lead the next enging and he would get a solution to come lead the next engine and he would get a solution to come the second seco ne must quit work. He is paid on, and receives an invita-tion to come back the next spring and he would get a job again; and perhaps he does so, but his boss may be heard telling that he is not the boy he was last year; he swears at the horses and does not seem to take the interest in the work that he formerly did. The boy was sent adult the He got among other young men who were paid the same time. They have a little money and feel

fall before. He got among other young men who were paid off about the same time. They have a little money and feel free, and there comes a strong temptation to abandon the principles taught them and to spend their money in folly.

Mr. Editor, if the farm is rightly handled the farmer cannot afford to discharge the smart, intelligent young man in the fall of the year any more than the business man in a town or city can spare the attentive young clerk.

When he grows to manhood and understands the rearing of stock of all kinds, the cultivation of the soil and all the different branches of farm work, is it not necessary that he be kept on the farm if it is possible to do so? If he gets married so much the better. Build a comfortable house for him; for all must agree that a man is more manly and contented married than single. Surely it is an insult to such a

man to say that his services on the farm for twelve months

man to say that his services on the farm for twelve months will not increase its assets to the extent of \$250 or \$300.

As regards the large mortgages, we must admit they are great obstacles in the way. But very few mortgages exist as a result of hired help on the farm where the owner understands his business; and it is my candid opinion that an important factor in the removal of those mortgages will be the steady employment and equipment and the steady employment, encouragement and equipment of those bright youths, who too often are found seeking other occupations because they never hear farming styled anything but drudgery, and that only obtainable during the summer

It will pay to help the good honest farmers' sons the year round, and when they get married and relieve your patient women of that much extra work keep them still. They are cheaper than before, for is it not a fact that:

A man may be willing and doing his best, But his mind will be weak if robbed of its rest. The man who can rest and move wisely through life Nine times out of ten is a man with a wife. J. A. GIBSON.

Petrolia, March 21st, '98.

Editor FARMING:

DBAR SIR,—I have read with interest the articles written on the "hired man" question, and if I were clever, would take a side. I agree with you so fully, especially in your comments on Mr. Harrison's first letter, in your issue of March 8th, that I can but say with Will Carleton, "Them 'ere is my sentiments tew." Truly it is a wonder the women do not rise up in arms. I have never figured the matter of least with a large wards. ter of board up in dollars and cents; have always considered the home comfort side of the question, and surely it cannot be reckoned in dollars and cents. What family, whether rich or poor, but must feel the privacy of the home life marred by the continual presence of an outsider, no matter how respectable the outsider may be, or whether a farmer's son or not. And the man himself, how much more this with a view to argue, merely to applaud you, Mr. Editor, for your large-heartedness. I feel that you are a friend to the farmer's wife.

A FARMER'S WIFE.

Wyoming, April 2nd, 1898.

Mr. Gibson touches on a very important point when he shows that the present method of only employing young men on the farm for a part of the year is tending to drive many farmers' sons and others engaged in farm work to seek more steady employment elsewhere. Is it not a fact that many young men leave the farm just because they do not see in it a business that would give them steady employment during the winter as well as during the summer? It costs a young man as much to live during the winter as during the summer, and, in fact, more when we consider the extra clothing required for withstanding the cold. Is it not, therefore, reasonable to suppose that any young man of ability and push would prefer to seek employment in some other line of life that would afford him steady work both winter and summer. We are all anxious to retain the young men on the farm, and one way of doing it is for our farmers to engage men for the whole year instead of for a few months during the summer. To do this it is not necessary to keep the farm help idle during the winter. On every well regulated farm, where stock is kept, a hired man's time can be as well utilized during the winter as during the summer, and made just as profitable to the

We are pleased, indeed, to have the kind words of "a farmer's wife" in regard to this whole ques-We were brought up on the farm and lived there long enough to engage in every kind of farm work and to know something of the conditions of farm life and the difficulties under which many of the farmers' wives are suffering. The extra work which the women folk have to perform because of the presence of the hired man in the home is not the important consideration from that point of It is, we believe, the fact that the privacy of the home life is broken into because the hired man boards in the home that makes his presence undesirable. We do not believe in class distinctions, yet at the same time we do not think the hired man on the farm should feel at all slighted because he is not looked upon as one of the family and admitted to their joys and sorrows. He is engaged to work on the farm, and his first aim should be to serve his employer faithfully and well. But we have known of more than one instance where young hired men on the farm have become offended because they were not admitted to all the pleasures of the home life. No merchant in a city would

think of employing a clerk in his warehouse and giving him a place in his home, and no more should a farmer be called upon to do so with the hired help on the farm.

Beet Sugar.

There may be an opening for beet sugar factories in this country yet. In the Budget Speech of last week the Government announces its intention of increasing to some extent the duties on sugars. This is intended to equalize the tariff and so react against the importation of bounty sugars from Germahy. At the same time there is a provision made to allow the West Indies sugars to come in on the preferential clause at 25 per cent. less than the regular duties. This will no doubt be the means of larger importations of cane sugars from these islands. But the whole effect of the change is towards a higher tariff on sugars.

The real working of this change is not definitely known yet, but it may make it possible for the beet sugar industry to be operated at a profit. The importation of bounty sugars has been the chief drawback to the establishment of the beet sugar industry in Canada. We consume 330,000,000 pounds of sugar annually. If it were possible to produce only one-third of this sugar in Canada it would require 100,000 acres of land upon which to grow the sugar beets; and we do not see any great difficulty in the way, if the bounty sugars are taxed a little heavier. To cultivate and produce sufficient sugar beets to make 100,000,000 pounds of sugar would mean a new enterprise for many of our farmers and a new and profitable outlet for their energies.

NOTES AND IDEAS.

The editor of the Canadian Produce, who is now in England to investigate the standing of American butter, regards Canada as the greatest competitor which the United States butter-maker has in the English market. Australia has never come up to its record of 1895, when it shipped 311,896 cwts. of butter to England. The outlook does not appear to be for heavy increases in that direction. Already Denmark, Ireland and France are complaining that there is little money in the business of producing butter at the prices which have ruled during the past few years.

CANADA'S FARMERS.

G. W. Clemons, St. George, Ont.

The subject of this sketch, Mr. G. W. Clemons, though of Welsh descent, is a Canadian by birth, and was born on the farm on which he now resides in the township of South Dumfries, in the county of Brant, in 1846. Like many more of our successful farmers, Mr. Clemons received his early education in the public schools, and, as he aptly puts it, "In the hard school of experience."

Mr. Clemons' larm consists of 100 acres, and is situated

near the village of St. George. He is well known as a breeder of purebred Holstein-Friesian cattle, and though he keeps Shropshire sheep, Berkshire swine and Plymouth Rock poultry, makes this noted dairy breed his specialty. He started his present herd in 1891, and gives as his reason for so doing that he found high grade Shorthorns "a delusion and a snare" as dairy cows. In 1895 he imported one bull and seven cows from the well-1 own herd of H. Stevens & Sons, N.Y., the best to be had. He was the first to introduce in Canada the famous Dekol strain, which is sought for by all breeders. Mr. Clemons has recently purchased two most promising bull calves in New York State for use in his herd.

Mr. Clemons has been a successful exhibitor at the lead-

and Canadian shows where his herd has always taken a leading position. In 1897 his herd won over all the Ontario herds at Toronto, London and Ottawa, taking the gold medal at the last named place. Stock from his herd have been sent to all parts of Canada. Though recent sales of young stock have very much reduced his herd, he still has treatly five head of nive beds on head.

twenty-five head of pure-breds on hand.

For the past five years Mr. Clemons has been secretary-treasurer of the Canadian Holstein-Friesian Association, which position he still occupies. He is also a director of the Dominion Cattle Breeders' Association. Among the honors which Mr. Clemons prizes more than any of the others, and which has been conferred upon no other Cana-dian breeder, is that of being an honorary life member of the Holstein-Friesian Association of America.

THE SOLUBILITY OF PHOSPHATE.

By T C Wallace (Wallace & Fraser) St. John, N B., and Toronto.

Rudolph Von Wagner, in his manual " Solof Chemical Technology, says uble phosphates is an error which has cost Germany 200,000,000 marks." Why? It is quite important that we should ask and seek an answer to this question, for the time has undoubted ly come when the Canadian farmers are opening their eyes to the absolute necessity of using some form of phosphate to supplement the manures of the soil and of the farm yard, to bring to a proper balance the fertilizing elements of the soil which is being robbed of its "bone earth" by the formation of bone in the stock and people of the farm, and the growing of grain to form bone in the horses and people of the cities and towns. It is no longer a question of whether we shall use phosphate for this purpose, but the question is what form of phosphate will most effectually and economically meet the want? From the writings of the ancients it is evident that this loss of bone earth was recognized by them hundreds, and probably thousands, of years ago. In the latter part of the eighteenth century in Europe they gathered bones and broke them up small to restore to the earth. Also they were composted with lime and ashes for manurial purposes. About 1840 Baron Leibig commenced the manufacture of superphosphate by the use of sulphune acid (oil of vitriol) to render the phosphoric acid water soluble, or partially so. With the advance of years came more modern machinery and methods, until the double concentrated superphosphates, freed from sulphuric acid, appeared as the highest form of pure phosphates for plants. The teaching of botanists that plants took their food in a water soluble state caused manufacturers to strive entirely for a water soluble phosphate, which we know as superphosphate. By and by, the diligent chemists and experimenters in agriculture, who are supported and encouraged by the German Government, intimated that some citrate soluble phosphates were nearly as soluble to plants as the water soluble.

Further investigation, however, showed great variation in the growing experiments, and while still admitting that some citrate soluble phosphates were quite readily available to plants, others, equally as soluble in citrate, were al-1883 or 1884 the Darmstadt Research Station announced that a new form of phosphate had been found which was the product of the dephosphorising of phosphatic iron ore by the Thomas process. It was classed as a citrate soluble phosphate, but Prof. Wagner, the director of the station, reported per head .- Feeds and Feeding. that from exhaustive experiments it

when it was proved so lasting that its membered, rarely produce lasting ef- all parts? phosphate for fruit, tobaccos, etc. made by the use of about half a ton of oil of vitriol (sulphuric acid) to the the excessive amount of acid used to Ontario. prepare them.

LARGE vs. SMALL COWS

Brandt (Jahresher, u. Agr. Chemic. 1894, 474) conducted three experiments with light and heavy dairy cows, each lasting four weeks, the second commencing seventy days after the were separated into two lots of fifteen cows each according to live weight. The cows were kept under similar conditions as to feed and care during the trial, none being bred after the beginning of the experiment. The average weight of the heavy cows was 1,205 pounds, and of light cows 979 pounds. The leading conclusions from the experiments are:

- 1. The milk of the small cows is richer in fat than that of the large
- 2. Large cows eat a greater amount of feed than small cows; per thousand pounds live weight they eat less.
- 3. Small cows produce less milk than large cows, absolutely and relatively.
 4. When in thin flesh small cows
- may produce more per thousand pounds live weight than large cows.
- 5 Large farrow cows are more per sistent milkers; on the other hand, most insoluble to plant life. About small cows show a greater tendency to fatten on the same feed, with a decrease in the milk flow.
 - 6. The loss in selling ten of the large cows amounted to five guilden per head on the average, after having been kept nearly a year, while the loss for ten small cows was twelve guilden

more insoluble in the soil. The ex- to cattle to that one breed, giving periments were continued until 1889, larger and more numerous prizes than would otherwise be possible, inducing effects were marked for four years and keener competition, and so making longer in the crops. Here then was a the surrounding district one to which form both quickly available and last-intending buyers of Ayrshires, both ing. Superphosphates, it must be repure bred and grade, would flock from membered, rarely produce lasting effall parts? Would not the stock-This new phosphate was also breeding interests of a county or safer than superphosphate, as, being township be better advanced in that tree from oil of vitriol, it could be way than by encouraging the keeping freely used with the most delicate of little show herds or flock of all cultivations, which made it a safe the known breeds, each having its own little section of the prize list to itself, Being well fortified with a very fine with little competition to face, and form of lime it sweetened an acid soil would it not tend to check the habit by supplying a new base, whereas so disastrous to the ordinary farmer, of superphosphate being an acid manure not sticking to one breed in his choice of sires, and consequently making "hash" of his grade stock? Particuton of phosphate, had too great an larly should this be the effect if grade amount of deleterious residue to be females of the chosen breed were genfreely used in fine cultivations. The erously remembered in the prize-list. error then in water soluble phosphates I should like to hear this suggestion is their wasting by drainage and re- criticised by those familiar with the version, and over their acidity through conditions of the live-stock interests of W. B. F.

QUESTIONS AND ANSWERS.

CLOVER PASTURE FOR PIGS.

Editor FARMING:

Enclosed please find the names and addresses of three new subscribers for FARMING : also post office order for amount and one do lar for my last year's subscription. close of the first, and the third a year always try and send a few subscribers to your after the beginning of the first. Thirty valuable paper. How many spring pigs do of the heaviest milkers in the herd FRANK HALLIDAY,
March 31st, 1898. Eldon, Belfa

Eldon, Belfast, P.E.I. March 31st, 1898. Eldon, Bellast, P. E. 1.

An acre of clover should give pasture for from 15 to 20 spring pigs, with the addition of a little grain. Mr. D. M. MacPherson, whose article on "Business Methods in Farming" appeared in Farming for December 28th last, claims to be able to pasture from 30 to 40 pigs on an acre of clover. Mr. MacPherson's method, however, is different from that of the average farmer as he feeds more grain, and we hardly think it would be well to pasture more than twenty on one acre. to pasture more than twenty on one acre. With extra grain more might be kept.

PRA-FOWL WANTED.

Mr. F. S. Green, Greenwood, Ont., wants the address of some one who has pea-fowl for sale. Will some of our readers who have this fowl for sale kindly correspond with him.

ROOTS FOR HOUS.

Editor FARMING:

Since February of the year 1895, I have been a subscriber for FARMING, and during that time have found a great deal of valuable information in its columns. To the services which your publication has already rendered me, I should like you to add the answers to a few questions. I am at present operating a 100 acre farm. Upon this farm we keep 32 milk cows and from 10 to 15 heilers, with the usual complement of hogs to take up the bye products of the dairy. Last year I sold over \$2,600 worth off this farm, and only bought \$102 worth of concentrated feed for the dairy sto2 worth of concentrated feed for the dairy cows. I believe that by the practice of still more intensive methods I can increase the revenue of my farm to \$3,000 yearly. My plan is to keep more hogs and to grow roots for their feed. I have a 10 acre sod field to break up this spring, and this field is comparatively free of weeds. Would it be practicable for me to grow roots upon this whole that from exhaustive experiments it proved much more available than bone, ground either coarse or fine, steamed or raw, and equally soluble with the best forms of super-phosphate, and even more available, when tested in the soil in the open field or in pots on grains of all kinds and all sorts of plants. It showed all the activity and availability of the superphosphate, but is much superior to it, as, not being water soluble, it did not become distance down into the strict bears upon a silicable for me to grow roots upon this whole turned into cash by feeding them to hogs next fall and winter? I have 24 young pigs now, ticable for me to grow roots upon this whole turned into cash by feeding them to hogs next fall and winter? I have 24 young pigs now, ticable for me to grow roots upon this whole turned into cash by feeding them to hogs next fall and winter? I have 24 young pigs now, ticable for me to grow roots upon this whole turned into cash by feeding them to hogs next fall and winter? I have 24 young pigs now, ticable for me to grow roots upon this whole turned into cash by feeding them to hogs next fall and winter? I have 24 young pigs now, to not supon it. According to the best authorities on the subject, it is not a good plan to cult have six more sows that will farrow in May, and I have been thinking seriously of no your columns. Could not such fairs do a good work, in localities where some one breed of cattle, sheep where some one breed of cattle, sheep or swine predominates, by concentrating water soluble, it did not become distinct of the ration, and use the brew-dairy course of variatively free of weeds. Would it be practicable for me to grow roots upon this whole turned into cash by feeding them to hogs next fall and winter? I have 24 young pigs now, it in all I have 24 young pigs now, it is not a good plan to cult have six more sows that will farrow in May and I have six more sows that will farrow in May, and I have even the fail and winter? I have 24 young pigs now, it in upon it. According to the

same reason did not revert and become why not give all the prize money alloted more insoluble in the soil. The extra to cattle to that one breed, giving what variety of roots would you recommend? What kind of an implement would you recomwhat kind of an implement would you recom-mend for putting in the seed and for cultivating the crop, and where could such an implement be procured? An answer to these questions in your next issue would greatly oblige.

W.H.C., Dundas Co.

The growing of roots for swine feeding has come largely into vogue during recent years. In our issues of November 16th and 23rd, 1897, we published the replies to a number of questions on this subject from several promi-nent farmers and swine breeders. Where roots were fed to hogs, invariably good results were obtained. We would advise our corres-pondent to read these back numbers. Aside pondent to read these back numbers. Aside from this, we believe it would pay to grow roots for hogs. The ten acres of sod referred to could be utilized for this purpose. We would recommend plowing it middling deep, so that a good depth of soil could be obtained on top. This should be worked well and made as fine as possible. It might be possible to sow the seed by means of some drill adapted for sowing on the level ground, but we think, if a fair depth of soil can be obtained on top for sowing on the level ground, but we think, if a fair depth of soil can be obtained on top of the soil when plowed under, it would be better to make light drills. These drills need not necessarily be deep, but just high enough to admit of the seed being sown to advantage. As to the kinds of roots to grow, we would recommend growing two or three kinds. Turnips, carrots, mangolds and sugar beets are profitable for swine-feeding. If the whole ten acres were sown to turnips, there would ten acres were sown to turnips, there would be plenty of time to get the sod in good shape before it was time for sowing, while if man-golds or carrots were sown the ground would have to be prepared much earlier in the season. W.H.C. seems to be a successful dairy farmer, and we would like to have full particulars of last year's business.

IN-BREEDING.

Editor FARMING:

Will you kindly inform me through the columns of your valuable paper, FARMING, what is your opinion of in-breeding horses? I have a very fine brood mare half Royal George and half Whistle Jacket, which I wish to breed this spring. I have been advised to breed her her to her sire, Old Whistle Jacket, as he is one of the best in this section, but I am a little afraid it might not be wise to in-breed in that way. Eden, Ont., March 25th, 1898. J.P.H.

In-breeding or line-breeding has been practised with good results when properly understood, but it should only be carried on by persons who thoroughly understand what good breeding means. In the hands of a novice inbreeding means. In the hands of a novice in-breeding might lead to bad results. Thirty or forty years ago in England in-breeding was carried on to such an extent that there was a revulsion of feeling in regard. Lately, how-ever, some of the authorities are recommend-ing it very strongly as a means of improving high-class stock. In the present case we hardly know what to advise. If both animals have good records and are excellent types of have good records and are excellent types of animals we would feel very much like giving it a trial.

Editor of FARMING .

Can you name a desirable and profitable ration in which a large proportion of fresh brewers' grains, oil meal, etc., could be used for feeding calves from commencement to eighteen months? Am anxious to feed as little milk and hay as possible. At what age will calves commence to eat brewers' grains? Also please give ration for feeding six months old calves taken from pasture. What is the probable gain in weight on these calves, if fed all they will eat? Would two-year-olds be more profitable to feed?

Yours respectfully,

Sherbrooke, Que. S. C. NUTTER.

best results. Two bushels of brewers' grains per day would be a rather heavy ration for mature animals, and with this there should be added, say four or five pounds of meal and eight or ten pounds of hay. We are of the opinion that two-year-olds would be more profitable to feed than calves, and would not

fitable to feed than calves, and would not cause as much trouble.

The data in regard to the feeding of brewers' grains to calves is very limited indeed. In fact, among the bulletins, etc., issued by the various experiment stations there is nothing to be found regarding it. We would, therefore, be glad to hear from any of our readers who have had any experience along this particular line.

Publishers' Desk.

Lump Jaw.—We recommend our readers to obtain the illustrated treatise on "Lump Jaw," published by Fleming Bros., chemists, St. George, Ont.—It will be sent free on ap-

Dairying Appliances. — Dairymen should get the Lancastet Machine Co.'s complete catalogue of dairying machinery. The Stafford Patent Curd Mill is one of the machines made by them.

Pure Salt .- The importance of using none but the best salt in the manufacture of dairy products cannot be too strongly emphasized. The Windsor Salt is always reliable, and for strength and purity is unsurpassed.

Wire Fences.—If you are thinking of making new fences this spring drop a postal card to McGregor, Benwell & Co., of Windsor. They have information on the subject of wire fences that will be found of value to every land owner. every land owner.

Thorold Cement.-For bank barns, concrete floors in stables, silos, culverts, pig pens, etc., this now famous building material is without doubt the best obtainable. Information regarding it may be obtained on application to the Estate of John Battle, Thorold,

The Vessot Improved Grain Grinder. Our friends should not overlook S. Vessot Co., of Johette, Que., when in need of machinery for grinding any kind of fodder. Their manufactures have taken a high place everywhere and received the most substantial kind of recognition from all capable judges.

The San Jose Scale.—We wish to call attention to the fact that perfectly healthy trees, tree from this destructive pest, may be obtained from either of the well-known nurserymen whose advertisements appear in this issue. This is important, and should be noted by those who contemplate making additions to their orchards this season. to their orchards this season.

The "Alpha" De Laval Separator. The "Alpha" De Laval Separator.

-The Canadian Dairy Supply Co., 327 Commissioners street, Montreal, will be pleased to furnish information to those who desire to purchase separators or any kind of dairying supplies. Their separators, which vary in capacity from 175 lbs. to 2,500 lbs. per hour, and in price from \$65 to \$500, are very favorable brown and extensively used. ably known and extensively used.

A Good Harrow.-When we speak of "a A Good Harrow.—When we speak of "a good harrow" we mean one which is durable, serviceable and effective for all the purposes for which a harrow is used, and unsurpassed by any other implement of the kind made. This no doubt accurately describes the All Steel Flexible Harrow made by Tolton Bros.' of Guelph. It is not only a good harrow but is the product of a good firm whose business methods are invariably satisfactory to their customers.

commendable Enterprise.—Our representative while in Brantford, the "home of good manufactures," recently was pleased to find that Goold, Shapley & Muir Co., Limited, had, with customary energy, risen from the ashes of the fire which did heavy damage to their main factory on March 4th, and were filling orders for Ideal Roller and Ball Bearing Windmills and Maple Leaf Grain Grinders with usual promptness. Since the temporary set-back caused by the fire fiend they eport their sales for March ahead of the average. One feature of the windmill trade is that over ninety per cent. of farmers are now purchasing power windmills with or without pumping attachments. The firm have completed arrangements to more than double their factory facilities. The Bee Supplies Department is again running and all orders will receive prompt attention.

The Farmers' Interests .- There is only one Farmers' Binder Twine Company Limited in Canada—headquarters, Brantford. Their (pure manilla) "Samson," "Red Star" and "Blue Star" binder twines are said to be the best ever made for the Canadian market. They have requested the Government not to every day, Sundays excepted, and depending now entirely on the loyal patronage of the intelligent Canadian farmers to hold them in existence for future competition as against telligent Canadian larmers to note them in existence for future competition as against monopoly and combine. The Farmers' Company are in a particularly enviable position, having purchased ahead at low prices two years' supply of fibre, and will be called upon beattern by the Canadian prices on twice shortly to set the Canadian prices on twine, that all other manuf cturers and dealers are evidently now waiting for and must follow.

A Profitable Investment.-The remarkable results of advertising in a good medium are exemplified in the following cases: medium are exemplified in the following cases: Mr. A. F. Dimma, of Cedar Grove, has advertised pure-bred poultry and eggs for the past two seasons. Last year's returns were entirely satisfactory, away beyond his most sanguine expectations in fact; but this year's have been simply astounding. Orders have come in so fast he has scarcely been able to reply to them. To fill them will require all the stock he can raise this year. One very large order was received from British Columbia, and others came from all parts of the Dominion. A small 12 line notice inserted by ourselves a few weeks ago brought in more than one hundred replies (we can show the originals to those who may be sceptical), and they are coming in yet, though the article advertised was sold long ago. Messrs. J. O. Fraser & Son, of Fellows, Ont., advertise Durce Jersey swine. They wrote under date Duroc Jersey swine. They wrote under date 7th April, 1898: "You will find enclosed the price of our subscription for another year, and also for our advertisement for another six months. We have reason to be well pleased with FARMING after a two years' trial."

THIS IS WHAT THEY THINK OF US.

R. W. Nicholson, Tara, Ont., says: "I am well pleased with FARMING, especially since it was made a weekly. Your comments on the market's changes are very valuable and interesting, and I should like you to enlarge still further on them if possible. I wish you every success."

SIR,—Please find enclosed \$2.00 for my renewal of your valuable paper, FARMING. There is such a lot of valuable information in th, touching on almost every point in farming. I would not like to be without it. I send \$2.00 that will renew to March, '99. I also send 50 cents for the weekly Globe.—CALVIN 1). Doan Newmarket.

An Exceptional Opportunity

WE herewith present to our readers a list of seasonable and useful premiums It contains nothing which is not of real practical utility, and the intrinsic value of each article is much greater in proportion to the return we ask for it than is usually found in lists of this kind. It will pay our friends not only to read this list, but to make the slight effort required to secure some of these excellent prizes.

FREE SEEDS.

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

From the stock of Messrs, JOHN S PEARCE & Co., of London, the leading seedsmen of Western Ontario, we make the following selection . -

		COLLE	٠٠.	LIOL	NA.	
10	Pac	kets Vege	tab	les.	Price, 5	0
1 P.	acket	Beet	1	Packet	Parsnip	
1	**	Carrot	1	••	Caubage	
1	••	Cucumber	î	**	Radish	
1	**	Lettuce	1	**	Squash	
1	"	Onion	1	**	Tomato	

Given for one new yearly subscriber at \$1. COLLECTION B.

10 P	ackets Flower	's.	Price,	500
l Packet	Phlox Drummondil	Packet	Pansy	
1 "	Stocks 1	**	Nasturi	ium
1 "	Petunia 1	44	Dianthu	
ı "	Portulacca 1	41	Balsam	
i "	Mignonette I	**	Aster	

COLLECTION C.

20 Packets Vegetables and Flowers.

Given for one new yearly subscriber at \$1.

		Price,	\$1.00	1
t	Packet	Aster 1	Packet	Squash
l	**	Pansy 1	44	Watermelon
l	**	Stocks 1	••	Musk Melon
Ì	• • •	Balsam 1		Lettuce
l	41	Phlox	41	Celery
l	**	Sweet Peas 1	**	Carrot
į	14	Cauliflower 1		Beet
ŀ	**	Cucumber 1	4*	Radish
Į	**	Onion 1	••	Tomato
l	**	Cabbage I	**	Vine Peach

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

COLLECTION D.

l Packet		1 Pac		
ı "	Parsnip	2 '	" C	abhage
2 lb. **	Cucumber	ī '	'Ī.	ettuce
ı "	Musk Melon	i '	• 1	atermelon
. "	Citron	ī ·		nion
i "	Radish	i '		
i "	Tomato	ī ·	·······································	quash 'ine Peach
i "	Parsley	ī '	۰ Ś	. Savory
i "	Sage	i ·	'nĩ	hy me

For reliability and a thorough knowledge of the requirements of the trade WILLIAM RENNIE, of Toronto, is justly considered one of the foremost in his business. At our request he has chosen the following Twelve Varieties of Garden and Flower Seeds

SPECIAL SEED OFFER

For one New Yearly Subscription at \$1.

Pkce.	Beet, Early Inte m diate	50
11.	Cabbage, First and Best	100
**	Carrot, Half Long, Scarl t	50
4.5	Cucumber, Long Green.	
14	Lettuce, Selected Nonpared	
4+	Onion, Yellow Globe Danve-s	
**	Parsnip, Intermediate, Half L. ng	
44	Radish, Olive Gem	
**	Squash, Hubbard	2)
• •	Asters, New Giant Flowering, Mixed	3
• •	Sweet Pear, Selected, Finest Mixed	.5
**	Wild Garden Flower, Mixed	
	· ·	

Seed Grains

SEED GRAINS -- Continued.

These varieties are among the best in the market, and from reports gathered from rehable sources have headed the lists, both in yield and quality.

The following are from the stock of Mr. JAMES BOWMAN, of Guelph, a well-known and reliable specialist on Seeds:

Peas

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

Potatoes

For one new yearly subscription at \$1 and 12 cents added for lar, we will send one peck of the Groat Divide Potatoes or one bushel of Empire State or Ross of Erin Potatoes. These seeds are advertised by Mr. Bowman in another column.

Other Premiums

THE ANTI-RATTLES COUPLING

Prevents ratiling or sound. Given for One new yearly subscriber at \$1.00

MILKING TUBES.

Most useful instrument made. Given for one new yearly subscriber at \$1.00.

THE APOLLO HARP

A Musical Wonder

Apollo Harp, No. 4; renders 4 chords, valued at 4, given for 5 new yourly subscribers at \$1 each. Apollo Harp, No. 27, renders 27 chords, valued a \$3 50, given for 10 new yearly subscribers at \$1 each.

If you cannot secure the required number we will take part cash and balance in new

BABCOCK MILK TESTER

Every farmer who keeps cows should have one. Four Bottle Machine, price \$5, given for 7 new yearly subscribers at \$1 each.

SIX Bottle Machine, price \$6, given for 8 new yearly subscribers at \$1 each.

VETERINARY INSTRUMENTS

Every owner of stock should have the following instruments. Occasions sometimes arise when the po session of them may save the life of a valuable

aninal,
TROCAR, 5 inch round, Germen silver canula,
ebony handle, price \$1.50. Free for three new yearly
subscriptions at \$1 each.
PROBANGS, price \$3.00. Free for six new yearly
subscriptions at \$1 each.

PUREBRED POULTRY

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

EGGS FOR HATCHING.

One setting of 13 eggs of either of the following carieties. Whate and Barred Plymouth Rocks, S. L. Wyandottes, Go'den Wyandottes, B. Minorcas, S. I. Whate and Brown Leghams for two new yearly subscriptions at \$1 each.

BOOKS.

OGILVIE'S GUIDE TO THE KLONDIKE I he sensation of the year. Price so cents. Free for one new yearly subscriber at \$1.

¿EEDS AND FEEDING, by Prof. W. A. Heavy, Dean of the College of Agriculture, etc., of the University of Wisconsin. The latest, the best, and most comprehensive work on animal nutrition ever issued. Price \$2.00, 637 pages. For three new yearly subscribers at \$1.00 cach.

THE CONCISE IMPERIAL DICTIONARY.
The favorite for all classes of readers. Authorized for use in the schools of Ontario. Price \$2.00. For three new yearly subscribers at \$1.00 each.

BLACKIE'S MODERN CYCLOPEDIA, in eight volumes. One of the very best standard livit sh books of reference. Up to date accurate and authoritative. A magnificent work. Price, bandsomely bound in cloth, \$18.00. Given for twenty new yearly subscribers at \$1.00 each.

Barley

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

Oats

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

Oats

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

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



Canadian Dairy Supply Company,

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

MONTREAL, CA

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 Pees -- Cattle Breeders', \$1; Sheep Breeders', \$1; Swine Breeders', \$2

BENEFITS OF MEMBERSHIP.

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 500, per head, non-members are charged \$1 00 per head.

A member of the Sheep Breeders' Association is allowed to register sheep at 500, per head, while non-members are charged \$1.00.

The name and address of each member, and the stock he has for sale, are published once a month. Over 10,000 copies of this directory are mailed monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States, also to prominent breeders and probab's 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 advertise sheep he must be a member of the Dominion Sheep 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, and to advertise swine he must be a member of the Dominion Swine Breeders' Association, and to advertise swine he must be a member of the Dominion Swine Breeders' Association, and to advertise swine swine of each month. Members having stock (5° sale, in order that they may be included in the third issue of each month. Members having stock (5° sale, in order that they may be included in the Garette, are required to notify the undersigned by letter on or before the pith of each month, of the number, breed, age, and sex of the animals. Should a member fail to do this his same will not appear in that issue.

F. W. Houson, Secretary.

F. W. Houson, Secretary. Perliament Buildings Thronto, Ont.

EAST VICTORIA FARMERS INSTITUTE.

In the absence of Mr Thurston, our secretary, who has been spending a part of the winter in Oregon, I enclose herewith a list of names of persons who have become members of East Victoria Farmers' Institute, that they may be placed upon the mailing list, and receive the various reports which are now becoming much sought after in this section. (The names are received and placed on the mailing list.) In looking over the Institute report for 1897, I notice that some of the Institutes have been holding local meet ings, and I thought that as our supplementary meetings were held early in January, there was a good opportunity to attempt something along that I spoke to two or three of the best men in my own locality, and as a result we have had two most successful nicetings with an attendance of 125 and 150, conducted entirely by local men, and without costing the Institute one cent. A third meeting was to have been held in another locality on the 11th of March, but owing to the almost impassable state of the roads and a wet evening, it has been post poned. I might say that I am delighted with the manner in which the people take hold of these meetings. Among those who have given us short talks on the various subjects intro duced are men who have never be fore attempted to address an audience of any kind, and I am bound to say that the ability to express their ideas and the knowledge of the subject evidenced by the manner in which it was handled, has been a surprise to more than one, and I think in this respect, i.e., the bringing forward of new men to help at larger and more public meetings, these local meetings must prove very helpful.

I enclose a programme of the meet ings held, by which you will see that there was no lack of material, especially in the case of the latter one, with twelve speakers on the list. I might say that, although we tarried till near midnight we did not get more than half through the list, and arranged to

visability of placing a lady on the deputation had been expressed. Miss Rose proved to be a great success, and some of those who were the most outspoken in opposition to the movement have asked us to endeavor to have her placed on supplemental deputation next year.

W. H. CULLIS,

President.

PROGRAMME.

1. Introductory Address, Manley Maybee.

2. "Hog Culture for Profit," John

Earle.
3. "Benefit of Having a Cheese Factory in a Community and Profits Arising Therefrom," T. Parkin.

4. "Apple Culture," A. E. Winthorne.

5. "How to Build and Manage a Silo for Profit," Alex. Magee.

6. A paper on Reading, J. Cundal. "One Way of Handling Cattle

for Profit," J. Suggitt. 8. Paper, W. H. Cullis.

"Culture of Sheep," etc., L. Ir-

10. "Fowl on the Farm," T. Coad. "Drainage," R. Westaway.

12. Music, readings and recitations, interspersed as required.

Who says East Victoria Farmers' Institute is not abreast of the times! Well done, East Victoria! Many of the other Institutes have done similar work with very gratifying results. Let us hear from others. The object of the Farmers' Institute system is to inspire, improve, and use local talent. All the work undertaken aims at this who thinks or says that it is impossible some startling conclusions. to derive great benefit from meetings such as Mr. Cullis describes, is clearly behind the times and should mend his ways or make room for a better man. Upward and onward is the motto of the Farmers' Institute system in Ontario.

WEEDS.

By GEORGE BINNIE.

ing that some doubt. regarding the ad- found to be equally abundant. In this

part of the country weeds are becom them, it costs many thousands of dol re crop too often, and thus allow the ket or seed, indeed it is almost imposso much feed has been imported into siderable loss in the reduction of the this district that many new weeds have market value of grain not properly been brought in and are making their cleaned. The yearly cost of growing appearance here and there. Every weeds to the firmers of this province plant out of place may be called a amounts to a large sum, and costs more weed; a grain of wheat is a weed in a now in proportion to the value of grain flower garden, and a rose in a wheat grown than at any previous time, field is also a weed. But there are There are different classes of weeds from his farm.

are a very common means of distribut-

ing weeds.
Weeds are injurious in many differ-

ing usually of a more sturdy nature ture, air, and sunshine.

ten plants to the square yard, it was would take from the ground and evap orate into the atmosphere over twenty water is being wasted by these useless and grow plenty of clover. Travelling through the country we plants as would ensure a successful have the other half at a later date. In can see field after field colored with crop of the different grains. This of reference to the regular meetings held the purple thistle top, or braiant with itself ought to be sufficient to make per acre has been obtained by growing at Bobcaygeon and Fenelon Falls, they the yellow mustard, while upon closer any farmer strain every effort to rid his clover, peas and vetches with phoswere both very successful, not with stand observation others less prominent are farm of useless and injurious weeds. phoric acid in a form combined with

4. It costs a large amount to handle lime and iron as bases.

ing more abundant. This is owing lars for the time it takes to bind them, partly to the failure to get a catch of it costs large sums for drawing, for grass during the last two or three dry storage room and threshing; it takes seasons, and having to re-plough and extra labor cleaning the grain for maiweeds to multiply. During the past year sible to get it clean, and there is con-Every weeds to the firmers of this province some plants that may be considered requiring different treatment for their weeds under all circumstances, such eradication. Those known as annuals as the thistle, mustard, wild oat, ox-eye grow only from seed. They grow, daisy, etc., and every farmer should mature, and ripen their seed in one bend his energies to eradicate all such season. Some of the most common are wild oats, mustard, cockle, fox-tail, Weeds are distributed in many ways etc. The seed of these are of such a The seeds of some, such as the thistle, nature that they will lie a long time in are provided with feathery attachments the soil and grow when favorable cirand are borne far and wide on the cumstances arise. The best method wings of the wind. Others, as the of attacking them is to turn the seed burdock, attach themselves to passing to the surface, get them to grow, and animals, and are carried by them to kill them before they are allowed to other parts where they flourish and seed. The biennials take two years Weeds are too often carried to mature and ripen seed. The perenfrom one part to another in seed grains nials are perhaps the worst class of and seeds. Three years ago I got a weeds. They grow from the roots as pretty good dose of daisy in grass seed well as the seed. Some of these are which gave me a great amount of the Canada thistle, ox eye daisy, couch trouble, and I am not done with it grass, etc., and owing to the tenacity yet. Threshing machines, too, carry with which they cling to the soil they seeds from one place to another, and are extremely difficult to get rid of. The remedy to be applied to rid the

soil of these and all other weeds is good cultivation, and the first re uisite is to remove all obstructions as stones, 1. They take up room that should stone piles, and rubbish of every debe occupied by useful plants, and be- scription, as these are not only a hindrance to cultivation but also a prothan the cultivated varieties, crowd tection to weeds of all kinds. Then them out and deprive them of mois- the land should be well plowed, every inch of it turned over and not done in They take from the soil the food that careless slipshod manner that we that should go to build up the useful see so often in our fields. No amount plants, thus making the latter weaker of after cultivation will make up for and less able to withstand the crowd- poor plowing. If the land is very dirty ing of weeds, and the attacks of in- it will be necessary to summer fallow, sects or disease.

3 There is another way in which kill, if possible, every sign of vegetaweeds are an injury to the growing tion in the field. But land, unless excrop. All plants draw a certain amount tremely dirty, can be cleaned and kept of water from the soil, and through the clean without summer fallowing and leaves throw it off into the atmos- without the loss of a season. Hoed Prof. Panton, of the Ontario crops should be extensively grown, as Agricultural College, at Guelph, and potatoes, turnips, mangolds and corn. others have lately been making some Large quantities of these are necessary experiments as to the amount of water to feed the stock that ought to be fed result, and without it little good is conveyed by certain plants from the on every farm. Proper cultivation accomplished. The Institute officer soil into the air, and have arrived at will be a valuable assistance in the de-Taking struction of weeds. A short system of the wild mustard plant and allowing rotation of crops should be adopted, as a long continued cropping of grain is a found that from an acre this plant sure method of encouraging and multip'ying weeds, as well as impoverishing the soil. We should grow plenty tons, or more than four thousand gal- of clover. It crowds out weeds and ions daily. Other plants of a like enriches the soil. The best method to nature also throw off large amounts of clear a farm of weeds and keep it clear water. This is a very serious matter, is to practise a thorough cultivation of especially in this dry climate, as much the soil, adopt a short rotation of crops

Stock Notes

W. C. EDWARDS & Co., Rockland, Ont.: Will you please drop the "Two imported bulls for sale" from our advertisement? They are both away, and the enuities about listeness, coming this to the sole form you have been applied to the composition of the composition o

coming oulls.

Oming oulls.

Against Nowara, Guelph, reports his young Polled Angain took as doing well. In the calves are coming right, and show the thick fishing qualities speculiar to the bred. The stock bull has improved and set out wonderfully. His Dorsets are lambing, and the lambs are coming strong and good. He is offering now a lot of good Prussian Blue seed peas. There are some bugs in them, but not to hust. The seed potatoes that he is offering have been well grown, and are varieties that have been well extend at the Ontario Agricultural tests. Lord Douglas, the drift have that he to offering or sale, is a low set, thick useful horse, and should be of great use in any neighboshood. In his younger days he was a puze-winner. His took have also been prize-winners, and a number of them now the stable attest his excellent qualities as a sire.

Canadian Cows in the Advanced Holstein Registry.

MR. G. A. GILROV, of Glen Buell, Ont., was doing a little quiet chuckling at the annual meeting of the Canadian Association. He thought he had the cow that made the highest test last year for the Advanced Registry of the American Holstein Association. The published statement abows that his estimate was correct, and that his cow, Inka Sylvia, 1321, stands at the head of the list with a good lead. Inka Sylvia is a daug ster of that famous milking trial winner, Carmen Sylvia, 306. Her site is Inak Kathleeu'ns on Messrs. A. & G. Ricc, Currier, stand fifth with Calamity Jane, the winner of the milk test at Branford. Mr. G. W. Climons, St. George, has two entered, which also show up well. Belos we give a table showing the records of the Canadian Cow and ritted to the Advanced Stall make a scould of 9 lbs. of butter during the 7 days of the test. The requirement gradually increases up to 15 lbs. for a five-year-old. The Canadian tests were conducted by representatives of the Ontario Agricultural College.

C. J. Gilroy Ione J. and	G. W. Clemons	A. & G. Rice	G. W. Clemons	G. A. Gilroy Carmen Sylvia	A. & G. Rice Calamity Jane	G. A. Gilroy Inka Sylvia	Owner's name.
Ione J. and	···· Queen De Kol and	Edgely Frena	Daisy De Kol	Carmen Sylvia	Calamity Jane		Name of cow.
u	~	٠	-	٥	٥	Уг <u>к.</u> 3	۷ ا
٠,	ω	w	Ξ	v.	6	Mos.	Age.
¥	5	E	\$	86	Ŧ	33	Days from calving.
3015	304	341 5-16	28314	52915	560 15-16	\$681%	Pounds of milk in 7 days.
3.55	2.76	3.62	3.19	2.92	3.44	3.09	Average per cent. of butter-fat.
	3,0	•	÷	بر 9	3,8	٠ <u>٠</u>	Highest per cent. of butter-fat.
12.957 11.843	10.477	15.477	11.502	19.325	24.137	21.949	Fotal pounds of butter 80 per cent, fat.
11.843	9.564	13.553	9.00	15.000	15.000	11.334	Pounds required at the animal's age for admission.
16 6.48	16 6.89	-	9	19 5.21	2	, d7	Equivalent record

Messis, A & G Rice entered Calamity Jane and Edgely Frena in the Food Test competition for the economic preduction of butter. Calamity Jane made a psund of butter costing p 26 tcs., and Rdgely Frena mide a pound costing 13.54 cts. The lowest cost was 4.98 cts.

Thirteenth Annual Meeting of the Holstein-Friesian Association of America.

Friesian Association of America.

The annual meeting of the Holstein-Friesian Cattle Breeders was held at Buffalo, N.Y., on March 16th last. There were present and represented nearly two hundred members.

The precident, Watkin G. Powell, of Shadeland, Pa., called the meeting to order and opened it with a most scholarly and scientific address treating upon the objects of the association and the subject of improved stock-breeding.

The most important work of the meeting was the signing of articles of agreement for the union of the Western Holstein-Friesian Association, whose delegates were present, and which consists of a memberahip of about two hundred, thus consolidating all herdbooks in the United States and avoiding the confusion of scoords.

coks in the United States and the appropriation of fractords.
Important action was taken in the appropriation of 7,00 in special prizes at dairy tests at fairs during 88s, including the Trans-Mississippi Exposition. An proportiation of \$400 for prizes for ecomonic production of butter was made, and \$1,430 for prizes for

officially authenticated Advanced Registry records of butter. The report of the results of these tests made during the past year was of the greatest interest and value from a scientific standpoint, and demonstrated that the cost of producing a pound of butter from Holsteir-Friesian cows varied by ages, from nearly five to nine crusts. The amount of butter made by cows in these tests, including all ages, from two to nine years, and during the week's test, was from 11.611 to 24.137 pounds.

The sum of the standard of the s

A RELIABLE OFFER.

HONEST HELP FREE TO MEN.

FARMING is authorized to state by Mr. D. Graham, Box 133, Hagersville, Ont., that any man who is nervous and debilitated or who is suffering from any of the various troubles resulting from overwork, excesses, or abuse, such as nervous debility, exhausted vitality, lost vigor, unnatural drains and losses, lack of development, etc., can write to him in strict confidence and receive free of charge full in-structions how to be thoroughly cured.

Mr. Graham himself was for a long time a sufferer from above troubles and after trying in vain many advertised remedies, electric lelts, etc., became almost entirely discouraged and hopeless. Finally he confided in an old clergyman, whose kind and honest advice enabled him to speedily obtain a perfect and permanent cure. Knowing to his own sorrow, that so many poor sufferers are being imposed upon by unscrupulous quacks, Mr. Graham considers it his duty as an honest man and a firm believer in Christian sympathy and kindness, to give his fellow-men the benefit of his experience and assist them to a cure. Having nothing to sell, he asks for no money, the proud satisfaction of having done a great serproud satisfaction of having done a great service to one in need, he rightly considers an ample reward for his trouble. If you write to Mr. Graham, you can rely upon being cured and upon absolute secrecy as well.

Address as above, enclosing a stamp and refer to FARMING. No attention, however, will be given to those writing out of mere curiosity, therefore state that you really need.

curiosity, therefore state that you really need



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

Address

R. & J. Ransford

· CLINTON ONT

LITTLE'S PATENT FLUID (NON-POISONOUS) SHEEP AND CATTLE WASH

The Original Non-Poisonous Fluid Dip.

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

FOR SHBB!'
Kills Ticks, Maggots; Cures Scabs, Heals Old
Sures, Wounds, etc., and greatly increases and
improves growth of Wool.

CATTLE, HORSES, PIGS, Etc. Cleanses the skin from all Insects, and makes the coat beautifully soft and glossy.

Prevents the attack of Warble Fly. Heals Saddle Galls, Sore Shoulders, Ulcers etc. Keeps Animals Free from Infection

No Danger, Safe, Cheap, and Effective. BEWARE OF IMITATIONS.

Sold in large tins at 75 Cents. Sufficient ir each to make from 25 to 40 gallons of wash, according to strength required. Special terms to Breeders Ranchmen, and others requiring large quantities.

Sold by all Druggists. Send for Pamphlet.

Rebert Wientman, Druggist, Owen Sound Sole Agent for the Dominion. .

Peas (some bugs) 75c. a bushel. Great Divide Potatoe. 50c. a Peck. Empire State and Rose of Erin Potatoes, 75c. per Bag of 90 pourds. These varieties stand well up to the top at the O.A.C., Guelph. JAMES BOWSAM. Guelph. Ont.

FOURTH ANNUAL

Canadian Horse Show

To be held in conjunction with the

Military Tournament

of the Toronto Garrison

Armouries, Toronto, Canada

Wednesday, Thursday, Friday, Saturday, May 4th, 5th, 6th and 7th, 1898.

Prize Lists can be obtained from the Secretary. ENTRIES CLOSE on Wednesday, April 20, 1898 and should be addressed to Hen y Wade, Seey. Parliament Bui dings, Toronto

Vegetables

can be raised at a profit, and the yield enlarged, if properly fertilized. Most fertilizers do not contain enough

Potash.

Vegetables need plenty of potash - at least 10% - besides the phosphoric acid and nitro-

Write for our books which tell all about fertilizers. They are free.

GERMAN KALI WORKS. 93 Nassau St., New York.

WALTER NICHOL, Plattsville, Ont., Breeder of Ayrshire Cattle and Leicester Sheep. Choice young stock for sale.

DONNIE BURN SFOCK FARM, Stouffville sta-tion and P.O. D. H. Rusnell, prop. Breeder thoroughbred Shortborn Cattle and Berkshire Swine.

..Windmills..

The Canadian Steel Airmotor has been adopted by the Imperial Government and C.P.R.

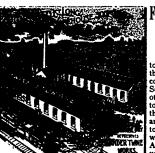
Painted or Galvanized.

Power Strength Durability Full line of

Pumps, Tanks, Grinders Hay Tools Woodward Watering

Basins_ No farmer should be without them.

Ont. Wind Engine & Pump Co. Limited LIBERTY ST. - TORONTO



Farmers' Binder Twine and Agricultural Implement Mfg. Co.

We think it necessary to immediately advise you to refute the treacherous and damnable reports that are being put out and circulated against this co-operative movement of farmers by our enemies. Some are stating that this mill is closed down, others that we are pleading with the Government to re-instate the duty on binder twine; others that raw material has tremendously advanced, and that the present moment is the correct time to buy twine requirements for the harvest of 180g and that the present moment is the correct time to buy twine requirements for the harvest of 180g and that the present moment is the correct time to buy twine requirements for the harvest of 180g and that the present moment is the correct time to buy twine requirements for the harvest of 180g and that the present moment is the correct time to buy twine requirements for the harvest of 180g and that the present moment is the correct time to buy twine requirements for the harvest of 180g and that the present moment is the correct time to buy twine requirements for the harvest of 180g and that the present moment is the correct time to buy twine requirements for the harvest of 180g and that the present moment is the correct time to buy twine requirements for the harvest of 180g and that the present moment is the correct time to buy twine requirements for the harvest of 180g and that the present moment is the correct time. We think it necessary to immediately advise you

is being run three hundred days in the year to its utmost capacity; that we have requested the Government not to reinstate the duty on twine; and that we are manufacturing pure Manilla 69 feet long, known as our Sampson brand. It and our splendid Red Star are superior to anything that has ever yet been placed on the Canadian market. As in the past, we will again shortly set the price on binder twine for the coming harvest at a fraction above actual cost of production, and all we ask, after five years of honest and determined endeavor in the interest of the agriculturists of this country to hold this Company as an independent concern, is that they, the farmers, give us their continued loyal support. Order our (wine early from our appointed agents, listen to no statem ants made by the enemy, and remain truly loyal in not purchasing one single pound of American or other twine in opposition to us until they inform themselves positively that every ball of this Company's twine is exhausted. Small samples and prices will be sent you in the near future, or can be had on application.

We ask you, as an intelligent man, to plead with your people to realize the importance of this company getting their undivided individual support, and to understand what our being driven from existence through indifference or scepticism on their part would mean to them in the future. The Salt Act would simply be repeated. Faithfully yours, JOSEPH STRAT-FORD, General Manager, Brantford.

MARKET REVIEW AND FORECAST.

Office of FARMING.

44 and 46 Richmond street W., Toronto. April 11th, 1898.

The cold snap of last week interfered somewhat with the wholesale trade, but a return to fine weather will cause a quickening in many lines of trade. The probability of war between the United States and Spain has had its effect upon the securities of those countries and to some extent mean the trade of Canada. and to some extent upon the trade of Canada. Vesselmen are speculating upon the increased amount of wheat that would ship by way of Montreal if war were to break out.

Wheat.

The visible supply of wheat in the United States and Canada east of the Rockies showed an increase of 161,000 bushels last week inan increase of tot,000 bushels last week instead of a decrease, as many expected. The world's supply of wheat and flour in sight shows a gain of 2,828,000 bushels over the week previous. The prospects are that there will be ample supplies of old wheat when the new crop comes in. Leiter is still paying 60, or 70, per bushel more than can be got for wheat in Fingland, and although he is shipping large quantities there is nearly as much being supplied him from the long supposed. long supplied him from the long supposed empty farmer's bins. During the past week business in wheat has been very active, owing no doubt to the war scare, as war would no doubt interrupt free export of wheat from the nited States. English buyers have there-United States. English buyers have therefore been buying more freely. Should war break out it would help the Letter corner. Argentine wheat shipments have amounted to 13,888,000 bushels in 14 weeks against 1,023,000 bushels last year. The high cold winds of last week have been general over the continent and much damage is reported. The beautiful have been beautiful. The heavy frosts have heaved the wheat bad-

ly in some places in Ontario.
On the local wheat market business has been very quiet. The demand for export has been good and the market is steady. Sales Soc. north and west; holders are asking 87c. Manitoba wheat is steady at \$1.00 for No. 1 hard at Owen. Sound, and \$1.10 to \$1.10/2 at North Bay.

The trade at Montreal has been merely nominal.

Barley and Oats.

Barley is nominal. No. 2 grade is one cent cheaper, 39c. being the ruling price. Feed barley continues to hold its own at 33c. At Montreal malting barley is very scarce at 50c. to 52c., and feed barley is quoted at 40c. to

Oats are in good demand; 29]c. is bid for the mure. The them, and holders are asking §c. more. The receipts at Montreal during the week were 154,200 bushels against \$1,600 bushels the week previous. Sales are reported at 33%c. and 35c. affoat in May. Out of store they bring 33%c. to 33%.

Peas and Corn.

l'eas are a little firmer than when last reported: 55½c. to 362, being the ruling price for cars north and west. At Montreal receipts have been nearly doubled. One sale is re-ported in the west equal to 64½z, affoat in May. Out of store 63c, is the ruling price.

Suckwheet.

There is no change to report in the market for buckwheat. Offerings are small, and the market is steady at 37c. for cars west. At Montreal trade is also quiet; 40c. to 464c. seems to be the ruling price.

Bran and Shorts.

The bran market is somewhat unsettled. The demand is somewhat limited, and millers the demand is somewhat limited, and inities have had to take lower prices. \$12.50 to \$13 still asked for shorts in quantity, and \$10.50 to \$11 for bran west. At Montreal it is reported that Manitoba bran has been placed at \$12.50 in bulk, and that sales have been made at \$13.75 and \$14, but more at \$14.25 to

Timothy and Clover Seed.

Red clover seed is quoted at \$3 to \$3.40; alsike at \$3.25 to \$4; and timothy seed at \$1.25 to \$4; and timothy seed at \$1.25 to \$1.35. At Montreal red clover is bring ng \$3.25 to \$4; alsike \$3.50 to \$4.25; and timothy seed \$1.50 to \$2, according to quality and the size of the lot.

Potatoes.

There has been no change in the potato market during the past week. Cars are quoted at 55c. on the track, and out of store potatoes sell for 63c. to 65c. Similar prices prevail at Montreat, the range being 55c. to 65c.

cold weather stiffened prices a little, but much larger supplies are looked for in the near future. The market continues steady at 9 %c. to 10c. per doz. Prices at Montreal have maintained the 10c. mark, though supplies have been very heavy.

Maple Syrup.

Maple syrup is in good demand at 65c, for wine gallons and 90c, for imperials. At Montreal the supplies have not been as large as expected, small tins being 50c, and large tins ooc. One sale is reported as low as 4c, per pound. Sugar brings from 6c, to 74c. per pound.

The cheese market continues quiet. Some business was done at 73sc. for finest western colored. Altogether about 17,000 boxes went torward by the winter ports. The first new fodder cheese to come on the market was about 130 boxes from the Kingston Dairy School. They were of a very superior quality, and sold for about 7½c. to 73sc. A few factories are beginning to make cheese.

Sutter.

Butter.

For the two months ending February 28th, 1898, Canada sent 1,482 cwt. more butter than for the corresponding period of 1897. During the same period Denmark increased her export of butter 9,200 cwt. The export of Canadian creamery butter during the winof Canadian creamery butter during the win-ter has not increased very rapidly, but the scarcity of dairy butter this winter has been so great that a very much larger share of creamery butter has gone into local consump-tion than usual. So much is this so that the home market is somewhat independent of the export trade.

During the week the market at Montreal has been somewhat firm, and everything is kept cleaned up from day to day. As high as 21c. and over has been paid at the factory for new make. Top price for new made cream-ery is 21c. to 22c. Earlier makes bring 194c.

to 2012c.
Dairy butter is scarce, and choice tubs of new bring almost as much as creamery. Single tubs bring as high as 22c. to 23c., western dairy packed bring from 17c. to 19c., and roll butter from 18c. to 19c.

At Toronto creamery brings 20c. in tubs and 22c. in prints. Large rolls bring 18c. A number of creameries are starting to make again, and the prospects are that butter will be cheaper in the course of a week or two.

Cattle.

Trade last week was again good at the stock yards. The accommodation on hoard

stock yards. The accommodation on hoard steamships is unusually open, and exporters are looking sharply after export stuff. Although Friday was food Friday, there was a large and successful market.

Export Cattle.—Tuesday's market was a good one, and the enquiry for cattle was very active Ruling prices were 4c. to 4½c., while fancy cattle brought \$4.40 to \$4.50 per cwt. On Good Friday's market prices were about 100 per cwt. lower. Export bulls bring from

On Good Friday's market prices were about 10c per cwt. lower. Export bulls bring from \$3 to \$3.75 per cwt.

Butcher's Cattle.—On Tuesday's market cattle sold off about 10c per cwt., but on Friday's market they sold at a slight advance. Prices run all the way from \$2.85 to \$4 per cwt. The Easter markets at Montreal were cwt. The Easter markets at Montreal were well attended. Choice Easter animals sold as high as 5½c, although 5c. was the top for good animals. Prices run down to 4½c. Common stuff sold for 4c. down, culls for 3c. Stockers and Feeders.—A good trade is being done in stockers at \$3.20 to \$3.40 per cut. Half, fat feeders, being \$2.50 to \$3.40 per cut.

Half-fat feeders bring \$3 60 to \$3.70

Milch Cones and Calves .- Many inferior animals are being offered; prices range from \$25 to \$40. Some fancy yeals brought as high as \$10; common run \$5 to \$6.

Butchers' sheep and export sheep bring 3\forall to 3\forall c. for bucks. Yearlings bring from \$5.25 to \$5.90 per cwt. Spring lambs bring from \$3 to \$5.

Hogs.

Prices fell away &c. on Tuesday's but were inclined to be a little higher on Friday's market. \$4.60 to \$4.63 is top price for choice bacon pigs; light hogs 4&c. to 4&c.; thick fat hogs, 4&c.; sows 3c. to 3&c., and stags accurate round.

A little improvement has been experienced otatoes sell for 63c. to 65c. Similar prices in the market for No. 1 hay. There is still revail at Montreal, the range being 55c. to a lot of hay in the country to be disposed of. Cars on the track at Toronto are quoted at \$8 to \$8.50, while at Montreal hay is worth \$10.50 to \$11.50.

Unbounded Success



American Cream Separator

MESSES. RICHARDSON & WEBSTER.

Javis, Ont., July 26th, 1897.

GENTIMMEN,—In reply to your letter of the 23nd, I would say the American Cream Separator that I purchased from you last September has done all that you claimed for it. I went to Toronto fair last fall with the intertien of buying a separator; after looking over the different makes, I concluded to buy the "American," and it has given me entire satisfaction. I find it runs easy, is no trouble to keep in repair, and it is at clean skimmer. In my opinion it is the most perfect machine on the market.

They all have something of the same to say.

Are you building a creamery? If so, get our prices for the complete out fit. We manufacture and handle churns, butter workers, engines and boilers, cream separators, and everything required for making butter or cheese.

RICHARDSON & WEBSTER,

ST. MARY'S, ONT.

Something New in Agriculture is VESSOT'S SUB-SOIL LANCE

(PATENTED) A complete revolution of the old methods. This is a most useful, simpleand durable instrument. It is easy to operate and adapts itself to any plough now use (including the sulky) and kee it but ver ittle harder to draw. It is sold very heap.

THE VESSOT IMPROVED GRAIN GRINDER LEADS

S. Vessot & Co.,

Churn

Churn

'paste"

solves?

Does your butter work to a

before the salt you use dis-

Poor salt spoils what might be

good butter. A sharp-grained salt is practically insoluble.

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

Windsor Salt

The Windsor Salt Co. Limited, Windsor, Ont.

Sole Manufacturers

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ULRICH'S ENSILAGE

Seed Corn.

This Colebrated Corn is Sold all over Canada.

Giant Prolific, Mammoth White, Red Cob

Yellow Dent, Improved Learning.

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

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

START A LONDIKE

AT HUME

By buying a pair of our Large English Berkshires. We have three choice Sows and two Boars of October farrow and Pigs of February 1808. We are now booking orders for spring Pigs; pairs not akin This stock is bred for use from the best foundation.

Correspondence invited.

J. J. PERGUSOI plehurst Dairy, Box 372, SMITH'S FALLS, Oat.

AYRSHIRE HERD BOOK WANTED.

Any person having a copy of Vol. I. of the Dominion Ayrshire Herd Book to spare will receive \$1 for it by forwarding it to H. WADE,
Parliament Buildings.

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from the best of m H.B.—Agents wanted. Territory for sale. ENG & BON, 174 York St., NAMILTON

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Woodstock Steel Windmills



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Get a

They Run with Oll. Steel Towers, Pumps, Tanks, Saw Tables and Watering

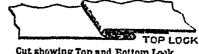
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Patent Safo Lock Shingle.



Cut showing Top and Bottom Look.



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

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

> Samples and Prices sent free upon application.

Metal Shingle and Siding Company

PRESTON, ONTABIO

OVOYOYO OYOYOYO WYOYOYO

"The Spramotor"



CERTIFICATE OF OFFICIAL AWARD:

This is to certify that at the centest of Spraying Apparatus, held at Grimsby on April 2nd and 3rd, 1830, under the anspices of the Board of Control of the Fruit Experimental Stations of Ontarlo, in which there were eleven contestants, the Spramotor, made by the Spramotor Co., of London, Ont., was awarded First Piece.

H. L. HOTT, } Jodge.

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Agents wanted. SPRAMOTOR CO. 357 Richagood St., LONDON Mention PARMING.



Fence Machine will weare your lence of any kind of wire.

4012 50 rods per day
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Price sayod in one days
work. Hard Colled Wire
of extra quality for sale.
Agents wanted
Write for particulars CUREUOR,

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Ask for

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when you order Then matches. you will be sure of having the best.

KLONDIKE SUPPLIES.

THE D. PIKE CO., Limited

Manufacturers of Tests, Horse and Wagyon Covers, Waterproof Clothing, KLONDIKE SUPPLIER, Fishing Tackle, Sporting Goods, Hules and Wire Ropes Spices

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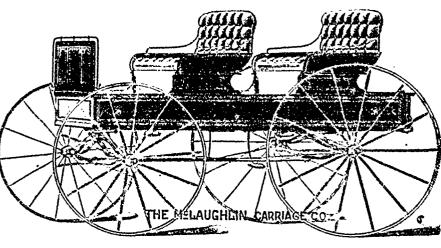


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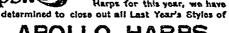


No. 40.—Duplex Spring Wagon, Low Down, Light Draught, Easy Riding, Handson, Full Drop Backs, Silver Rail on Dash. Eand Iron Strips on top of body, also on bottom. Drop end gate full width of body, extra heavy arb sills. Made as follows: Axles and Wheels, 1 inch, 1½ inches, or 1% inches. Bodles, 31½, 34½ or 36 inches. Capacities: Eoo, 1,000, or 1,200 pounds. See Catalogue for full particulars.

15 Styles of Democrats with bodies from 29 to 41 inches wide, any kind of gear with any capacity. See our Agent before you buy and make sure that the name plate reads as follows:—

The McLaughlin Carriage Co., Oshawa, Ont.

Bargains in Harps. Having changed the styles of our Harps for this year, we have determined to close out all Last Year's Styles of



APOLLO HARPS AT A REDUCTION 25 Per Cent.

We have SAMPLE HARPS which we shall sell at a also a few SAMPLE HARPS sacrifice of 49 per cent Such Bargains rarely come to the lovers of High Grade Music

AND NOW IS YOUR OPPORTUNITY TO Circular Free on Application

AGENTS WANTED A. H. PUTNAM

SOLE CANADIAN AGENT CONFEDERATION LIFE BUILDING

TORONTO

FLEMING'S LUMP JAW GURE

Is sold under a positive

guarantee to cure, or money is refunded



SHOAL LAKE, MAK.,
DEAR SIR. Jan. 26th, 1658
In regard to our experience with your Lum
Jaw Cure, we used it on seven lumps has nesses
It worked all right. Some of the lumps had broke
and run several times before using it.
Your truly,
FLEMING & SKORT.

PRICE, \$2.90, sent by mail limetrated Treatise on "Lump Jaw" sent free

FLENINGBROS., Chemisis.ST. GEORGE, ONT.

Gream Separators

THE ALEXANDRA

Hand and Power—Capacity, 160 to 2,200 lbs. \$50 to \$350

THE MELOTTE

Hand Style only-Capacity, 330 to 850 lbs. \$100 to \$1851

Up-to-date Farm Machinery and Supplies ACENTS WANTED

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R. A. LISTER & Co., Limited 18 St. Maurice St., Montreal.

in these hard times in tucse and in tu Steel Flexible Har-



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

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The feribility of the Harrow coalies it to adapt itself as readily to rough and unerestroard as to smooth, and the accillating motion readed by its forthfire polyeries; the ground, and leave, it in a loose and more porcess condition than any other Harrow, and it is made of the very best material money can bey for the purpose. The bars are used of

HARD SPRING STEEL

very stiff and strong, the binger and teeth being of solid stort, all of which are of a bicker grade then is positive name in any other make of Eurows. We can guarantee more than double the attength and want in this Harrow than there is in any other

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

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The Farmer supplies the world with road

und the Massey-Harris *Implements*



cultivate ground roup the erops.



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MASSEY-HARRIS CO., Limited TORONTO, CANADA

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In three seasons ALBERTS' THOMAS PHOSPHATE POWDER (Registered) has proved itself THE LEADING PHOSPHATE IN CANADA, as it has done elsewhere in the world for the ten years rec eding its introduction here.

DO NOT BE DECEIVED by agents who may tell you they can supply you the same thing or anything like it. Remember that the ALBERTS' have won the foremost place in the world as manufacturers of manures on the merits of the goods made by them. Try for yourself and be convinced

WALLACE & FRASER, St. John, N. B.

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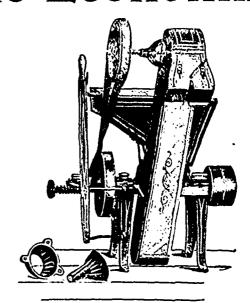
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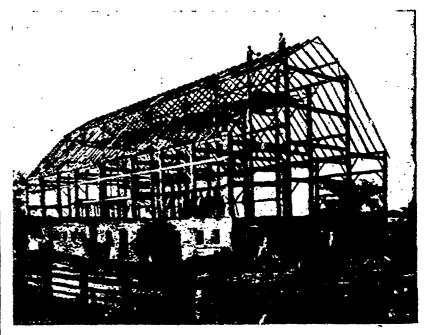
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