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ALEX. HUME, BURNBRAE, ONT.

...LEADING TOPICS FOR THE WEEK...

Do not Make Cheese till May 1st. The Dairy Test at the Brantford Show. Co-operative Pork Packing. Hard Times. The Poultry Industry of Canada. Health on the Farm. The World's Wheat Supply Increasing. Sugar Bounties. Amalgamate Local Shows. The Hotbed. Harness Bruises. Eastern Cheese and Butter-Makers Meet. Maple Syrup. Market Review and Forecast

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Ayrshire and Guernsey Cattle. Improved Yorkshire Swine.

Shropshire Sheep. Our Ayrshire herd is headed by the noted bull, Matchless 7560, sire, Glenclair III., imp. 6955; dam, Nellie Osborne, imp. 5353.



Our Special Offering consists of six choice young Ayrshire bulls and a few heifers; two extra Guernsey bull calves, and a choice lot of sheep and pigs. All at very low figures for immediate sale.

T. D. McCallum, Manager,
Danville, Que.

J. N. GREENSHIELDS, Proprietor

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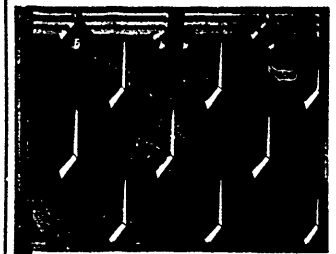
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ALL STYLES AND SIZES.

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OLENTANGY INCUBATOR. This Machine will hatch every fertile egg, so thousands testify. It is the best Self-Regulating machine made. Broodens \$5.00. Catalogue free. Address, GEO. S. SINGER, Cardington, O.

English Advertisements.

Henry Dudding

Riby Grove, Great Grimsby, Lincolnshire, England

Has always for inspection and sale, the largest flock of pure Lincoln Longwool Sheep in the county, including many prize winners, having taken prizes for many years at the Royal and other shows for both Rams and Ewes, including champion medals at both the Paris Exhibitions, Vienna, Amsterdam, Canada, Australia, New Zealand, and all the leading prizes at the Chicago Exposition, also the first for the best collection of Lincoln fleeces of wool at the Royal Windsor Show and the Lincolnshire Show, which proves the character of this flock. The sheep are famous for their great size and one hundred and twenty five years good breeding. At Lincoln Ram Sale, 1896, this flock's consignment not only made the highest individual average of any consignor, but also made an average price exceeding that made by any other breed in England, £2, \$511 per head the first six making an average of \$340. The sheep for sale this year are all sired by noted rams, and are fully equal to their predecessors in every way.

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Telegrams: "Dudding, Koolby, England."

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Dowsby Hall, Folkington, Lincolnshire, England

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Dowsby Hall is one mile from Kippingale Station, on the Great Northern Railway, Bourne and Seaforth Branch.

TELEGRAMS: DEAN, RIPPINGALE.

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Sempringham House, Folkington, Lincolnshire, England

Has for sale pure bred registered Lincoln Rams, Ewes and Ram Lambs and the Lambs. Flock established over 100 years. The Rams this year are principally sired by the 200 guinea ram Sempringham, 3145, Ashby Rover, 1291. This sheep gained first prize at the Yorkshire Show in 1895, and last year clipped 11 lbs. of wool. Sempringham Pointon A, 2741, Loughton Chief, 1227 (bred for a high figure), and Sempringham Dudding, 2240, half brother to the Royal Prize Shearling at Darlington.

Registered Flock No. 36.
Telegrams and Railway Station

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J. E. Casswell

Stock Book No. 45

This well-known flock has been established more than 100 years, and the pedigree Lincoln long-wooled rams and ewes have been noted throughout the Colonies and South America for their "size, symmetry, and lustrous wool." Ewes from this flock have always passed to their father to son, and have never been offered for sale. Mr. J. E. Casswell's grandfather, Mr. G. Casswell, of Loughton, was the first breeder in the county to let his rams by public auction. At Lincoln Ram Fair, 1895 and 1897, Mr. J. E. Casswell made the highest average for 20 rams. The rams of 1896 were all sold privately for export. During the last two years the following amongst other noted sires have been used: Bakewell Councillor and Baron Kigby, for each of which very high prices have been returned; Loughton Major, Loughton Style, Loughton Choice, No. 5; Ashby George, 60 guineas; Judge, 95 guineas; his son, Loughton Justice Lincoln, 200 guineas; Lincoln, 152 guineas; Welcott, 70 guineas; Lincoln, 72 guineas; and his sire, Loughton Ribby. Shire horses, Short-horn bulls, and Dorking fowls are also bred. Inspection and correspondence invited. N.B.—Loughton Choice won and at the Royal and a pen of 5 theaves by him won 1st at Royal Doncaster. Visitors met by appointment. TELEGRAMS: CASWELL, FOLKINGTON, ENGLAND.

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Great English Pedigree Sales

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Waters & Rawlence, Salisbury, England

Will sell by auction during the season upwards of 50,000 Purebred EWES, LAMBS and RAMS, including both Rams and Ewes from the best Registered Prize Winning Flocks in the country. Commissions carefully executed. Address

WATERS & RAWLENCE, Salisbury, England.

An Ad. in "Farming" Pays

Lincoln Longwool Sheep Breeders' Association.

Lincoln Ram Sales, '98

The Seventh Annual Sale of Lincoln Longwool Rams will be held in LINCOLN, on

FRIDAY, SEPT. 2ND, '98

STEPHEN UPTON, Secretary.

St. Benedict's Square, Lincoln, 4th February, 1898

W. W. Chapman

Pedigree Live Stock Agent and Exporter

Secretary to the National Sheep Breeders' Association of England and the Southdown Sheep Breeders' Association, Hon. Secretary Kent Sheep Breeders' Association.

All kinds of Registered Stock, Horses, Cattle, Sheep, and Pigs supplied on Commission.

References—JOHN JACKSON & SON, Abingdon, Ont. N. CLAYTON, Belsey, Chichester, Eng.

Offices: Fitzalan House, Arundel St., Strand, London, England

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Turns all roots and vegetables into Fine Stock Feed. Indispensable to dairymen and sheep breeders and of greatest value to general farmers and poultrymen. Cuts fine: no choking. Self-feeding. Shaking. Crates take out all dirt; save the leaves; fully warranted. Send for FREE CATALOGUE. THE G. H. GRIMM PANNING MILL CO., of Chatham, (Limited).

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Painted or Galvanized. The Canadian Steel Airmotor

is proving such a boon to FARMERS that we were compelled to erect a NEW FACTORY to meet the demand.

Power and Pumping. Note Our New Address.

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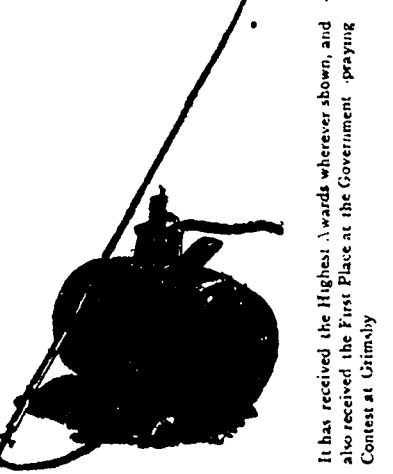
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I am prepared to book orders for pigs and can ship at any time. Prices right. POULTRY—W and B P Rocks, W and S L Wyandottes, W Illa and Brown Leghorns, W and B Minorcas, Black Hamburgs, S G Dorkings, W C B Poland, L Brahmas, \$1 per 13 eggs. Rouen and Pekin duck eggs, \$1 per 11 eggs. M B Turkey eggs, 25 cents each. \$2 per 4 Toulouse geese eggs 40 cents each. D A GRAHAM, Parkhill, Ont.

"The Spramotor"



CERTIFICATE OF OFFICIAL AWARD: This is to certify that at the contest of Spraying Apparatus, held at Grimsby on April 2nd and 3rd, 1896, under the auspices of the Board of Control of the Fruit Experimental Stations of Ontario, in which there were eleven contestants, the Spramotor, made by the Spramotor Co., of London, Ont., was awarded First Place.

H. L. HURT, M. PETTIT, Judges. Catalogue and Price List on application. Agents wanted. SPRAMOTOR CO MENTION FARMING. 357 Richmond St., LONDON

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One pair of Andalusians. One pair of Partridge Cochins. One pair of Black Langhans. One pair of Brown Leghorns. Also a young Stock in the above varieties. W. R. KNIGHT, Bowmanville, Ont.

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Will sell my breeding stock which includes my imported birds of Golden and Silver Wyandottes. Winners at the Canadian and U.S.A. shows. Golden and Silver Wyandottes eggs, \$1 per 13. Headed by Cock from Sharp Butterfield. JAMES LENTON, Park Farm, OSHAWA

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HAVE shipped birds and eggs to South Africa, England, Ireland, France, and all parts of the United States and Canada, where they have always won for my customers. The bulk of the Minorcas which won at the great Toronto Poultry Show were bred by me. At Toronto Industrial, 1897, I won for the fourth successive year, with my Minorcas, the Association Medal for best collection in Mediterranean class; and in Barred Plymouth Rocks, 2nd Cock, 2nd Hen, and 1st and Special Jubilee Medal for the best cockerel in the American class. Send your order for Eggs at \$3.00 per setting; two settings, \$5.00. I can also spare, if taken at once, six Barred Rock cockerels at \$2.00 each, and twenty splendid pullets at \$1.50 each.

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FARMING

VOL. XV.

MARCH 15TH, 1898.

No. 28.

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

Our Clubbing List.

	Regular price.	With FARMING.
Canadian Magazine	\$2 50	\$2 50
Toronto Weekly Globe	1 00	1 50
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London Weekly Free Press	1 00	1 75
London Weekly Advertiser	1 00	1 40
Ottawa Semi-Weekly Free Press	1 00	1 60
Hoard's Dairyman	1 00	1 75
Rural New Yorker	1 00	1 85

Do Not Make any Cheese Till May 1st.

At a meeting of the Board of Directors of the Butter and Cheese Association of Eastern Ontario, held in Kingston last week, the following recommendation was made regarding the make of cheese for 1898:

"That in view of the fact that a large quantity of cheese of the manufacture of the year 1897 is still in the hands of the dealers and unconsumed, be it therefore resolved, that in the opinion of this board, it will be in the best interests of the dairymen of this Province that no cheese be manufactured before the first day of May, nor after the last day of October during the present year."

The recommendation of this important organization should be adopted by all the dairymen in the Province, and for that matter, in Canada. If the cheese market is to be relieved of the large stock of last year's goods on hand some definite action of this kind on the part of our dairymen is necessary. We cannot hope to go on increasing the make of cheese each year and expect that it will always command a high price. Many of those who understand the trade best believe that we have already reached the maximum in regard to the quantity of cheese we are exporting to England. True, the consumption of Canadian cheese in England is increasing every year, still there is a limit to the capacity of the British consumer in this particular, and we must repeat what we pointed out in last week's issue, that if all the factories would agree not to open till at least May 1st and to close each year at the end of October, the very best interests of our cheese export trade would be served. It would seem to be the height of folly for our dairymen to go on loading up the market at the present time with a lot of early made cheese, especially when such early made fodder stuff is inferior in quality to the later makes. Even if the supply of early fodder goods is not large it always has a depressing effect upon the market, especially when it is

in the over-loaded state it is in at the present time.

As we pointed out last week it will pay the dairyman better to make butter during the early spring and late fall. The prospects for butter just now are good. Fine, fresh creamery butter meets a ready sale at remunerative prices and it will be much more profitable to make butter during the early part of the season and have the skim-milk returned for raising the calves. This whole question is of vital importance just now, and factorymen should arrange for meetings of their patrons at once and decide not to make any cheese till the cows are on the grass.

The Dairy Test at the Brantford Show

Criticised and Defended.

At the special request of one of our patrons we publish the correspondence which appeared in *The Holstein-Friesian Register* recently, relating to the conduct of the dairy test at the Provincial Fat Stock and Dairy Show at Brantford last December. As Mr. Clemons points out, it would have been better if the criticisms regarding the test had been made in some Canadian paper in order that those directly interested might be able, if need be, to defend themselves.

"I believe I owe it to Holstein breeders to give an explanation of the record of the Jersey cow herein mentioned, Fancy of Oakdale. It is a pretty high record for fat and may be quoted now or in the future. I wish to show up a few facts to show how unworthy of credence it is. It may be safely put down with those of Princess and Toltec Fancy, unworthy of belief. Our reporters here are silent (for business reasons), but they are not bats and knowing how this record was made, do not waste any praise on it, a record which if straight, is worthy of all praise.

In the first place this cow was entered as under thirty-six months, her horns were nicely smoothed off, but her owner forgot to knock out her teeth. As she had a full mouth and every appearance of being a cow, it would not go down. She was actually put in as a heifer. The first milking of the test, the scales were out of order and a new pair had to be got, and the test commenced over again. Before the test was tested again, the Jersey man was given to understand his "heifer" would be thrown out, he then acknowledged she was older and put her in the cow class. I am told he added another cow's milk. We know when she was watched the cow gave 16 lbs., the product of eight hours, when not watched 26 lbs. was weighed as the product of eight hours, which shows fraud on the face of it. Fancy a cow making 26 lbs., testing 4.7 per cent. in eight hours. Again this cow was put in as milking over 200 days and was allowed 20 points for that reason. Of course nobody would believe any such thing. Why the testers did not throw her out is a mystery to me. Our cows showed no such variation. Calamity Jane gave second day of test with forty or fifty people looking on, 28½ noon, 28½ night, 28½ morning 85 lbs. in twenty-four hours. She was the sensation of the show and everybody wanted to see "the cow that gave so much." This with dogs running around kept the cow disturbed and she only tested 2.7 per cent. first day, 51½ lbs. milk and 2.9 per cent. second day; tested the week previous, lowest 3.1 per cent. highest 3.8 per cent., average 3.46 per cent. for a week.

We got more total solids and came out ahead by a comfortable margin in spite of 20 points allowed the Jersey and added milk. A mistake was made in figuring up and it was first reported that the Jersey had won. I insisted on having a look at the book and found one cow was only down for 116½ lbs. milk, instead of 166½.

You have now the inside history of this badly managed test. We have surmounted all obstacles and added another victory for the black-and-whites." A. & G. RICE.

Editor Register:

"Subjoined to your report in the February number of the recent Provincial Fat Stock and Dairy Show is a letter from the pen of Mr. Geo. Rice regarding the Jersey cow Fancy of Oakdale, and her performance at said fair. Now, as superintendent of the dairy department of the fair, I desire to take exception to some of Mr. Rice's statements.

In the first place, the cow Fancy of Oakdale, was entered by her owners, Messrs. J. H. Smith & Son, in the proper class, and not as Mr. Rice states, in the class for heifers under thirty-six months. Messrs. Smith also entered two heifers, but did not bring them to the fair, and the entry number properly belonging to one of these heifers was

placed on Fancy of Oakdale. This is how the first milking of this cow happened to be placed to the credit of the two-year-old heifer. When weighing the first milkings it was found that the scales were not exact, and it was decided to drop this milking and start the test afresh. I then went to Mr. Harry Smith and warned him that his cow was in the wrong class, and that other breeders were ready to enter a protest against her on the question of age. Mr. Smith admitted the charge, and thereafter her milk was properly credited. You may be sure that after this I took particular care that this cow should be closely watched at every milking, and I deny emphatically that Mr. Rice has any grounds for his statement that she was not properly watched. We had thirty-four cows and heifers in the test, an unprecedented number, by the way, and it was no easy task to get men out at 5 o'clock in the morning to watch all these milked.

Mr. Rice claims that the fact of this cow giving sixteen lbs. at one milking and twenty-six lbs. at another proves the test to be fraudulent. Now anyone can see that sixteen pounds was considerably below her average milking, and it is accounted for by the fact that the cow was not milked clean that night, so that a phenomenal milking might be shown next morning. This gave Mr. Smith no advantage, and he had a perfect right to do it, if he so desired, although I can not see why he should wish to do so. I agree with Mr. Rice that it was highly improbable that this cow had been in milk for 200 days; but neither Mr. Palmer, the tester, nor myself had any authority to throw her out of the test on that account, if we had desired to do so. If Mr. Rice or any other breeder had any evidence to offer on that point, why was not a formal protest filed with the secretary, and such evidence brought forward to substantiate it? I have yet to find a Fair Board imbecile enough to throw out a cow on the strength of idle gossip.

In justice to Mr. W. J. Palmer, who had charge of the testing, I must say that the trouble with the scales at the beginning of the test, and the consequent postponement, made the time between the end of the test and the close of the fair too short for the proper calculation of all the records made. Mr. Palmer's mother was almost at the point of death at the time, and it is not to be wondered at that, with this trouble weighing upon his mind in addition to the bustle and hurry incident to the desire to get all the tests figured out before the show closed, he and his assistants allowed a clerical error to creep into the figures of Calamity Jane's test. If it had not been for the unfortunate circumstance that Mr. Palmer was called away to his mother's bedside before the mistake was discovered, it would have been rectified at once. In conclusion I may say that in my opinion the officers of the fair did everything possible under the circumstances to make the test a success. Talk is cheap, especially in foreign papers, but why does not Mr. Rice make the same charges in our Canadian papers, so that the parties interested might give him an opportunity to prove his statements? At any rate if he desires to kill the dairy department of the winter show which has done so much to demonstrate the capacity of the Holsteins, he is taking the best possible method to attain his object."

G. W. CLEMONS,
Supt. Dairy Show.

Co-operative Pork Packing.

A new co-operative farmers' industry has sprung into existence during the past few months that is arousing considerable interest in some sections of the country. At Stouffville and Bowmanville co-operative concerns will soon be in operation for packing pork. These factories will be run on a purely co-operative basis and will be owned and operated by the farmers in these districts. They are modelled somewhat after the co-operative cheese factories, the producer, or the man who supplies the hogs, to share in the profits after the expenses of operating are deducted.

At Stouffville every person becoming a shareholder must be a hog producer to the company. Not being a hog producer will debar any person from becoming a shareholder. Each shareholder must deliver at least five hogs for every share he becomes a holder of. Toronto prices will be paid for all the hogs supplied. It is claimed that this will insure the producer one dollar per hog more than he is getting under the present system, as no middle man comes between the farmer and the manufacturer. All shareholders shall be paid six per cent. on all the stock they hold as first lien on profits. After this every person will receive the full profits according to the number of hogs delivered by him up to fifty hogs per share. Any

shareholder delivering more hogs than fifty per share, the hogs above that number will be considered as bought hogs from non-shareholders and profits on the same will be divided equally amongst shareholders, as per the number of shares held by each individual. The profits on all hogs bought from non-shareholders will also be equally divided amongst shareholders, as per the number of shares held by each individual. Each shareholder shall be entitled to deliver fifty hogs per share, on which he will receive all profits earned by said hogs, less the six per cent mentioned above. No shareholder will be allowed to hold more than \$500 worth of stock.

The progress of this movement will doubtless be watched with the keenest interest. The fact that the co-operative cheese and butter factory has been a success is no guarantee that the co-operative pork packing establishment will be successful also. They are two different lines of business, the one involving comparatively little capital and risk, while in the other a large amount of capital is necessary for buildings and plant, and the risk to be incurred proportionately great. The co-operative cheese factory is almost co-extensive with the development of your cheese industry, while the co-operative pork packing concern appears on the scene when the business of pork packing in this country has been pretty well developed. The co-operative cheese or butter factory has practically no competitor to-day, for whether the factory is owned by one individual, or by the farmers themselves, the co-operative principle is practically the same. The pork packing industry to-day is under the control of the large pork packing establishments which have almost unlimited capital at their disposal for carrying on the business. With these large concerns the co-operative pork packing establishment will have to compete, and we are safe in stating that they will not give up any share of the business which has formerly been theirs without a struggle.

However, we wish this new venture every success, and only draw attention to some of the difficulties, as it is well that our farmers should consider every phase of the question before investing very largely in any new scheme. There is a good precedent for the farmers' co-operative pork packing establishment to be found in Denmark. In that country a large share of the bacon is produced in packing establishments owned and controlled by the farmers, or the producers. As far as we can learn these have been successful. Whether the conditions there are such as would be more conducive to success than they are here remains to be seen. The Danes are much nearer the market than we are, and may have other advantages that we know nothing about.

Hard Times.

For the past two or three years people have been accustomed to talk somewhat glibly about hard times, without seriously considering how they might be overcome, or without making any direct effort in applying a remedy. The lack of economy, or not applying our best knowledge and skill to the work we have in hand, very often results in so-called hard times to the individual. True, there are circumstances sometimes which the individual cannot always control, which make it impossible for a person to make the most out of his resources. But in a very large measure, if the individual would use all the resources he has at his disposal in the very best way, the complaint regarding hard times would not be so prevalent.

The farmer sometimes complains of hard times when, if he had utilized his resources in the very best way, he would have had no reason to complain. A speaker at a farmer's meeting recently said:

The lack of economy has much to do with hard times. Economy is not meanness, but a good and intelligent use of all of our faculties and the good things which nature and a kind Providence has put within our reach. We should economize our time. The value of time cannot be estimated in dollars and cents; much of our time is wasted. We should be content to live within our means. Be content to ride in a second-class wagon until able to buy and

pay for a new one. We should economize the strength of our body and give our brains a chance. We should do more thinking, and think to a purpose.

The last sentence of this extract puts the whole matter in a nutshell. Our farmers as a rule do not do enough thinking. If they would take a little time to study out the various phases of their business, many lines of farming practice which they are now following would be quickly abandoned. They would find out what lines of farming paid, and what lines did not pay. They would learn to discard the unprofitable cow and to keep only those which return a profit. They would discard many of the idle horses that are no use, and not paying for their board.

Many farmers fail to make farming profitable because they neglect to give particular attention to the little details of the business. For example the hen is totally neglected in many instances as being unworthy of attention, when, if managed properly there is no branch of the farm that will return as much profit for the capital invested and for the time and labor expended upon it as poultry raising. There are other ways also in which the farmer may improve upon his opportunities and make his business more profitable. It is a concentrated system of farming that entails special attention to every little detail of the business that will be successful in the future, and our farmers, if they are not working along that line should adopt it at as early a date as possible.

The Poultry Industry of Canada.

By THOMAS A. DUFF, Toronto, Ont.

(Continued from last week.)

KEEP THE MALE BIRD AWAY FROM THE LAYING HENS.

This, in my opinion, is really the key note to success. Though the object of the egg is undoubtedly to envelope the germ, yet impregnation of an egg by this germ has no influence upon the actual laying, and a hen will lay at the proper season independently altogether of her being mated with a male bird. Millions of eggs are laid every year which would never hatch, simply because they contain no germ, not having been fecundated. There are, therefore, two classes of eggs—fertile and infertile. A fertile egg is one in which the vital impulse has been communicated by fecundation, and by the term "infertile" is meant an egg which has never been impregnated, and consequently one that cannot possibly hatch.

My experience has proven that a hen when never mated to a male will lay seventeen per cent. more eggs than when so mated. Supposing, by way of illustration, that a hen, properly cared for, fed and housed, lays one hundred and fifty eggs a year; this would mean twenty five more eggs, which, at fifteen cents per dozen, means thirty-one cents more profit made from each hen than you make by allowing the male bird his liberty. On one hundred hens the profit is \$31—a considerable item towards the cost of feeding.

In addition to obtaining more eggs, there are other advantages to be gained. You gain an egg of a better flavor, and one for which a better price will be paid. An infertile egg will keep very much longer than a fertile one, because there is no germ in it to spoil by the heat. If fertile eggs happen to be left in the nest for a day or two the heat from hens laying in the same nest, will, to some extent, spoil the flavor and keeping qualities of the egg.

To better exemplify the above, permit me to give you the result of an experiment which came under my personal notice:

In July last, several dozens of eggs, some of which were fertile and some infertile, were placed on bran in the drawer of an egg cabinet and kept in a cellar, where the temperature ranged from fifty to sixty degrees.

About the 15th of August, some of these eggs were broken, but no perceptible difference could be seen in them.

On the 15th of September, more were broken with the same result, except a slight entanglement of the germ in the fertile eggs.

On the 15th October, more were broken, when it was quite apparent that the white of the fertile egg was much thinner than that of the infertile egg, and the germ was larger than at the previous test.

At the November 15th test, this was still more apparent, for in the fertile eggs the white was so very thin as to entirely leave the yolk and run over the saucer like water, while the white of the infertile egg had apparently not changed at all.

On December 10th, the last test was made, and the result was still more pronounced. The whites of all the fertile eggs broken were like water, and in a majority of cases the yolks broke and mixed with the whites, while on the yolks of those which did not break were to be noticed many dark spots and discolorations, showing clearly that the eggs were decaying. All of the fertile eggs broken at this December test were totally unfit for table purposes, and of little or no value for culinary purposes. In the infertile eggs, however, the whites and the yolks were in the same condition as when tested in August, and showed no signs whatever of decay. These were quite fit for any purpose, but, of course, could not be called "fresh" eggs. From the fertile eggs a bad smell was noticed, while from the infertile eggs nothing of this nature could be detected.

During the conduct of this experiment, other prominent features were observed, namely:

(a) The loss by evaporation in brown shelled eggs was less than in white eggs.

(b) The loss by evaporation was greater in small eggs than in large eggs.

(c) The brown shelled fertile eggs were in a much better condition than the small white fertile eggs; while little difference could be detected in the keeping qualities of the large white colored eggs and the brown eggs.

The evaporation depends upon the conditions under which the eggs are kept, and will vary in accordance with these conditions. It is much more rapid in hot weather than in cold—in warm places than in cool.

When eggs are stored in other than cool places the transpiration of oxygen and hydrogen invariably renders them stale. This loss and evaporation are scarcely perceptible in the first week, but are more marked in the second, and of considerable importance in the third. An egg exposed to the weather, but protected from sun, rain and frost, will lose more than half its original weight in twelve months. Under similar conditions twenty seven eggs at the end of six months will weigh less than twenty two newly laid ones. Evaporation is half the daily average in winter and double the annual daily average in summer, or a daily loss four times greater in hot weather than in cold.

Experiments have proved that evaporation is very unequal. It is influenced by the size and form of the egg. In a series of experiments made with new-laid eggs, weighing eight, nine and ten eggs to the pound, it was found that eggs weighing ten to the pound lost double that of eggs weighing eight to the pound, and with very small and long eggs the loss in weight assumed a still greater proportion.

Placing eggs in a cool place minimizes evaporation, and a low temperature is not favorable to the multiplication of the micro-organisms associated with the decomposition of eggs. A pure air where the eggs are stored is absolutely essential.

Upon two rules, apart from preserving processes, depends success in storing eggs for food—cool storage in a pure atmosphere reversing the eggs at least twice weekly.

COLLECTING EGGS AND HOLDING UNTIL MARKETED.

Be sure and gather your eggs every day. Under no consideration neglect this. After they are gathered, and all dirty eggs washed, see that all small, cracked or thin-shelled eggs are removed and set apart for home use. Those intended for market should then be placed in the cellar. It would pay everyone to have a rack made in which to keep these eggs. It can be made at home and will cost but a trifle. The frame can be made out

of material 2 x 2 inches, dressed. A good size for a case is two feet wide, fifteen inches deep, and four feet high. The egg trays consist of a frame made of very light material, and the bottom covered with wire gauze. Small triangular pieces of wood are run across the frame of the trays as a division for each row of eggs. The gauze is also tacked to these strips to keep them in place and strengthen the frame. Strips of wood an inch thick and two inches wide should be nailed on the inside of the 2 x 2 uprights, so as to slide the trays in and out. This also enables you to put the trays one above the other. By having one more tray than you have trays in the case, a few minutes each day would enable you to turn the eggs. Place the eggs in the trays in full rows, with the large ends all pointing the same way. In turning, place the extra tray over the eggs; grasp the sides of the trays firmly with both hands, and turn end over end, allowing the large end of the eggs to pass downward and underneath.

SELECTION OF LAYERS.

As the breeding season approaches, select out from your flock the hens which you know, by observation, to be your best layers, and mate them to a thoroughbred male bird, of the same variety, from a well-known egg producing strain. The result of such selection will be that year after year you will be improving the size and number of eggs obtained.

When the breeding season is over see that all the male birds are either disposed of or shut up.

Health on the Farm.

Farming is generally considered to be one of the most healthy occupations. People in the cities in search of health usually flock to the country where the pure air, fresh breezes, and wholesome foods are believed to be health producing. This is true enough, and many persons who have been without good health in the large cities have fully recovered after spending a comparatively short time in the country; but in many cases we believe the improvement has been due more to the mere change of environment than to anything else.

However, the condition of things in the country should be more conducive to health than conditions in the city, but very often they are not. If those living in rural districts observed the laws governing sanitary conditions to the same extent that they are observed in the cities the country would be a regular paradise of health. In every well-ordered city the laws governing sanitation are very strict and are enforced by competent officers. Of course, such regulations are more necessary in the city than in the country, but if those living in the country would pay more attention to sanitary laws the standard of health would be very much higher than it is at present. People engaged in farm work deceive themselves very often by thinking that there is no need of regarding sanitary conditions so long as they have the pure air and fresh breezes of the country, and frequently people are found living in the midst of the most unsanitary conditions and who wonder why they are not blessed with good sound health. Unsanitary conditions are conducive to bacterial development, and nearly all diseases have their origin in germ life, and consequently sickness results, in many instances, where it is least expected.

One of the chief sources of disease in the country is to be found in the water. Frequently wells, from which the water used for drinking purposes is taken, are near some polluting source that makes the water anything but healthy. Frequently decayed vegetable or animal matter may be found adjacent to many farm dwellings, the germs of which are inhaled by those living on the farm. Farmers do not give as much attention to these things as they should. If every detail connected with the sanitary arrangements on the farm were well looked after there would not be as much sickness in the country as is found in some sections at the present time.

The World's Wheat Supply Increasing.

The world's available wheat supply is steadily gaining upon that of a year ago, so says *The Montreal Trade Bulletin*. This is rather surprising in face of the fact that the visible supply in the United States and Canada east of the Rockies decreased 1,345,000 bushels last week and that there was a falling off of 560,000 bushels in the quantity on passage to the United Kingdom. The total amount of wheat in sight has now increased to 71,528,000 as compared with 69,717,000 bushels a year ago. These facts refute the claims of some statisticians that there would likely be a wheat famine. There is now eight months of the cereal year provided for and only about four or five months between now and harvest, so that there is not much danger of many people being deprived of their usual amount of bread.

It is true, however, that there are not the large surpluses stored up of former years. Speculators have tried to take advantage of this condition of things by buying up large quantities of wheat and diverting them from legitimate channels by keeping them off the market. Leiter and his followers have done this and are now trying to take advantage of the situation by putting up prices. Leaving out the speculative element the situation is more favorable than a year or two ago, and prices have been raised to a profitable basis. In view of the fact that reports regarding the coming season's crop so far are favorable there is not likely to be any great advance in prices unless it be through speculation.

Sugar Bounties.

There is some agitation in England in regard to the continental export sugar bounty system. A conference was recently held in regard to the matter, when various remedies were suggested. One was to give a bounty to sugar manufacturers in the colonies; another, to put on a sufficient amount of duty to prohibit the importation of bounty sugars. The matter appears to be very difficult to regulate, and the bounty sugar from Germany and elsewhere almost prohibits the manufacture of sugar in countries where a similar bounty is not given, or where the sugar interests are not sufficiently protected. Many people in England are interested in sugar manufacturers in the West Indies and other colonies, and consequently the cheap bounty sugar affects their interests directly.

If it were not for these bounty sugars there would be no difficulty in the way of successfully operating beet sugar factories in Canada. The Germans, by sending out their cheap sugar, have almost secured a monopoly of the sugar trade in many countries, and are seriously injuring the manufacture of sugar in other places. True, it is all right as far as the consumer is concerned; but we believe that if beet sugar manufacturing could be made profitable to our farmers it would add very much to the value of agriculture in this country.

Does the Rooster Increase the Egg Yield?

The Rural New Yorker has been sending out a number of inquiries in reference to this subject. We do not know whether Canadian poultrymen have given this matter any attention or not. Some of the leading authorities on poultry matters have advocated producing non fertilized eggs, as they would keep longer than those fertilized. It has also been stated that hens lay better when kept away from the rooster, but in some recent contests all prize-winners who won a prize for the largest number of eggs from a given number of hens, had a rooster in the pen with the laying hens. The question now is, how do poultry authorities reconcile the facts with the theory?

The correspondents of *The Rural New Yorker* do not seem to agree in regard to the matter. The weight of evidence seems to be against the rooster. While some are strongly in favor of keeping the rooster separate from the hens, there are others who are just as strongly of the opinion that the

presence of the rooster is an advantage. However, should his presence increase the yield of eggs, it is altogether probable that the gain in this respect would be overbalanced by the extra feed it would take to keep the rooster. We should be pleased if some of our poultrymen would test this matter and give us the results for publication.

NOTES AND IDEAS.

Recently the Ontario Fruit Growers' Association urged upon the Dominion Minister of Agriculture that the Government should prohibit the importation of foreign fruits into Canada, because of the danger from bringing in the San Jose scale. The Winnipeg Board of Trade took the matter up and has received word from Mr. Fisher that the prohibition of the importation of foreign fruits is practically impossible. Such a prohibition would be manifestly unfair to the people of Manitoba, who depend largely upon California for fresh fruit. No pears, plums or peaches are grown in Manitoba and the North-west, and nearly every attempt to bring fruit from British Columbia or Ontario has resulted in loss, therefore the prohibition of foreign fruit coming into the country would almost deprive Manitoba of these luxuries.

In answer to a question from Mr. Davin regarding the Northwest creameries, the Hon. Sydney Fisher told the members of Parliament at Ottawa, the other day, that there were some creameries being operated at a profit at the present time. A sample shipment of Northwest butter had been sent to China and Japan, and had been so successful that a cable had been received asking the Government to send as much more as they could of the same kind. Northwest butter had been successful in England also, so that there were two openings for the butter, besides the demand that is sure to come from the gold regions

A farmer on Long Island has gone into the growing of sunflower seeds and raises 100 bushels to the acre. These seeds are made into oil which sells for \$1.25 per gallon, and it takes two and one-half bushels to make one gallon of the oil.

CANADA'S FARMERS.

Alex. Hume, Burnbrae, Ont.

The firm of Alex. Hume & Co. is well known to breeders of fine dairy stock. For years some of the finest types of Ayrshires have been produced at Burnbrae.

The head of this firm is Alex. Hume, the subject of this week's sketch. Mr. Hume is a comparatively young man, and was born on the farm on which he now lives, less than forty years ago. His father, the late Thomas Hume, was a school teacher, and consequently saw the necessity of his children receiving a liberal education. Mr. Alex. Hume therefore received a good education at the common and high schools, though his ambitions in this regard were hindered somewhat by being compelled to take a special interest in the work of his father's farm than he otherwise would, owing to the delicate health of his father.

The Burnbrae herd of Ayrshires was founded twenty-four years ago by the late Thomas Hume. Eight years ago Mr. Alex. Hume became more intimately connected with the business, and the herd was largely increased from some of the best breeders in Canada. Owing to an inherent desire to be at the top, Mr. Hume imported a young cow and calf in 1893, from the well-known herd of Andrew Mitchell, Scotland. In 1891 he purchased a purebred Clydesdale mare in foal to MacNeillage. In 1890, Yorkshires were added to the list of purebred stock, and were the first to be brought into the township in which he resides.

Animals from the Burnbrae herd have been exhibited at Toronto and the leading fairs during the past three years, and have succeeded in capturing many of the best prizes. The special prize for the best dairy herd has been taken frequently at a number of the local fairs. Many high-priced animals have been sold, and are to be found at the head of some of the leading Ayrshire herds in Canada. Over fifty Ayrshires and thirty grade cows are kept at Burnbrae, besides over thirty purebred Yorkshires.

Mr. Hume has been honored in many ways by those who know him best. In his own locality he is a leader in local matters, a successful Sabbath school teacher, and takes a leading part in local educational affairs. He is a director of the Seymour Agricultural Society, and a director of the Dominion Ayrshire Breeders' Association.

MUSTARD AND OTHER WEEDS.

WHERE THEY COME FROM AND HOW TO GET RID OF THEM.

By T. C. WALLACE, St. John, N.B.

How often we hear it said that the garden is so rich that it is almost impossible to keep the weeds down. This richness is always obtained by the copious use of stable dung and such manures rich in humus. The same remark applies in farming as in gardening. Why do these weeds grow on these very rich soils? Are these soils not over rich in something? May they not also be wanting in something, and consequently may not a want of balance cause what we may term, from our standpoint, a weakness? I know a man who had one of these very rich spots. On my suggestion he treated it liberally with a pure phosphate of lime in a non acid form, and as a result the only weed he had to contend with was clover, but the produce was also much improved. The elements of soil fertility are nitrogen, potash and phosphates. The stable manure supplies considerable quantities of the first two and very little of the third, as the animals use it up in their bone. But there is another point which presents itself to our notice. The large amount of stable manure needed to give enough phosphate for the best production puts into the soil such an overwhelming supply of humus matter to decompose in the soil that an inordinate amount of carbonic acid is secreted with the result that the land is really sour. Also if the land contains much sulphur it is apt to be freed in the soil from which we are carrying away the lime in the crops. As a result of this acidity it is held by some that various weeds spring into life or develop, among them the mustard. Liberal applications of pure non-acid phosphate of lime have frequently effected a cure, the mustard disappearing in a couple of years and sometimes even sooner. Clover seems to take its place in many instances.

If the clover comes in this unaccountable way, why not the mustard? It is particularly noted that if left to flower the weeds upon such acidified soils produce yellow blossoms, and it is well known that yellow color follows green very closely, being its complementary color. Is the yellow also a sign of weakness is a query which suggests itself to us when we remember that the yellow weeds come either early in the spring before nature is thoroughly active, or in the autumn when she has partially exhausted her strength in production. Have you noticed that the corn turns yellow in a soil soured by lying in a wet state without proper drainage in a wet season? Healthy dung from a growing animal of any species which forms a considerable bone structure, is yellow, and it is the refuse of the food from which the animal has extracted the strength. In the autumn the leaves turn yellow when the ripened wood and fruits have extracted from them all the strength and bone earth assimilated in its structure. Most fruits are green while growing, and the strength of the plant is acting throughout the structure, but as the strength concentrates in the interior flesh and seeds, in fact, with ripening within comes yellowness and weakening without. The seeds of the yellow pumpkin and squash con-

tain the most of its strength. May not we have found an antidote for the yellow weed, and is it not possible, by proper attention to manuring, so as to properly balance the elements of plant growth in our soils, to control weed growth and confine it to a class more tractable than mustard and some of the more noxious ones.

MAPLE SYRUP.

This is the time of the year when "new maple sugar" or "new maple syrup" is displayed in the store windows to tempt the lovers of this good Canadian product. The sceptical customer is serenely told that "it comes from the Province of Quebec, you know," despite the fact that the trees have not been tapped in southern Ontario. If the customer has his suspicions set at rest and purchases a little sugar he is almost sure to repent it later, for he is invariably treated to a sugar composed of nine tenths common brown sugar and perhaps one-tenth maple, or it may be that only a maple flavoring has been added.

There is no reason, however, why any farmer having a hundred or so good maple trees can not have a nice lot of genuine sugar and syrup at a very small cost.

A few weeks ago we illustrated the old-fashioned way of boiling down maple sap, and it is a good plan yet where the quantity is small. A better plan, however, is to get a big flat pan made of galvanized iron. A convenient size is two and a half feet wide, five or six feet long, and six or eight inches deep. Build an arch either of brick or stone with a good high chimney. The sap in the front pan should never be put off the boil by having cold sap put into it. By having a pot or small pan built into the arch at the back of the boiling pan, the sap can be heated to the boiling point by heat that would otherwise pass up the chimney. The sap from the heating pan or kettle should be strained into the boiling pan, and should be boiled down as rapidly as possible after it has been gathered. Quick work makes the best colored syrup. Don't let syrup stand in the pans over night. Syrup off every night and strain the syrup through a loose woven piece of flannel.

It is a good plan to have a galvanized iron pan with four good handles made to fit the kitchen stove. This pan should be about ten inches deep and the syrup as it comes from the woods should be put into this pan and boiled down until an imperial gallon weighs thirteen pounds. While boiling the syrup should be cleansed by adding to it about a pint of sweet milk which will cause any dirt that may be in it to come to the surface when it should be skimmed off at once.

A good many makers prefer to let the syrup, as it comes from the woods, stand until cold before cleansing it. This allows the malate of lime to settle. The syrup is then drained off the top and cleansed.

Cleanliness all the way through is the secret of having good syrup. The buckets should be thoroughly cleaned out before the season begins. Tin ones with covers will give the brightest colored syrup, but where there are only a hundred trees or so, good

wooden buckets will answer well. Iron or tin spiles are to be preferred to the old wooden ones, and the bucket should be hung on the spile.

With this simple outfit any farmer can make a nice lot of syrup that will be a welcome addition to the table any time during the year. Such a simple outfit is all right for a small number of trees, where there are quite a few hundred trees it will pay well to get an improved evaporator, as the work is done quickly, an essential feature, and the quality is superior.

THE VALUE OF THE MAPLE TREE.

There is a business as well a sentimental reason why the maple tree should be honored by Canadians. According to the census of 1891 the annual production of maple sugar in Ontario amounted to 5,665,796 lbs., which, at average market prices, means almost half a million of money.

It is claimed that the sugar bush at the Michigan Agricultural College yields an annual return of twelve per cent. valuing the woodland at fifty dollars an acre. Many Canadian farmers could testify to the value of their maple bush as a very profitable portion of their farm. Besides supplying the fuel needed on the farm a fair maple bush can easily make ten dollars an acre in syrup or sugar per year. This too, at a season when time can be spared to attend to the work. Besides its usefulness in supplying a delicious food, the maple is much used in cabinet making and for interior decorations. People in other countries admire it and value it, if we do not.

Those who have a good bush should take good care of it. Encourage young maple trees to grow; if they don't spring up naturally plant them in vacant places in the woods and so renew the timber. There are odd corners on many farms that could be very profitably planted with maple trees.

HARNESS BRUISES.

Continuous pressure of the harness or collar upon a part not accustomed to it compresses the blood vessels so that the normal flow of blood is checked. The walls of the tiny blood vessels are bruised and partially paralyzed. Then as soon as the pressure is removed the blood rushes into the weakened vessels distending them. The serum of the blood flows through the weakened walls and accumulates under the skin, thus originating the soft, puffy swellings so often seen on the shoulders. If these swellings are not removed either by being absorbed into the blood again or by an incision they will become calloused and permanent.

Knowing how these swellings are caused we should be the more careful to see that the causes are removed. Always use the same collar on a horse, provided, of course, that it fits him properly. Frequent changes of collar will invariably cause sore places.

Most farm horses have not been very busy during the winter and their shoulders are more or less soft and should be gradually broken into hard work. With horses that are particularly soft stop frequently, lift the collars and rub the shoulders, this will help to restore the circulation. Keep the shoulders dry, if possible. If neces-

sary have a cloth handy to wipe them with if the horse sweats excessively. Remember how sweating softens your own hands.

When the harness is removed bathe the parts where the harness rests with cold water. This has a tendency to contract the muscles and thus prevent inflammation and the consequent swelling. Should a swelling appear it should be well bathed with cold water so long as there is any inflammation. It is a good plan to use ice in the water to make it cold. When work on the land begins watch the horses' necks especially when they are working on a tongue.

A little careful attention from now until seeding time will be well repaid. When you begin seeding don't go at it with a big rush the first day, let the horses take it easy for a day or two, they will more than make up the lost time to you before the seeding is through.

THE HOT BED.

It will not be long until it is time to start the hot bed. Every farmer should have one. If you haven't one, set to work and make one. Many farmers have old sash lying around that would make good glass for a hot bed. Sometimes old storm sash can be obtained cheaply and they answer well. Having selected your sash, make a frame to suit it. On page 102, measurements of a convenient sized hot bed are given. Anyone handy with tools can make a good frame.

Sometime before you are ready to use the hot bed, make up a pile of good stable manure (largely horse manure) large enough to cover the entire bottom of the intended hot bed 18 inches deep. Let it heat a few days then turn it over and let it heat another week. Now make up a bed of this manure 18 inches deep and a foot larger all round than the size of your frame; water, and tramp it down solid. Place the frame upon it and bank up around the manure and frame with more manure. On top of the manure in the frame put in five inches of fine garden mould, no matter if it is frozen 't will soon thaw out. If you can't get that, go to the woods and get some nice leaf mould. Put on the glass and allow the hot bed to work off its excessive heat. Place a thermometer in the soil and when the temperature remains constant at 80° the ground can be got ready for sowing and the seed put in. If the temperature is too high wait until it cools down or the plants will be burned out. Sow radishes and lettuce for the first crop; cabbage, cauliflower, tomatoes, etc., can come on for a second crop.

As soon as the sun's heat begins to warm up the bed and the temperature rises, it may be necessary to open the sash a little to regulate it. But this can soon be learned and a great deal of pleasure and profit will be obtained from the hot bed.

COVERING FOR WOUNDS OF TREES.

It often happens that, either by intention, as in pruning, or by accident, trees are wounded in various ways. A common practice is to cover large wounds with coal tar; but this is objected to by some as injurious to the tree. Experiments made in the or-

chards and gardens of the Pomological Institute, at Ruthlegen, in Germany, go to show, however, that its true use is not injurious; but that, on the contrary, a callous readily forms under the tar, on the edges of the wound, and that the wounded part is thus protected from decay. There is, nevertheless, another objection, for if the tar is applied a little too thick, the sun melts it, and it runs down on the bark of the tree. This can be obviated by mixing and stirring and thus incorporating with the tar about three or four times its weight of powdered slate, known as slate flour—the mixture being also known as plastic slate and used for roofing purposes. It is easily applied with an old knife or flat stick, and though it hardens on the surface, it remains soft and elastic underneath. The heat of the sun does not melt it, nor does the coldest winter weather cause it to crack—neither does it peel off.

The same mixture is also useful for other purposes in the garden. Leaky water-pots, barrels, pails, gutters, sashes, etc., can be easily repaired with it, and much annoyance and loss of time thus avoided. It will stick to any surface, provided it be not oily; and as it does not harden when kept in a mass, it is always ready for use. A gallon will last for a long time.

A most excellent preparation for small wounds and for grafting, is thus prepared: Melt a pound of resin over a slow fire. When melted, take it from the fire and add two ounces balsam of fir, or two ounces of Venice turpentine (not spirits of turpentine), stirring it constantly. As soon as it is cool enough, mix in four to six ounces of alcohol of 95 degrees strength—according to the season—until it is as thick as molasses. It keeps well in close-corked bottles for a long time. Should it become too thick, by the gradual evaporation of the alcohol, it is easily thinned by putting the bottle in warm water and stirring in sufficient alcohol to bring it to a proper fluidity. It is applied with a brush.

This preparation is much better than liquid grafting wax composed of resin, beef-tallow, and spirits of turpentine which often granulates—*Rural World*.

DON'T SUIT THE ENGLISHMEN.

Advocates of the American trotters are doing their best to bring them to the front as carriage and park horses, and fancy high-stepping drivers. High action is obtained by training and by weighting the shoes. In this way some wonderful performers have been developed for the show ring. These horses, however, are seldom as good performers with the hind as with the

fore-end. They are also lacking in substance and ability to draw with ease a loaded dog-cart over ordinary roads as the English horses are expected to do. They are also apt to possess the cat-like ham of the trotter instead of the full-muscled, rounded form of the hackney type. At some of the leading horse shows animals of this description were placed ahead of true acting horses of a hackney stamp, much to the delight of the lovers of the American horse.

This was at the horse shows which are a society affair. On the business market this class of horses have soon found their level. Quite recently some twenty-two American horses were sold at Tattersall's, London, England, and brought a little under \$200 apiece on an average. These horses were described as being prize winners at the New York and Chicago horse shows. Speaking of the sale, *The St. James' Gazette* says: "The experiment is not likely to be repeated. The horses were not of the proper stamp. A New York prize does not carry an equal recommendation with the English. Here the shows are strictly business. At Madison Square Garden they are a mere society function."

EASTERN CHEESE AND BUTTER MAKERS MEET.

A convention of the makers and dairymen of Eastern Ontario was held at the Dairy School, Kingston, on March 9th last. There was a large attendance of makers from the various cheese centres of the east. The meeting was held under the auspices of the Eastern Butter and Cheese Association, the president, Mr. D. Derbyshire, presiding at both sessions.

The chairman in his address referred to the good work being done by the Kingston Dairy School, and also the one at Guelph. The cause of much of the poor cheese to-day was poor makers, and the effect of such schools was to improve the makers and to make them better able to produce a finer quality of cheese.

The Kingston Dairy School has a good friend in Principal Grant, of Queen's University. In his address of welcome he referred to the progress which the school had made. There were more students this year than last, and 20 per cent. of them old students. In every line of work there must be a going forward. If we do not go forward we go backward. Eternal vigilance must be exerted so as to bring the quality up to the highest point. He pointed out that the Governments were not liberal enough in their appropriations for institutions existing for the benefit of the agricultural classes.

Prof. H. H. Dean, of the Ontario Agricultural College, Guelph, dwelt upon the value of co-operation as applied to every phase of the cheese industry. The makers cannot combine to raise the price of making without considering the other factors in the concern. One of the difficulties in our present system of dairying was to get all the factors in the concern interested. At dairy meetings, etc., it was usually the man who did not need to be enlightened so very much who attended. The man who needed education most was always conspicuous by his absence. The average

food cost of a pound of cheese for 1896 and 1897, as shown by experiments made, was about four cents. If the cheese only sold at from six to seven cents there was not much money in the business for the producer. The average food cost of a pound of butter from April to October for the same period, was about thirteen cents. At this figure there was not much money in the business for the man who made dairy butter. To get the patron to co-operate it must be shown that he can make a profit out of the business. Some of the difficulties of the present system were the disinterestedness of the patrons; poor buildings and plants; unfair sharing of losses; speculation and selfishness. If there were more co-operation these difficulties would be overcome. Our co-operative system should be so extended that everyone connected with the concern should share in the profits after a fair interest had been allowed on capital invested.

At the afternoon session Prof. Dean discussed the points of a good cheese and butter maker, which were given as being good looking and having sunny ways, good constitution and a good worker, neat and clean, and should have brains and knowledge of how the different processes in cheese and buttermaking are brought about.

Mr. James Alexander, cheese exporter, Montreal, expressed himself as being in doubt as to whether Prof. Dean's scheme of co-operation was feasible or not. Would not advise sending cheese to England on commission as the goods would be sacrificed. We are making as much cheese now as England will take, but there is a large field for butter, and if we send forward the right kind of stuff, put up in proper shape, there should be no great difficulty about extending our export butter trade. Mr. Alexander pointed out that the curse of the dairy business was dirt. This was something that could be easily removed.

Mr. G. G. Publow, instructor in cheese-making at the Kingston school, pointed out various reasons why inspection in the factories was necessary. It was necessary in order to locate the causes of inferior cheese and because over-production made the consumer more particular. The inspector should not devote himself to inspecting milk, but to the work of instruction. About sixty per cent. of the rejected cheese in his district was due to bad flavor. If it were due to other causes, such as bad water, incapacity, etc., the maker was largely to blame. Cheese were usually shipped too green to allow flavors in the cheese to develop.

Mr. J. A. Ruddick, superintendent Kingston Dairy School, stated that he believed that fully seventy-five per cent. of the water used at the cheese factories in Eastern Ontario was bad and was due to slops getting into the wells. In such cases the maker was not to blame and should not be held responsible. Factorymen need enlightening in regard to the water problem. Mr. Ruddick also read a paper on the theory and practice of butter-making. We will publish this later on in full as also a paper on the composite milk test by

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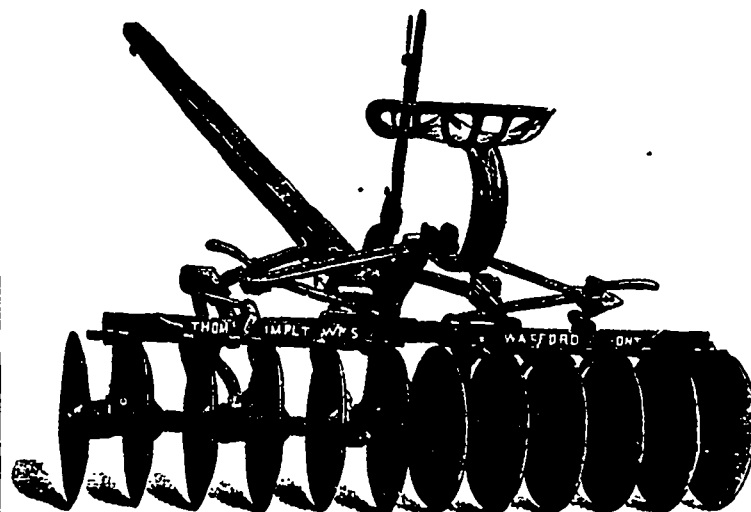
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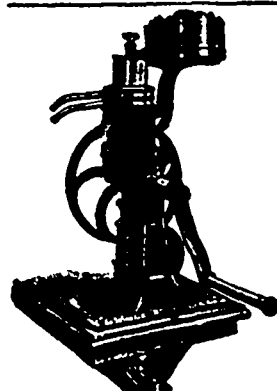
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Mr. L. A. Zufelt, instructor in butter-making at the Kingston school.

An interesting discussion was taken part in by the instructors of the Eastern Association on points in practical making of value to the makers. In the opening of the Question box, which followed, it was shown that very over-ripe milk will not make an heavy-bodied cheese; that the "flying of the color," or mottled cheese, was due to various causes; that too much moisture in a cheese develops an off flavor; that it is better to wash curd after milking than before; that a greasy curd should be cooked higher and washed before salting, and that too high salting injures the flavor by absorbing too much moisture.

Dr. Connell, of Queen's University, gave a very interesting address on how milk is tainted. There are taints caused from bacteria getting into the milk, and from bad-flavored foods. The former are the most difficult to overcome, and their chief sources are particles of dust, manure, hairs, etc., getting into the milk; decayed animal or vegetable matter near the milking yard or place where the milk is kept; and improperly cleaned cans, especially those in which the old sour whey has been returned to the patrons.

Short addresses were given by Mr. D. J. Borbeau, superintendent of the St. Hyacinthe Dairy School, Que., Mr. Wm. Eager, and others. The Kingston Dairy School has recently been enlarged and improved, and is now one of the best schools of its kind in the Dominion. That the work carried on there is highly appreciated by the makers was shown at the meeting when an address expressing the highest appreciation of the work carried on by Mr. Ruddick and his able staff of assistants was presented by the students of the term recently ended. It is proposed to extend the experimental work to be carried on next season.

FEEDS AND FEEDING.

Many a farmer has wished for a good reliable work on feeding farm stock. One which would give the value of the many different kinds of feeding stuffs and the best methods of feeding and caring for all kinds of stock in all kinds of conditions. We are pleased to say that this long felt want has been at last supplied. Professor W. A. Henry, director of the Wisconsin Experiment Station, Madison, Wisconsin, has just published a work, "Feeds and Feeding," which we think every farmer will hail with delight.

In the first part of the book he explains in simple language, which any one can understand, how the plant grows and elaborates the materials that are to serve as food for animals; how this food is digested by the animals, absorbed into the system and converted into heat, work, beef and milk; and how the different kinds of food influence this production.

In the second part of his book nine chapters are devoted to a consideration of the different feeding stuffs, their composition, their feeding and their manurial values. These chapters contain a lot of valuable information for every feeder of live stock.

The best, however, is left until the last. The third part, consisting of nineteen chapters, 350 pages, is devoted to practical feeding. This portion of the work is a mine of information both to the beginner and to the experienced stockman. Professor Henry gives the fullest and best plans and suggestions for feeding which we have seen in print. These plans have been gathered from the practice of the most successful feeders throughout the country.

It is a work that should be in every farmer's home. "The stockman who, in addition to experience, possesses some knowledge of the composition of the nutrients of feeding stuffs, and has considered how the animal grows and is nourished by them, is certainly thereby better equipped for wisely and economically administering feed to the animals under his care. And in the deeper insight and wider range of vision which these studies insure, there comes keener enjoyment and a greater satisfaction to the possessor in his daily round of duties." The price of "Feeds and Feeding" is \$2 through FARMING.

Now is a good time to prune apple trees. Some claim the best time is when the leaves are coming out, as then the wounds heal most readily, but that is always a busy time. Do it now. Also prune the raspberries and currant bushes now on fine days.

Publishers' Desk.

Trotting and Pacing Stakes.—The Industrial Exhibition Association of Toronto offer \$3,000 in stakes for trotting and pacing at their next exhibition to be held in Toronto, commencing on the 30th of August next. The purses will be \$500 for each class for two and three-year-old trotters and pacers 3-minutes class (trotters and 2.50-class pacers. All entries must be made to H. J. Hill, the secretary of the exhibition, at Toronto, on or before the 30th day of March, from whom forms of entry, conditions, etc., can be obtained.

Stock Notes

J. J. TANNABILL & SON, TROUT RIVER, QUE.—I have recently visited the Holstein herd of A. Hoover, Jr., Enery, Ont., and purchased and brought home with me the cow Edgley May, and the two year-old heifer Baroness Mercedes. The heifer is now in milk, and due to calve again about August. The dam of this heifer is Emery Beauty, Mr. Hoover's famous milk test cow. We also purchased some time ago, from J. R. Bell of Kelson, Que., the cow Indulge 7th, of Sunnyside. We think these cows, when bred to the bull Advance, No. 1022, which we purchased from A. C. Hallman a year and a half ago, should produce some fine stock.

GEO. LATSCH, FERRISPORT, ONT.—My Jersey cows are milking splendidly this winter, and doing better still at the churn, turning out a lot of gilt edged butter twice a week (such as only Jersey cows can produce) I sold, recently, one of my stock bulls to Gavin Goodall, Galt, a bull calf to Amos Hallman, Baden, another to Conrad Ludolph, New Dundee; and a fine cow to Henry Beatty, German Mills.

Mr. Hunter's Sale.

The attendance at Mr. Hunter's sale of purebred stock was very large, and buyers were present from all parts of the province. A number of buyers from the Northwest and from across the lines were also present.

The stock were brought out in excellent shape. The prices realized were good, being a marked advance on those obtaining for some time past. In all probability they would have averaged a little higher had there been a number of young calves running beside their dams, showing that the herd was in good breeding condition.

The *Clydesdales* brought the following figures: Master Lyndoch, \$650; King of Sunnyside, \$420; Nelly, \$115; Queen of Sunnyside, \$200; Gladys, \$118; Polly, \$176.

The young *Berkshire* sows brought from \$13 to \$16 each, and the old sow \$20.

The *Shorthorn* ewes brought about \$16, and the lambs \$13 a piece.

The following are the names of the Shorthorn cattle date of birth, and price:

Jessie (Nov. '92), \$120; Sweet Lady (Jan. '93), \$106; Valley Rosebud 2nd (Jan. '90), \$40; Red Rose (May '97), \$70; Gaiety 5th (Feb. '92), \$120; Lady Aberdeen (Jan. '90), \$105; Warbaby Lass (Feb. '96), \$120; Lady Sarah 4th (Dec. '92), \$70; Lady Hopewell (Jan. '95), \$115; Red Polly (Apr. '90), \$95; Marguerite (May '95), \$100; Gaiety 4th (Jan. '92), \$115; Roan Blossom (June '95), \$85; Lorna Doone (Feb. '94), \$90; Bride Elect (July '97), \$70; Queen of Lorne 4th (Dec. '88), \$65; Maggie Lander (Dec. '91), \$80; Miss Canada (Feb. '97), \$110; Miss Dixie (Oct. '92), \$175; Bridesmaid (Mar. '97), \$85; Lady Blythe (Mar. '96), \$120; Mantalin Bud (May '89), \$90; Red Lily (June '88), \$80; Blooming Bride (May '97), \$65; Gaiety 3rd (Nov. '85), \$65; Sunnyside Lass (Nov. '95), \$90; Strawberry (Jan. '97), \$80; Roseberry (May '90), \$75; Bridal Rose (May '97), \$90; Rose of Pilkington (June '89), \$80; Farewell 5th (Feb. '89), \$105; Lord President (May '97), \$150; Prince Arthur (Feb. '96), \$111; Red Knight (April '96), \$78; Royal Stewart (Dec. '96), \$117; The Candidate (Apr. '97), \$110; Prince of Sunnyside (Dec. '96), \$96; Bridegroom (Dec. '91), \$120.



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COLLECTION C.

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

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

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COLLECTION D.

20 Packets Vegetables. Price, \$1.

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| 1 " Parsnip | 2 " Cabbage |
| 2 lb. " Cucumber | 1 " Lettuce |
| 1 " Musk Melon | 1 " Watermelon |
| 1 " Citron | 1 " Onion |
| 1 " Radish | 1 " Squash |
| 1 " Tomato | 1 " Vine Peach |
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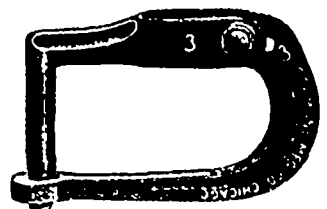
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The Ontario Agricultural Gazette

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

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

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BENEFITS OF MEMBERSHIP.

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

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

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

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

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

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

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

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Simmons, C. M.....Ivan..... 4 young bulls; 6 heifers.
Smith, H. & W.....Hay..... 3 young bulls; 6 young cows and heifers.
Smith, J. S.....Maple Lodge..... Bull, 2 years.
Stone, F. W. Estate.....Guelph.....

Ayrshires.

Brooks, T. & Sons.....Brantford..... 4 heifers, 6 to 18 months; 2 bull calves, 4 weeks to 4 months.
Caldwell Bros.....Orchard..... 4 bulls, 7 to 10 months.
Clark, J. G.....Ottawa..... 2 bull calves.
Guy, F. T.....Bowmanville..... Bull, 9 months; bull, 2 years; young calves both sexes.
Reid, R. & Co.....Hintonburg..... 2 bulls, 1 and 2 years; 5 bull calves.
Smith, W. M. & J. C.....Fairfield Plains..... 2 bulls, 1 and 3 years; 2 bull calves.
Vuill, J. & Sons.....Carleton Place..... Stock all ages.

Polled Angus.

Bowman, James.....Guelph..... Females, all ages.
Hall, W.....Washington..... 2 heifers, 1 and 2 years.
Murrison, J.....West Lorne..... Cow; bull calf.
Sharp, James.....Rockside..... 2 bulls, 1 year old.
Varcoe, J.....Carlow..... 4 bulls, 11 to 13 months; 10 females, all ages.

Holsteins.

Atrill, Mrs. H.....Saltford..... Bull, 3 years; 2 yearling heifers; heifer calves.
Hallman, A. C.....New Dundee..... 3 bulls, 9, 11 and 18 months; heifer, 2 years; 2 calves, 1 month.
Hoover, A., jr.....Emery..... Bull, 7 months; heifer, 7 months; heifer, 2 years.

Herefords.

Smith, H. D.....Compton, Que..... Calves.
Stone, F. W. Estate.....Guelph..... Bull calf, 8 months; 2 bulls, 2 and 3 years.

Jerseys.

Bull, B. H. & Son.....Brampton, Ont..... 4 cows; 8 heifers and heifer calves; 9 young bulls.
Caldwell Bros.....Orchard..... Bull, 10 months.
Latsch, C.....Freepoint..... 2 bull calves, 3 and 4 months.
O'Brien, J.....London West..... 3 bulls.

Guernseys.

Caldwell Bros.....Orchard..... Bull, 11 months.

THE DOMINION SHEEP BREEDERS' ASSOCIATION.

Southdowns.

Jackson, J. & Sons.....Abingdon..... Set of Show Sheep.
Shopland, J. S.....Maywood, B.C..... 2 rams, 1 and 2 years; 2 lambs; ewes.
Smith, W. M. & J. C.....Fairfield Plains..... Ram.

Shropshires.

Campbell, J.....Woodville..... 4 rams; 10 ewe lambs; ram lambs.
Ganton, D. G.....Elmvale..... 2 rams; 5 shearling ewes; aged ewe and young ewe.
Hamner Bros.....Mt. Vernon, Ont..... 20 ram lambs; 19 ewe lambs; a few ewes.
Miller, R.....Brougham..... 100 yearling rams; 60 yearling ewes.
Vuill, J. & Sons.....Carleton Place..... Stock, all ages, both sexes.

Dorset Horns.

Bowman, J.....Guelph..... 2 ram lambs.
Harding, R. H.....Thorndale..... Stock all ages.

Oxfords.

Birdsall, F. & Son.....Birdsall..... Imported ram.

Merinos.

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

Leicesters.

Smith, J. S.....Maple Lodge..... 4 ram lambs; 6 ewe lambs.

Cotswolds.

Bonnycastle, F. & Son.....Campbellford..... Yearling ram; ewes and ewe lambs.
Thompson, J.....Uxbridge..... 3 yearling rams.

THE DOMINION SWINE BREEDERS' ASSOCIATION.

Berkshires.

Hailey, H. C.....Cookshire, Que..... Boar, 6 months; boar, 3 years; sow, 4 months; sow, 2 years; 7 pigs; 4 weeks, both sexes.
11 head, boars and sows, 4 months.
Stock, all ages.
100 head under 4 months; 2 aged boars.
Pigs, 3 and 4 months.
25 young pigs.
Young stock, both sexes.
Sow, 2 years; 2 sows, 2 months; boar, 2 months.
3 boars, 2 to 5 months; 4 sows, 2 to 5 months.
43 head, all ages.
4 sows, 3 months.
Boar, 2 years, active as a kitten.
Boar, 18 months.
A few pigs.
6 sows and 4 hogs, 6 months, young pigs.
Boar, 10 months; boar, 6 months; 2 sows, 6 months young pigs.
Pigs, 2 months.
3 sows.
3 boars, 9, 12, and 14 months; 2 sows, 9 months; 3 sows, 4 to 5 months; young pigs.
2 boars and 2 sows, 5 months; 1 boar and 3 sows, 4 months.
Boar, 10 months.
9 young boars; 10 young sows.
4 sows, 5 months; 2 sows and 3 boars, 4 months; 4 sows and 4 boars, 6 weeks; young stock.
Boar, 3 years, boar, 1 year; boar, 7 months; 2 sows, 7 months.
1 boar, 2½ years; 1 boar and 1 sow, 6 months; 8 young pigs.

Tamworths.

Blain, N. M.....St. George..... 2 boars; boars and sows, 3 months and under.
Young pigs, both sexes.
7 boars, 6 months; 16 sows, 5, 7, and 9 months; 40 head, 4 to 6 weeks.
12 young pigs.
Sow, 11 months; 3 boars, 3 months; 2 sows, 3 months.
11 boars, 3, 4, and 7 months; 3 sows; young pigs.
Stock all ages.
3 boars, 3 months; 4 sows, 3 months; 25 spring pigs, both sexes.
Boar, 18 months.
5 boars, 5 months; 3 boars, 4 months; 6 pigs, 6 weeks; 12 sows, 4 months.
Boars, 4 months; young pigs.
7 sows, 5 months; boar, 5 months; 2 sows, 3 months.
Boars and sows, 5 months.
Young stock, both sexes, 6 to 10 weeks.
Spring pigs.

Yorkshires.

Bowman, W. R.....Mt. Forest..... Stock all ages.
Burgess, Mrs. R. L. & Son.....Burgessville..... Pigs, 3 and 4 months.
Clark, J. G.....Ottawa..... Spring pigs, both sexes.
Collyer, F. J.....Wellwin, Assa..... Boar, 2 years; sow, 2 years; 6 sows, 4 months.
Davis, C. G.....Freeman..... 6 sows, 4 months; boar.
Davis, H. J.....Woodstock..... 5 boars, 3 to 5 months; 5 sows, 3 to 5 months; 10 boars and sows, 6 weeks.
Pigs, 2 months, both sexes.
Boar, 17 months; a few young pigs.
Sows, 7 to 8 months.
4 boars and 6 sows, 6 months; 2 boars and 3 sows, 8 months.
3 boars; 7 sows.
Sow, 6 weeks.
7 sows and 3 boars, 5 weeks.
4 pigs, 4 months; 3 boars; 1 sow.

Poland-Chinas.

Bennett, J.....South Buxton..... Imported boar.
Herron, H.....Avon..... 2 boars, 6 and 9 months; 2 sows, under 1 year; 4 sows, 6 months.
McKay, J. F.....Parkhill..... 2 boars, 18 months and 3 years; aged sow; stock both sexes, 6 months.
Sows, all ages.
2 aged boars; 1 aged sow, 1 sow, 1 year; pigs, both sexes, 2 months.
Aged boar; aged sow; boar, 2 months; 2 sows, 4 months.
Boar, 2 years; sow, 2 years; 2 sows, 3 months; young pigs.

Chester Whites.

Bennett, G. & Pardo.....Charing Cross..... 4 sows; 2 boars, 8 months; young stock, 2 to 5 months, both sexes.
Boars and sows, 10 weeks to 5 months.
Boar, 22 months.
Young stock, both sexes.
Boar and 4 sows, 8 months; 23 pigs, 2 to 4 months, both sexes.
Stock all ages.
Boar, 2 years; sow, 3 years; 10 pigs, under 1 month.
Boar, 8 months; 3 boars, 5 months; 5 sows, 5 months.

Duroc-Jerseys.

Berdan & McNeil.....Strathburn..... Stock, all ages; sows, 4 months.
Fraser, I. O.....Fellows..... Stock, all ages, both sexes.
Smith, W. M. & J. C.....Fairfield Plains..... Boar, 6 months; 2 sows, 6 months.

ANOTHER CAR FOR THE WEST.

Another load of live stock will leave for the West about the 20th. Parties wishing to send stock to Manitoba and the Northwest should correspond immediately with F. W. Hodson, Parliament Buildings, Toronto.

The grape is probably more easily grown than almost anything else in horticulture, but it requires care and

skill in the management if a return in the form of heavy fruitage is expected.

A few standard varieties of apples, well grown and prepared for market, will make a farm's reputation, while, if there be a score of kinds, there will not be enough of any one to establish a name. It is wise even for the farmers of a certain region to make a reputation for a few standard things, suited to climate and locality, and their fame will come.

MARKET REVIEW AND FORECAST.

Office of FARMING,

44 and 46 Richmond street W., Toronto,
March 14th, 1898.

General trade is usually quiet the week after the millinery openings, but this year it has been active, with a good demand. Preparations are being made in all lines for an extensive trade. The grain markets have been fairly steady, and prices have not changed much. The violent fluctuations of the stock markets on account of war scares have occupied the attention of speculators, and the grain markets have been more or less neglected.

Wheat.

Chicago continues to be the centre to which all eyes are turned. There the market continues about five cents higher than other markets on the seaboard, with the result that wheat is moving west to it instead of going to the seaboard. The continued high price of wheat is causing an increased consumption of substitute products. Stocks of wheat in Europe are not large, and the millers are living on a hand to mouth principle, but the quantity of wheat on the ocean will more than meet all immediate demands, and every day brings them nearer the next year's crop. Threshing is progressing rapidly in Argentina, a large crop is looked for, and since January nearly seven million bushels of wheat have been shipped to European markets. India wheat will soon begin to move, too, so that buyers in Europe are inclined to buy just as little as possible of Leiter's high-priced wheat. The winter wheat all over the United States is looking well, according to reports. The seeding of oats has progressed as far northward as the northern parts of Kansas. In the south of England the mild weather has caused such a rapid growth of wheat that in many cases sheep have been turned on the wheat fields to keep down the growth.

The longer the remaining wheat still in the country is withheld from the market channels the more likely it will be to affect values when it comes on the market, probably with a rush, later on.

The market for wheat at Toronto is dull, and somewhat easier than it was last week. The offerings are large at about 54c. for red winter wheat west. Manitoba wheat, however, continues to hold its own, and is steady at \$1.19 1/2 at North Bay for No. 1 hard, and \$1.06 1/2 at Sarnia. The cut in freight rates to the seaboard has raised the price of wheat in Manitoba and has had the opposite effect in the east.

Barley and Oats.

There has been no change in the barley market, 42c. for No. 2; 38c. to 39c. for No. 3 extra, and feed at 35c. to 36c. outside. At Montreal feed barley is quoted at 40c. to 42c., and malting grades at 48c. to 53c.

Oats are quiet at about 30c. to 31c. north and west. The receipts at Montreal have been quite large, but there seems to be some difference of opinion between buyers and sellers. About 20,000 bushels were offered at 34c but refused. Several lots out of store have been sold at 34c.

Peas and Corn.

The market for peas continues steady at 56c. to 57c. for cars north and west, and 58c. east.

Corn is steady at 31c. for Canada yellow west. American corn is worth 37c. at Toronto.

Buckwheat and Rye.

Buckwheat continues steady at 26c. west. Montreal prices are the same as those given last week.

There has been no change in the market for rye; it is steady at 51c. to 52c. for cars north and west. At Montreal it is worth from 61 1/2c. to 62 1/2c.

Bran and Shorts.

Bran is scarce and in good demand. \$12.50 per ton in car lots west seems to be the ruling price. \$14.50 per ton for car lots west is asked for shorts.

At Montreal Ontario bran is quoted at \$14 to \$14.50 per ton in bulk, and shorts at \$16. Manitoba bran is quoted at \$15, and shorts at \$17.

Timothy and Clover Seed.

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

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

Potatoes.

Potatoes are quiet. Cars on the track are quoted at 58c. to 60c. It is reported that lately a car sold for 59c. Out of store they sell at from 65c. to 70c.

Poultry.

The offerings are somewhat small, especially of fresh stock. There is a fair demand and the market rules fairly steady at from 12c. to 12 1/2c. for turkeys, and from 50c. to 65c. for chickens.

Eggs.

The mild weather has presented more favorable conditions for the production of eggs. Consequently the receipts of new laid eggs have been very much larger and prices have steadily fallen. They have dropped during the week to 12 1/2c. to 13c. per dozen in case lots for new laid eggs. Somewhat higher prices are obtainable on Toronto market and for guaranteed fresh stock. Prices have receded at Montreal in proportion to the drop at Toronto.

Cattle.

On account of somewhat light offerings prices were a little stiffer at the cattle market on Tuesday, but on Friday the receipts were considerably heavier and there was a somewhat weaker feeling in most lines.

Export cattle go slow, good steers bring up to 43c. On Tuesday's market one lot of extra stuff brought \$4.30 per cwt. Poorer stuff run down to 31c. Bulls bring 34c. to 37c. At Montreal good export steers bring from 4c. to 4 1/2c.

Butchers' cattle are coming forward in large numbers. Good to choice cattle bring from 33c. to 37c. per lb. Animals of poorer quality only bring 3c., and poor cattle bring less than this. On Friday quite a number of poor animals were not sold.

Stockers and feeders. On Friday's market about half the stock was of this description. Trade was brisk, there being a good demand from Buffalo at prices that made this class of stock really more profitable than export stuff. Light stockers bring from 2 1/2c. to 3 1/2c. per lb. Feeders bring from \$3.20 to \$3.60 per cwt. Heavy feeders bring up to \$3.90 per cwt.

Choice veals are in good demand but poor ones are not wanted. Milch cows and springers bring from \$22 to \$47.

Sheep.

Sheep and lambs continue to bring good prices. Butchers' sheep bring from 3c. to 3 1/2c. Bucks bring from 2 1/2c. to 3 1/2c. per pound. Lambs bring from 5c. to 5 1/2c., old choice ones running up a little higher.

Hogs.

The offerings of hogs are very large. They are not of the right character, however. While of about the right weight, they are too fat. The pigs have been forced along too fast on fattening foods rather than on more growing ones. The result is a cut in prices, choice bacon hogs being sold at 5c. to 5 1/2c., but it is difficult to get the latter figure. Light hogs bring 4 1/2c., thick fat hogs 3 1/2c. Prices for next week are expected to be lower, on a basis of about \$4.90 for choice selections.

Dressed Hogs.

Receipts are not large, the demand is slow, and the market weak and lower at from about \$5.90 to \$6.15 per cwt. At Montreal prices also are weaker.

Cheese.

There does not appear to be very much change in the cheese situation though there is a little more activity on this side. If there is any change it is not in favor of the producer. A month or two ago it was expected that with the greatly increased consumptive demand the large stocks of cheese on hand would have largely disappeared before the new goods came in. Just now the situation is not so hopeful, and large quantities of stock continue to loom up from almost unexpected sources. However, there is a couple of months yet before the new season really sets in, and the situation may greatly improve before that time, and if the factorymen agree not to open the factories till well on in May prices may be better for next season's goods than the condition of the market at present would warrant. Sales have been made during the week at from 7 1/2c. to 8 cents.

Butter.

The creamery butter situation has greatly improved during the past ten days. There seems to be a scarcity of fine fresh creamery butter, which together with the increased export demand have strengthened the market considerably. Prices in Montreal during the week ranged from 19 1/2c. to 20 cents for fine

fresh creamery, and stored stuff brought as high as 19 cents. The demand for creamery butter for the local trade has also improved, and there has been considerable rivalry of late to secure supplies for the export and local trades. The butter situation is, therefore, bright and the prospect good. This condition of affairs should induce the dairymen to make butter in the factories till about the middle of May and thereby relieve the cheese situation. At Toronto the receipts of dairy butter continue to be moderate. There is a good demand and prices are firm at 16 1/2c. to 17 1/2c. for large rolls, 18c. for choice dairy tubs, and 15 cents for medium tubs. At Montreal the prices for dairy are about one cent per lb. lower than at Toronto.

During bright days give all the whiffle-trees a good coat of paint. The plows, the roller, and other implements will last longer and look better if they, too, had a coat of paint.

If the grain was very smutty last season, make preparations to treat it with bluestone, or try the hot water treatment. There is no money in growing smut.

Fruit.

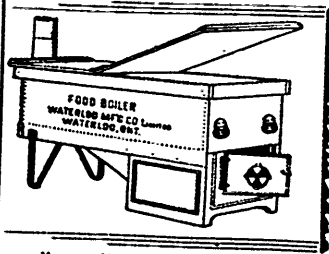
Trees and Vines become hardier, and their products better colored and better flavored when liberally treated with fertilizers containing at least 10% actual

Potash.

FREE An illustrated book which tells what Potash is, and how it should be used, is sent free to all applicants. Send your address.

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93 Nassau St., New York.

The Waterloo Food Boiler

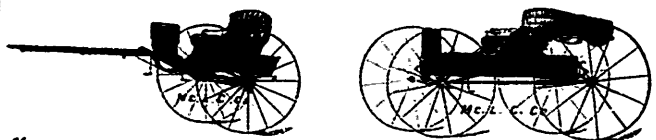


Used chiefly by Farmers, Stock Feeders, and Butchers for Cooking Feed for Stock and Poultry, for Boiling Sap, Scalding Hogs, etc., etc.

You save fifty per cent. of the feed, and produce double the growth and fat, when feeding boiled feed than when fed dry and raw. The Waterloo Food Boiler is the simplest, cheapest, most convenient, and most economical boiler in the market. Every farmer should have one.

Price \$25, Delivered at Your Station.

WATERLOO MANUFACTURING CO. LIMITED
Waterloo, - Ontario.

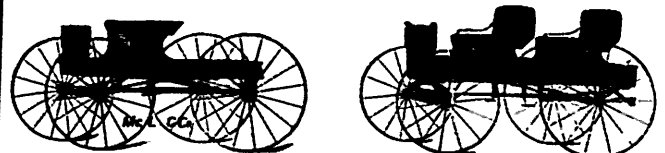


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THEY'RE PERFECTLY NOISELESS
THEY WEAR LIKE IRON
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THE MCLAUGHLIN CARRIAGE CO.
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..New Metal Roofing.. -- The Leading Wagon in Canada--



Patent Safe Lock Shingle.

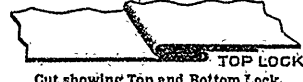
Our Patent Safe Lock Shingles are so constructed that they lock or fasten on all four sides, making perfect joints, absolutely proof against the weather.

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 Limited

PRESTON, ONTARIO



TOP LOCK

Cut showing Top and Bottom Lock.



SIDE LOCK

Cut showing Side Lock.

WANTED

A DAIRYMAN to take charge of the Dairy department; one who can handle a steam separator and make gilt edged butter.

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

A VEGETABLE GARDENER A thoroughly competent man; none but clean, tidy and trustworthy men need apply. References as to character and ability most accompany applications.

THE BOW PARK CO., LIMITED
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Italian and Hybrids—Best Queens Wax
All Bee Supplies—Best Quality. Wanted
Wood Patent Process. Cash or Trade
BEES Gold, Knapler & Sons Co.
Limited, Brantford, Can.

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NON-POISONOUS
CHEAPEST and Most Effective Sheep Dip, Cattle Wash and Preventive for Hog Cholera. Universally used for the destruction of Ticks, Fleas, Mange, and all insects upon Sheep, Horses, Cattle, Pigs, Dogs, Chickens, etc. Price: \$1.50 per gallon; 5 gallons \$6.50. One gallon makes 75 gallons for dipping Sheep. Agents Wanted in all Counties.
THE WEST CHEMICAL CO.,
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Walter Hall,
Washington, Ont.
Breeder of Filled Angus Cattle of the choicest strain. Choice Stock from my prize-winning herd of 1896 and 1897 for sale.
WALTER HALL, Washington, Ont.

FARMING 52 numbers for \$1
Less than 3 cts. a number

You get The Best Thoughts Of Clever Men

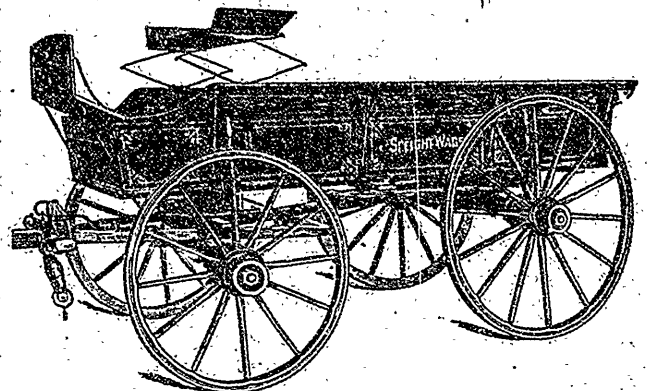
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LIGHTNESS in weight compared to any other gear of equal strength, and we have a reputation for excellence of workmanship, DURABILITY, and material not equalled in the Dominion in our line, and it is our aim that the excellence of our productions shall not only be maintained but advanced to a still higher standard. Write us. We invite correspondence and on application will be pleased to give full descriptions, with catalogue and prices.

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Head Office and Factory, MARKHAM, ONT.

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A complete revolution of the old methods.

This is a most useful, simple and durable instrument. It is easy to operate, and adapts itself to any plough now in use (including the sulky) and makes it but very little harder to draw. It is sold very cheap.

THE VESSOT IMPROVED GRAIN GRINDER LEADS
S. Vessot & Co., Sole Manufacturers **Joliette, Que.**

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Is sold under a positive guarantee to cure, or money is refunded

Trade Mark Reg'd.

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DEAR SIR, In regard to our experience with your Lump Jaw Cure, we need it on seven lumps last season. It worked all right. Some of the lumps had broken and ran several times before using it. Yours truly, FLEMING & SHORN.

PRICE, \$2.00, sent by mail. Illustrated Treatise on "Lump Jaw" sent free.

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CAPACITIES, 330 to 850 lbs.
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Why ? Because

in these hard times is there such a great demand for this All Steel Flexible Harrow

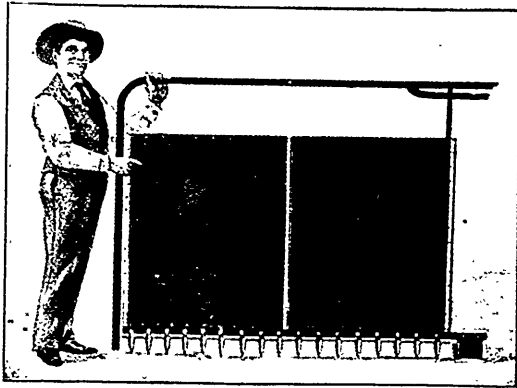
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1883	50 tons
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1889	240,000 "
1890	400,000 "
1891	440,000 "
1892	530,000 "
1893	680,000 "
1894	760,000 "
1895	920,000 "
1896	1,370,880 "
1897	1,920,000 "

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Canadian Agents for ALBERTS' THOMAS-PHOSPHATE POWDER (Registered.)

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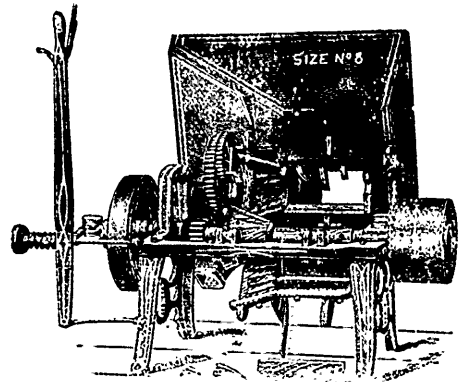
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A NEW GRINDER

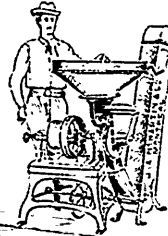


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We manufacture also TREAD POWERS, THRESHERS, FEED CUTTERS, HAY PRESSES, CIRCULAR SAW MACHINES, etc., etc.

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"LITTLE GIANT" GRINDING MILL



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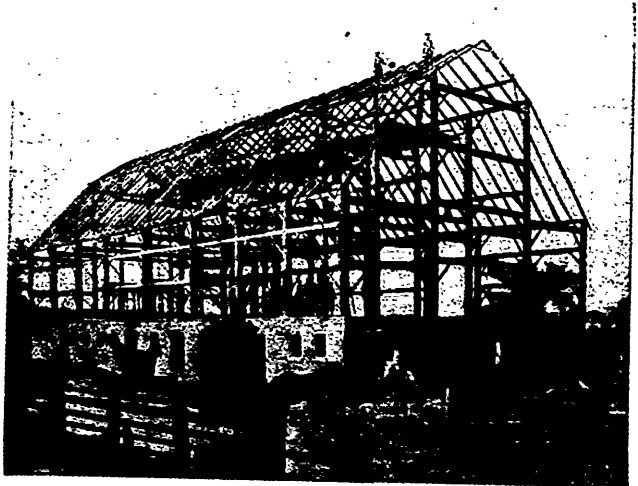
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