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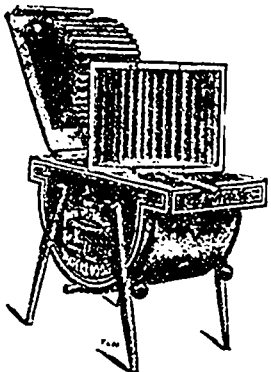
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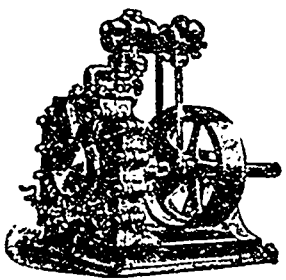
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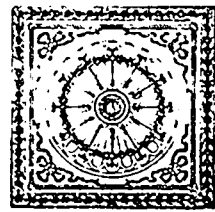
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Has always for inspection, and sale, the largest flock of pure Lincoln Longwool Sheep in the county, including many prize-winners, having taken prizes for many years at the Royal and other shows for both Rams and Ewes, including champion medals at 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 year's 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, i.e., \$511 per head, the first six making an average of \$840. 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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Dowsby Hall is one mile from Rippingale Station, on the Great Northern Railway, Bourne and Stamford Branch.

TELEGRAMS: DEAN, RIPPINGALE.

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, 1892.

J. E. Casswell

Stock Book No. 46
Laughton, Folkingham, Lincolnshire, Eng. 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 from father to son, and have never been offered for sale. Mr. J. E. Casswell's grandfather, Mr. G. Casswell, of Laughton, 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: Bekewell Councillor and Baron Ribby, for each of which very high prices have been realized; Laughton Major, Laughton Style, Legion Choice, No. 4; Abby George, 60 guineas; Judge, 95 guineas; 5; Laughton Justice Lincoln, 100 guineas; Lincoln, 150 guineas; Wickett, 70 guineas; Lincoln, 70 guineas; and his sire, Laughton Ribby, Shire-better. Short-horn bulls, and Dorking fowls are also bred. Inspection and correspondence invited. N.B.—Laughton Choice wool sold at the Royal and a pen of 5 theaves by him won 1st at Royal Docket. Visitors met by appointment. TELEGRAMS: Casswell, Folkingham, England.

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Great English Pedigree Sales

JULY, AUGUST and SEPTEMBER, 1898

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 Pure Winning Flocks in the country. Commissions carefully executed. Address

WATERS & RAWLENCE, Salisbury, England.

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. OLAXTON, Selsey, Chichester, Eng.

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

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BONNIE BURN-STOCK FARM, Stouffville station and P.O. D. H. Russell, prop. Breeder purebred Shorthorn Cattle, Shropshire Sheep, and Berkshire Swine.

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EGGS FOR HATCHING from Silver, Golden, Barred Plymouth Rocks, and White Wyandotte, Packed in patent boxes. Will replace at half price any not fertile. Also poultry supplies.

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EGGS FOR SALE.

White Wyandotte, White Plymouth Rock, Cornish Indian Game, Black Minorca, Houdan, Black Langshan, White Langshan, Barred Plymouth Rock, Silver Laced Wyandotte, \$1.50 for fifteen, or \$4.50 for thirty. Packed in patent boxes. Will replace at half price any not fertile. Also poultry supplies.

Will exchange any of the above for first class Tamworth pigs or light Brahma Pullets, say strain.

Dorset and Shropshire sheep, Tamworth pigs, Shetland ponies, Jersey cattle, all ages. Registered. Price right. STRATFORD FROS, Brantford, Ont.

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Birds imported from best yards in England and United States. Eggs \$1.00 per dozen. A few good birds for sale.

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EGGS for Hatching from choice Buff Leghorns, Golden Wyandottes, Golden Spangled Hamburgs, Red Caps, B.P. Rocks, Black and White Minorcas, Blue Andalusians and Martridge Cochins. \$1 per 25. Stock for sale. S. W. D. FRITH, Winchester, Ont.

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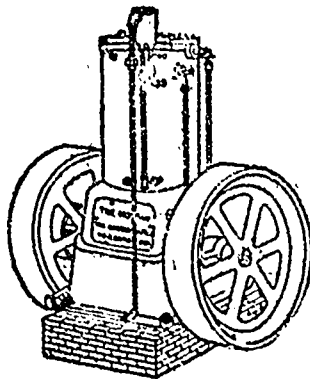
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Ten to one, it's the fault of the salt you use in your churning. Inferior salt makes bitter butter—impure salt spoils butter.

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Other salt is said to be "as pure as Windsor Salt"—that usually settles it.

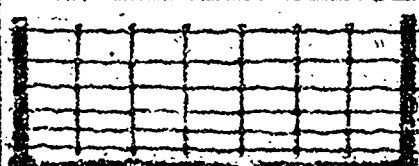
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FARMING

VOL. XV.

JUNE 7th, 1898.

No. 40.

FARMING

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

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Representative for Great Britain and Ireland, W. W. CHAPMAN, Fitzalan House, Arundel St., Strand, LONDON, ENG.

TOPICS FOR THE WEEK

How Others See Us.

The following extract from one of our weekly exchanges, though exceedingly flattering, contains some excellent advice for everyone engaged in the business of farming. It is undoubtedly true that no one can be a successful tiller of the soil unless he combines active brain work with muscle power. It well says that the days of haphazard farming are past. To farm properly to-day the farmer must read and think. To be able to think intelligently every farmer should subscribe for and read at least one first-class farm paper. How can he otherwise keep abreast of the times and keep posted regarding new and improved farming methods? The agricultural journal is the only regular means at his disposal for receiving this knowledge and no farmer can afford to be without one, and the oftener it reaches his home the better. A weekly farm paper such as FARMING is, containing information on all lines of farm practice and reliable data regarding the markets for live stock and farm products, cannot help but be of inestimable value to every farmer, and as our contemporary states we shall be pleased indeed to forward sample copies to those desiring them:

"To be successful nowadays tillers of the soil must read, learn and think. The days of haphazard farming are past for those who wish to be in the race and abreast of the times. Every progressive farmer should subscribe for at least one first-class agricultural journal such as *Farming*, published by the Bryant Press, of Toronto. It is the only weekly agricultural journal in the Dominion, and has the best staff of writers of any agricultural paper we know of. Particular attention is paid to the markets, and this feature alone is worth the subscription price, one dollar per year. Send for a sample copy."—*Lindsay Watchman*.

Agricultural News and Comments.

The manager of a large hotel at Hong Kong, China, imported from San Francisco last year 1200 pounds of pickled and creamery butter. It was imported in barrels of one hundred rolls, each roll weighing one and three-quarter pounds, and it was laid down in Hong Kong for from 26 to 32 cents (gold) per pound. The results of this importation are that the residents of that city have a liking for this butter and have fallen into the habit of sending over to the hotel for rolls for their private use.

The cavalry horse for the United States army must be sound and well-bred, gentle under the saddle, free from vicious habits, with free and prompt action at the walk, trot and gallop, without blemish or defect, of a kind disposition, with easy mouth and gait, and otherwise conform to the following description: A gelding of uniform and hard color; in good condition; from 15¼ to 16 hands high; weight not less than 950, nor more than 1,150 lbs., from four to eight years old; head and ears small; forehead broad; eyes large and prominent; vision perfect in every respect; shoulders long and sloping well back; chest full, broad and deep; forelegs straight, and standing well under; barrel large and increasing from girth toward flank; withers elevated; back short and straight; loins and haunches broad and muscular; hocks well-bent and under the horse; pasterns slanting and feet small and sound. A horse under five years old will not be accepted unless a specially fine and well-developed animal.

In 1897, 33,884 pounds of butter were imported into the port of Nagasaki, Japan, mostly from the United States and France. Small quantities were received from Australia, Denmark, Canada, and Holland. The butter imported from the United States is packed in tubs, each containing sixty rolls of two pounds in brine. The tub butter is mostly used for cooking purposes, and retails for about 32½ cents gold per pound. The table butter is imported in tins holding half a pound, one pound, and two pounds; the one-pound tin being the favorite. Most of the butter in tins is brought from France, and is in demand for table use. The one-pound tins sell for from 37½ cents to 40 cents each, and cost the importer laid in his store 32½ cents gold per pound. The French butter in tins has the preference for table use, because its quality can be depended upon, and because each package is as neat as can be made.

The Chinese use almost no butter, and what is imported by China is used nearly altogether by foreigners living there, who usually prefer the brand to which they were accustomed before leaving their own country. In 1896 butter to the value of \$74,758 was imported into Shanghai, China. Most of this was brought from France; while a considerable quantity was brought from the United States, Denmark, and Germany. The American Consul at this port states that in February last good United States butter brought 45 cents per pound. There is no use sending poor butter, and what is sent must be put up in hermetically sealed tins or jars. In order that the retailer may be induced to push the sale of the butter it should be laid down in China at about 25 cents per pound.

Last year the losses of cattle shipped from Canada to Great Britain amounted to eight for every one thousand shipped, as against five per one thousand in 1896. Nearly one half of the losses last year, however, occurred on two voyages under exceptional circumstances, and therefore the losses are not at all large. In shipping from South America there were losses last year of eighty-one for every thousand cattle shipped and thirty-six per thousand of the sheep, as compared with fifty-five cattle and twenty-six sheep per one thousand for 1896. The losses on shipments from the United States last year were only three cattle and eight sheep for every thousand of each class shipped as compared with four per thousand of

cattle and nine per thousand of sheep in 1896. The losses from the United States, therefore, show a marked improvement over the losses on Canadian shipments. The low percentages of losses from the United States is said to be largely due to the practice of dehorning as carried out by feeders and shippers.

It is a matter of wonder to people living outside of Canada, and especially to those living in the United States, why Canada sends abroad each year such large quantities of wood ashes. These people think that it would be better economy for us to keep the wood ashes at home and use them as a fertilizer, and we think so too. Wood ashes in the rural districts are very cheap. Pedlars have been accustomed to go through the country gathering up ashes, giving one pound of hard soap for one bushel of ashes. This is a foolish practice on the part of our farmers. They would make ten times as much by utilizing their wood ashes as fertilizers. Wood ashes are valuable in many ways. Where large quantities are used ashes will prevent potato scab, though enough should be used to make the soil alkali enough to kill the scab germ. Ashes, however, will do better on clover or grass than on potatoes.

At the Iowa State Fair a novel and at the same time a practical method is adopted for testing farm machinery. The managers during the summer grow crops of corn and potatoes on the fair grounds, which are ready for harvesting when the exhibition is held. The farmers who visit the show see just how the farm machinery on exhibition works in actual practice and do not have to depend upon an explanation of its mechanism only. A plowing match is also another strong drawing card.

In some sections, since the advance in the price of wheat flour, corn bread is being considered as a substitute. Experts recommend that where such a course is necessary the change from wheat flour to corn meal should be a gradual one, and that wheat bread should not be entirely excluded from the dietary. Wheat flour contains more protein and less fat than corn meal, so, if the latter is used, the amount of cheaper protein foods such as beans, peas, oatmeal, milk and cheese should be increased. There is no material difference between the yellow and white corn meal.

On a 3,000 acre farm in New Jersey, 2,000 tons of ensilage were grown last year at a cost of eighty-two cents per ton when harvested and put in the silo. The yield on some parts of the land was thirty-three tons per acre, actual weight. A large dairy herd is kept and fed largely on ensilage during the winter. The milk yield per cow averaged last year 6,250 pounds. The owner sells all the milk he can produce at ten cents per quart, and guarantees twenty per cent of cream on each bottle.

At the Birmingham, England, Police Court, recently, a dealer was fined £1 and £5 costs, or nearly \$30 in all for selling butter containing boracic acid. The Inspector prosecuting the case purchased half a pound of butter from the offender, which, when analyzed, was found to contain seventy grains of boracic acid. This is one instance of the many which have induced exporters of Canadian butter to insist upon butter-makers here not using preservatives of any kind.

A Western Packing Company on the Bacon Hog.

The following letter from a Chicago packing company to *The Breeders' Gazette* will be read with interest by those interested in our export bacon trade.

The best type of bacon pig is long and rangy; has a large percentage of lean meat, the fat being white and firm, and not too much of it. These qualities are specially to be found in the Yorkshire and Tamworth breeds, the latter making an ideal bacon pig, and for that purpose should be given a preference over all others.

The question of feed is also of importance to anyone who would raise the best bacon pigs. The almost exclusive corn-feeding practised by so many in the West makes too much fat, and, while corn fed to the above named breeds will make a better bacon than when fed to any other, it should be varied with mill-feed, barley, oats, peas, etc., which produce a larger percentage of lean and also better flavored meat. It is the general use of these breeds, together with the varied feeding, that enables the Canadians to obtain such a large premium for their pigs over those raised in the West. If there was a regular supply of such pigs on the market, here they would soon come to be appreciated, and would generally command a premium.

Whether it would pay a farmer to raise this class of animals even at a premium depends upon how he is situated for obtaining or growing feed at a moderate cost, but in any case the Tamworth will be found to make a good cross. They are prolific, gentle, and the sows are very good mothers. If there was a regular run of specially-fed bacon pigs at the Chicago yards, so that packers might have a regular brand upon a steady supply, there is no doubt but a premium would be paid for such stock.

INTERNATIONAL PACKING CO.

Chicago, Ill.

All packers engaged in the export bacon trade will agree with this description of what the bacon hog should be. The majority will also agree that a pig of the Tamworth type is what is wanted. Whether this type is found in the Tamworth only or in the Yorkshires, Berkshires, or any other breed, makes very little difference so long as the right kind of hog is produced. What the breeder and feeder will have to look to is a type of hog that will meet the requirements of the trade and at the same time return the greatest amount of profit to the farmer. The contention of many Americans that it will not pay them to give up the fat, corn fed type of hog for this more improved bacon type there are strong grounds for. But their conditions are quite different from what we have here. The Americans have a large home market of their own to supply, and therefore are to a certain extent independent of the export trade. But we in Canada have no such market open to us, and if our bacon trade is to assume large proportions we must look for an outlet for our products across the Atlantic, where the competition is most keen, and where it is absolutely necessary to send forward only the highest quality of bacon. Therefore, whether our neighbors to the south approve of the bacon type of hog or not, we must do so if we wish to secure a market for our products.

The question of feed is also a most important one, and is perhaps a more serious one for the western breeder than the quality of the breed. In a very large measure the inferior quality of western bacon is due to the large extent in which corn is fed in the West. While on the other hand we are largely of the opinion that the superior qualities which Canadian bacon has over the American are more due to the question of feed than of breed. It is only during the last few years that the real bacon type of hog has come to the front in Canada, and it may be several years yet before the bacon breeds are in general use in this country, as the above letter would lead people to believe. The majority of our feeders, however, feed other grains than corn. In fact, it is only within recent years that feeding corn to pigs has been practised to any great extent, and that only in a few sections where corn can be grown most successfully.

The feeding of corn to hogs for bacon production is, however, a serious mistake. It should not be fed at all for such a purpose. There are other feeds which, in this country, can be produced just as cheaply as corn, and which will fill the bill very much better. These are mill feeds, barley, oats, peas, etc., and for young pigs, roots.

One can hardly realize the difference there is between corn-fed and other bacon till he has examined the two together. We had the privilege of doing so lately, and there is as much difference in the quality of the fats in corn-fed bacon and bacon produced from other grains as there is between day and night. While the fat of the bacon produced from peas, etc., was firm and solid, that of the corn-fed bacon was soft, lacked body, and was as greasy as tallow. The former might be styled the substance, and the latter the shadow, so quickly does it melt away when cooking. In England the difference in prices obtained for corn-fed and other bacon amounts to from one to three cents per pound. This is a sufficient amount to knock the profit off a shipment of bacon, and consequently the packer on this side can afford to pay a good premium for bacon produced from the feeds above mentioned, as he also can for hogs of the true bacon type.

Over-Feeding Breeding Stock.

This subject is receiving some attention just now among English breeders, and is worth considering by our own stockmen. In Great Britain it seems to be more necessary for the breeder to exhibit at the leading shows than it does here, if he wishes to do any business. It has been the practice at all the leading English shows to have show animals, excepting the purely dairy breeds, made as fat as it is possible to make them. So much so is this the case that unless an animal is fat and well rounded off it does not stand much of a show for the prize. The breeder has either to keep his stock at home if they are in a natural condition, or to be at a great disadvantage in the show ring. This unfortunate condition of things has been brought about largely because prizes have been awarded to the animal which in its general outline was most pleasing to the eye rather than that it conformed to any particular type or breed. In some few cases judges have ignored the condition in which an animal was, and awarded the prize to the animal conforming most to the characteristics of the breed in which it was shown, but in the majority of instances the judges have gone with the crowd and given the prize to the animal most pleasing in general appearance.

Aside from the fact that in following such a practice the really best animal might not win the prize, there is the more serious matter to be considered, that of the effect the over-feeding necessary to produce a fat animal has upon its breeding properties. Many animals of good potent qualities are undoubtedly ruined for breeding purposes because of this practice of over-feeding for the show ring. And especially is this so at this season of the year, when the weather is warm. If all judges at shows would judge only from a breeding standpoint, or from a standpoint of conformity to type or form only, the difficulty complained of would soon be overcome. The agitation in Great Britain is along this line, and will likely bear fruit before very long.

As far as we are able to judge Canadian breeders are not as much troubled with this difficulty in connection with preparing show animals as the English breeders are, yet there is enough of it on this side to make the question of importance here. If the purpose of the show is to bring out the fattest animal, by all means give the prize to the one showing the greatest amount of fat. But if the purpose of the show is to bring out animals conforming to certain types or breeds or for breeding stock, then let the prizes be given for the best animal of these types or breeds whether he has been fattened up for the occasion or not. If this practice were followed entirely we believe that more breeders would exhibit than is the case at present. Of course it would not do to ignore the condition of the animal altogether. But if, for example, a breeder exhibiting a bull, were expected to have him in a condition best suited for service much better results would follow. It should not be considered necessary that in order

to stand a good chance in the show ring an animal should be carrying a few hundred pounds more fat than his owner would allow him to have if the exhibition were not ahead of him. If such were the rule there would be less danger of the breeding properties of stock being ruined when being fitted up for the show ring.

We are glad to see that a move has been made somewhat along this line by the Provincial Fat Stock and Dairy Show, though the motive for doing so has nothing to do with the breeding properties of stock. In the meantime we would like to hear from breeders and others in regard to this question of over-feeding, and if there is a danger to our breeding stock because of the manner in which judging is done at the leading fairs of this country.

The Outlook for Wool.

ALDERMAN HALLAM ON THE SITUATION: LOW PRICES.

Farmers are interested just now as to the outlook for wool. In order to obtain accurate information in regard to the wool situation, a representative of FARMING interviewed Alderman John Hallam, of this city, on the subject recently. As many of our readers know, Mr. Hallam is one of the largest exporters of Canadian wools, and is therefore in a position to speak with authority on wool matters.

Mr. Hallam thinks the prices for wool are very low, and the general outlook not very promising. The only market for Canadian long wools is the United States. These wools cannot be used by Canadian manufacturers profitably. Such being the case, they will have to be bought up at a price to suit the markets of the United States. In the leading United States markets common wool is now selling at from 28c. to 31c. per pound. No Canadian wool will bring in the United States markets more than 30c. per pound. If from this we deduct the 12 cents duty imposed by the American Government, only 18 cents is left, and from this must be deducted 1 cent per pound for freight and the expenses of handling, which leaves only 17 cents. American brokers charge 5 per cent. of the selling price (30 cents) for making sales, and consequently when everything is taken into account there is scarcely 16 cents left for the dealer here to work on.

Mr. Hallam is now paying 16 cents for wool, which according to the above is somewhat higher than the market would warrant. Mr. Hallam states that the local manufacturers on this side are taking advantage of the low prices to stock up their warehouses. When they are supplied he thinks prices will be low enough to admit of exporting being done. To make a profit out of exporting wool under present conditions wool would have to be bought at 15 cents per pound. Wool in England, of the same quality as our Canadian wool, is now selling at from 7½d. to 8d. per pound. Only recently a shipment of Irish wool was delivered in the United States for 28 cents per pound duty paid. From this it will be seen that other countries are experiencing low prices as well as our own.

Mr. Hallam is of the opinion, and which seems to be the current opinion also, that the present season will be a dragging one, and that unless there is a marked improvement in the English and the United States markets Canadian wool will have to be bought at from 15 cents to 16 cents per pound. It is thought by some wool experts that the surplus of this year's wool will have to be carried over till the United States is ready to take it. But as Mr. Hallam states we have been doing that for the past six years, and, therefore, it will not be a new experience. Unwashed and tub-washed wools cannot be sent to the United States. The duty on unwashed wool is 12 cents and on tub-washed 24 cents, and current prices there for these wools are such that it is impossible to ship them at a profit.

The British Wheat Problem.

Recent British exchanges devote considerable attention to a problem which seems to be confronting the British people. That of making themselves independent in regard to a wheat supply in war time. Just now the wheat market there is somewhat stationary, and dealers have a little time to consider the whole situation more carefully. *The Mark Lane Express*, whose counsel may generally be relied upon, makes the following remarks upon the situation:

It may easily arrive, therefore, that there will now be persons willing to "unload," but, whether this occurs or not, the total supply of wheat available between now and a new harvest will not be increased by a single sack. The recent rise has been only partially due to war. Writing in these columns on the 3rd of January last, in reviewing the year just then closed, we said: "The prices of 1894 and 1895 are likely to remain the lowest wheat quotations of the century, and it is probable that as 1897 advanced on 1896, so 1898 will advance on 1897." The rise of 1897 on 1896 was 4s. 2d. per quarter, so that, to such an extent as was foreseeable without war, we may fairly claim to have advised our readers four full months in advance.

This same journal, for several months back, has been advising the British farmer not to sell, and it now turns out that if farmers had done so they would have been much better off than is actually the case. This same journal now advises the British farmers to hold the eight or nine hundred thousand quarters of English wheat still in their possession, and not to part with it under fifty shillings. This would indicate that a further rise is expected, and the same journal points out that it is more likely that sixty shillings will be made for English wheat in July than that the present London average of 48s. 1rd. will be the highest price of the season. What grounds there may be for this rise are not stated. But if this claim should turn out to be correct, not only will the British farmer benefit by it, but the Canadian farmer also.

But, as we have stated, the important matter to be dealt with is to secure a sufficient supply in case of any national emergency. From some quarters a proposal was submitted to the Imperial Government to provide national granaries for storing wheat for future use. However, this has not met with the approval of the Government, and besides it is hardly comprehensive enough to meet all the necessities of an extended war period. Two or three other schemes are proposed, which, if carried into effect, might help to solve the problem.

One plan is to encourage the British farmer to grow more wheat. To induce him to do so it is suggested that when wheat goes below 40s. per quarter, the price which corresponds with a five-penny loaf there, should be a duty collected on all wheat imported, but when the price is above 40s. no duty should be imposed. Such a plan would no doubt tend to keep up the price so that it would pay the British farmer to grow wheat.

Another method is to adopt what is known as the Russian system, because it is in Russia where it chiefly exists. This is the system for enabling the farmer to carry the necessary stores in his own granary or barn, the Government advancing cash on the security of the grain, under the force of special enactments, giving the State a first charge and rendering the sale, or rather the resale, of such stores a criminal offence. The great merit of this scheme is that it would prevent a rush of farmers to sell grain after a new harvest. But it is claimed that such a plan would not regulate the price in any way.

A third plan, and one which to our mind seems to be the most feasible, is to develop wheat cultivation within the Empire. This, of course, would necessitate preferential duties in favor of the colonies. But even so, if the scheme were developed so that a sufficient amount of wheat could be grown within the Empire to supply all needs it would make the United Kingdom completely independent of other nations, and infuse new life and new vigor into the colonies. England's navy would be a guarantee that no shipping from the colonies would be interfered with.

Will our Breeders Exhibit at Omaha?

On another page we publish the proposed classification for prizes for live stock at the Trans-Mississippi Exposition with a view to giving information to prospective exhibitors. It is doubtful if many of our breeders will take advantage of this opportunity of exhibiting their stock to the breeders and feeders of the Western States, who are gradually becoming large purchasers of high-class Canadian stock, though we certainly think that it would be in the interest of our live stock trade to do so.

In conversation with Mr. James Russell, President of the Dominion Shorthorn Breeders' Association, last week, he expressed the opinion that it was not likely that many Canadian breeders would make a display at Omaha. In the first place, Mr. Russell said, the cost would be too great, and it is not known yet what the prize money will be. To induce a breeder to go so far with an exhibit of stock the prizes should be large and the chances of winning very great. Personally, Mr. Russell thinks he has already carried off enough honors in the United States. He exhibited at Philadelphia in 1876 and at Chicago in 1893, and carried off most of the highest honors in the Shorthorn classes. Mr. Russell estimates that the cost of sending a car of stock to Omaha would be in the neighborhood of \$200, and this would only be a part of the expense. During the World's Fair the Government paid the cost of transportation and other expenses, so that the exhibitor if he did not succeed in carrying off some of the prizes was not so much out of pocket as he would be at Omaha if no prizes were secured.

Canadian Apples for the Omaha Exposition.

A Montreal firm has received an order from the Hon. Sydney Fisher, Minister of Agriculture, for six barrels of fancy apples for exhibition purposes. These apples are to be sent to the Trans-Mississippi and International Exposition in Omaha, Neb., which commences this month and will continue till November next. The variety of apples will be Northern Spies, Roxbury Russets, and Cooper's Market, and will cost the Government \$12 per barrel. These apples are now in cold storage at Montreal, and will be forwarded to Ottawa, where they will be held in cold storage till they are sent forward by the Government.

If these apples reach the Exposition in good condition, as they undoubtedly will if kept in proper cold storage, they will furnish visitors to the exposition with an opportunity of judging as to the keeping qualities of Canadian fruit. It is likely that some of this year's fruit will be exhibited also, and we are of the opinion that it would be of great benefit to have a large exhibit of all Canadian products. In this issue we give the proposed classification for the prizes for live stock, and we believe it would be in the interest of the Canadian live stock trade if a number of the best animals of each kind were shown at Omaha.

The Pace of Harness Horses in the Show-Ring.

This is the subject of a very interesting article in a recent issue of the *London Live Stock Journal*, in which the writer contends for more uniformity in the movement of harness-horses when on exhibition before the judges in a show-ring. He points out that where a number of animals are travelling at different rates of speed it is not possible to make a satisfactory comparison as to the merits of each horse. Another point touched upon and which is of importance is that of allowing the horses too little time after they have settled down to their regular pace to show their staying powers.

All this is worth considering by judges at our leading fairs, though it may not be as applicable as to the English shows, where American harness-horses are brought into competition with the home-bred animals and, as they are trained to greater

speed in the show-ring, it is difficult to compare them satisfactorily with the English harness-horses, driven at a slower rate of speed. Even if no foreign animals are shown it would be an advantage to have a more uniform rate of speed when harness horses are being judged in a show-ring; and also to allow them a sufficient time to keep on moving in after they have settled down to their work, as many animals make a good showing for about 300 yards which would go all to pieces if sent twice that distance.

Poultry-Raising as a Business.

Poultry raising as a business offers many inducements to the ambitious farmer. A great many farmers have the idea that poultry-raising is woman's work and that it is beneath the calibre of the average farmer to devote his time and attention to such matters. No greater mistake was ever made by any farmer than to have such a one-sided view of the business of poultry-raising. It may lead to a serious loss in the year's business which might have been turned into a profit if properly looked after.

Success in any particular line can only be obtained by conducting it on strictly business principles, and poultry-raising is no exception to this general rule. Those who are making a success of poultry farming are those who pay strict attention to every detail of the business. There is no such thing as good and bad "luck" connected with it, or for that matter with any other business. What is often attributed to bad luck is due to following wrong methods and lack of proper care or attention. If every farmer who keeps poultry would give as much attention to this branch of the farm operations, as he does, for instance, to his dairy, poultry raising would soon prove to be a source of profit instead of a source of loss, as is now very often the case. It is surprising what the hen can do if properly looked after.

The Value of Honey as a Food.

How many outside of those who make bee-keeping a study and a business realize the value of honey as a food for the human body? The analysis of pure honey shows 37.58 per cent. of dextrose; 36.22 of leonlose; 26.06 of water and .14 of ash. According to this the essential constituents of honey are dextrose and leonlose. One of the advantages of honey as a food over other foods such as cane sugar is that these constituents are in a form ready to be absorbed by the system. In the analysis of honey the ash invariably shows from 0.1 to 3.05 per cent. of phosphoric acid, an indispensable ingredient in the food of plants and animals, and of immense importance in the human organization, forming an essential constituent of the brain, nervous and other tissues.

According to a writer in *The Jamaica Journal*, honey is cheaper there than butter, and is recommended as a substitute for the latter for poor people. Bees can be kept very easily, and if properly understood require comparatively little attention. The writer above referred to sums up the advantages of bee-keeping and honey in the following order: (1) Honey is a food in a form very readily taken up by the system. (2) Honey is a carbohydrate and as such is a producer of energy and heat in the body. (3) Honey is a cheap food. (4) Honey is invaluable for young children especially. (5) Honey may be made a therapeutic agent of marked value in medicine.

The largest farmer in England, curiously enough, bears the name of Farmer. His residence is in Wiltshire, and the entire amount of his holdings exceeds 15,000 acres. He milks at least 1,000 cows, and has a stock of upwards of 5,000 sheep. By paying his men good wages, he commands the most useful class of labor. He also obtains his farms on the best possible terms.

TOBACCO CULTURE.

By WM. SAUNDERS, LL. D., F. R. S. C., F. L. S.,
Director Experimental Farms.

(Continued from last week.)

CULTIVATION.

After planting, the ground should be stirred with a one-horse cultivator about once in ten or twelve days, so as to keep the land thoroughly clean from weeds, and in a porous and mellow condition. Frequent cultivation will also induce more favorable conditions of moisture. This should be continued as long as the cultivator can be passed through the rows without injuring the plants. After this, as the roots of the plants will then almost fill the space between the rows, the ground should be kept clean by shallow hoeing.

PRIMING AND TOPPING.

By the word "priming" is meant the removal of the lower or primary leaves which come out too near the ground, and often touch the surface and become torn and sandy. It is an advantage to do this work early, so that the plants may not unnecessarily lose strength by their growth. The distance from the ground this priming should be done depends somewhat on the variety, but the bottom of the stalk is usually stripped to a height of from four to six inches from the ground.

Topping is the removal of the flower stalk with one or more of the upper and smaller leaves. This is done to throw the strength of the plant which would otherwise go to the production of seed, into the more perfect development of the leaves. The plant is ready to top when the "button," as the blossom is called, has grown long enough to be taken hold of without injuring the upper leaves of the plant. As the plants do not all blossom at the same time, it is usual to let those stocks which bloom first run a little beyond the usual time of topping, so that all may be topped at the one operation. The tops when broken off should be thrown between the rows and allowed to decay. The number of leaves left on the stem at the time of topping varies from ten to sixteen or eighteen, depending on the variety grown; if topped too high the upper leaves are apt to be too small to be of much value. As the leaves of the tobacco plant are arranged on the stem in eight perpendicular ranks, the ninth leaf stands directly over the first. This fact will assist the operator in determining the number of leaves on a stalk without counting them.

SUCKERING.

After topping, "suckers" soon begin to grow, shooting out from the stalk on the upper side of each leaf at the base, those at the top starting first. As soon as they are large enough to be pulled they should be promptly removed, otherwise much of the strength of the plant will be lost and the maturing of the crop delayed. Should they start a second or third time, they should be again removed.

SAVING OF SEED.

To obtain seed for sowing the following year, a few of the earliest, most thrifty, and large-leaved stalks should be left without topping. These will

bloom and seed freely, and when the crop is cut these stalks should be allowed to stand. As soon as the seed pods turn to a blackish color the seed will be nearly matured; then cut off the heads and hang them up in a dry place to cure. Later in the season strip the seed pods from the stalks, rub them in the hand, and clean the seed by sifting through a fine sieve. Tobacco seed is said to retain its germinating power for several years.

INSECT ENEMIES.

Cutworms are sometimes very active in destroying the newly-set plants. Where these are troublesome they may be reduced in number by placing at many different points in the field small bunches of poisoned weeds, grass, or clover. These hunches are tied and rendered poisonous by dipping them in a mixture of Paris green and water in the proportion of two ounces of the poison to a pailful of water. The cutworms take shelter under the bundles of weeds and eat of the poisoned material and die. In hot weather these bundles should be put out after sundown and a shingle may be laid on each to keep it fresh. Cutworms are the caterpillars of dull-colored, active moths or "millers," which fly at night, mostly during the month of July. The caterpillars lie hidden during the day and come out to feed at dusk. They are smooth and naked, and are usually of some dull shade of greenish grey, or brown, with dusky markings. When these caterpillars are fully grown, which is usually in the latter part of June, they enter the ground and change to chrysalids, from which the moths emerge later in the season. These deposit their eggs on grass or other plants or weeds; the young larvae hatch in about a fortnight and feed usually unobserved amid the abundant growth of summer, and when they reach a length of one-half to three-quarters of an inch they bury themselves in the ground in autumn, where they remain until the following spring. On emerging from their long period of torpor they become very active and feed greedily on almost any green plant which comes in their way.

Cutworms usually attack the plants about the base, and having eaten the stem through leave the greater part of the young plant to wilt and perish. Where a plant suddenly withers and dies, the author of the mischief can generally be found within a few inches of the plant, buried just below the surface of the ground. In such cases they should be searched for and destroyed. Where cutworms are plentiful it is necessary to look over the plants every day or two, and to promptly reset any which may have been killed.

After the cutworms have disappeared the caterpillar of a large sphinx moth, *Sphinx quinquemaculatus*, becomes a most troublesome foe to the tobacco grower. This insect spends the winter in the chrysalis state buried in the ground. Early in June the chrysalis wriggles its way up to the surface, when the moth escapes. It flies at dusk and in its flight much resembles a humming-bird, and soon begins to deposit eggs. These are laid singly on the under side of the leaf, where they hatch in the course of a few days, when the young larva or

"worm" begins to feed on the leaf, making small holes here and there in it. About the time when the leaves are as large as a man's hand these caterpillars appear. The plantation should then be gone over carefully, looking at every plant. A sharp eye will detect the small holes they make in the leaf very promptly, and on turning it up a small green caterpillar will be seen on the under side with a projecting horn on the hinder end of its body. These should be at once destroyed, which may be done by crushing them between the finger and thumb. As the eggs of these caterpillars continue to be laid during a considerable part of the season, constant watchfulness and frequent inspection is needed to prevent injury to the crop. Where the fields are neglected these caterpillars grow rapidly and eat voraciously, and a single specimen will soon destroy the greater part of the leaves of the plant on which it has been placed and on several others near by. When full grown this larva is three inches long, or more, and about the thickness of the forefinger, green, with paler stripes along the sides of the body. When disturbed it raises its head in a threatening manner and looks quite ferocious, but is incapable of inflicting any injury.

(To be continued.)

AWARDING PRIZES IN A MILK TEST.

DR. BABCOCK RECOMMENDS A NEW SCALE OF POINTS.

At the leading exhibitions in Canada where cows are judged for milk production, the scale of points used is that adopted by the British Dairy Farmers' Association, and which is as follows: 1 point for each pound of milk; 20 points for each pound of fat; 4 points for each pound of solids (not fat); 1 point for each 10 days in milk, after the first 20 days (limit, 200 days); 10 points shall be deducted from the total score for each per cent. of fat below three per cent. of fat in the milk. At the Provincial Fat Stock and Dairy Show 20 points are added for constitution and conformation. Though this basis of awarding the prizes has given pretty fair satisfaction as far as the general public is concerned, yet in a quiet way there has been considerable objection to it in some quarters. While those having cows giving a large quantity of milk are well satisfied, those having cows noted for giving a large percentage of fat and a comparatively small quantity of milk are quite strong in their objections to it because, as they claim, not enough points are given for fat production. It has been continued largely because there was nothing better to put in its place.

Among those who have taken considerable interest in this question is Mr. W. E. Butler, of the firm of Wm. Butler & Son, Dereham Centre, Ont. Mr. Butler has just completed a three years' course at the Ontario Agricultural College, Guelph, in which he has given special attention to dairying. During the past year he has given much attention to the question of judging dairy cows, with the object of finding out a better basis for granting the awards in a milk test than that now in general use. In this connection he communicated with several dairy experts connected with agricultural col-

leges in Canada and the United States. Among the replies received was one from Dr. Babcock, of the Wisconsin Agricultural Station, in which a new plan for awarding prizes in a milk competition is given, and which reads as follows:

Madison, Wis., April 23rd, 1898.

W. E. Butler, Esq.,
Guelph, Ont.,

DEAR SIR,—Your letter of April 9th to Prof. Henry in relation to rules for testing dairy cows has been referred to me. The scale of points submitted appears to me to give altogether too much prominence to the yield of milk and too little to the yield of fat which is now generally admitted to be the most important factor in determining the value of milk for manufactured products, on account of the nearly constant per cent. of solids not fat in all milks, from whatever source the yield, according to their rules, influences the score twice, once directly and again as the solids not fat. The effect of this is shown in the following example:

100 pounds of average milk contains 9 lbs. of solids not fat, and 3.5 lbs. of fat. On the plan proposed this gives the following points for milk:

1 point for each pound of milk.....	100
4 points " " " solids not fat 36	144
20 " " " fat.....	70

206
This gives to the fat only about one third of the value of the milk, whereas for almost any purpose it should constitute fully three-fourths of the value. The best way which occurs to me of avoiding this inequality is to base all of the points upon the solids of the milk, giving a relative weight to the solids not fat and the fat which shall as nearly as possible represent average values when all branches of the dairy industry are considered. When milk is converted into cream, butter or cheese, a pound of fat has from 12 to 20 or more times the value of a pound of solids not fat. Only when milk is sold for direct consumption is the difference less than this. It seems to me that giving a pound of fat ten times the value of a pound of solids not fat is a fair average all things considered. On this basis the milk considered in the above example would represent the following points:

9 lbs. solids not fat.....	9
3.5 lbs. fat.....	35

44
The proposed plan for equalizing the effect of advancing lactation is unfair to cows giving a large yield of milk. They will lose more as lactation advances than cows giving a small quantity. This may be avoided by making this correction upon a percentage basis. I would suggest that one per cent. of the total points scored for milk be added for each week of lactation after the first month, and that this increase be limited to 25 per cent.

Upon the scale of points which I have outlined it would be necessary to make the points for conformation less than in the rules submitted in order that this be not given too great prominence. I think five points for this would be fair. The scale of points would then be as follows, viz.:

Five points for conformation.	
One point for each pound of solids not fat.	
Ten points for each pound of fat.	

One per cent. of the total points for milk to be added for each week of lactation after the first month, the total increase to be limited to twenty-five per cent.

I realize the difficulty in accepting a plan like the above which differs so widely from that in general use, still I believe the principle involved is just, and I hope before long to see something of this kind adopted. It may at first be necessary to fix a lower ratio between the fat and solids not fat, but I believe that when all things are considered that the ratio given is none too high."

Very truly yours,
(Sgd.) S. M. BABCOCK.

The scale of points submitted to Dr. Babcock by Mr. Butler was that used at the Provincial Fat Stock and Dairy Show last fall. After receiving Dr. Babcock's proposal Mr. Butler took the trouble to compare it with that now in use, basing his calculations upon the value of milks containing different percentages of fat ob-

tained from experiments conducted by Professor Dean, and which were published in FARMING of May 3rd, page 291. The comparisons made by him are as follows:

300 lbs. milk 4.35 per cent. fat produce 33 lbs. cheese @ 8c. \$2 64
 300 lbs. milk 3.15 per cent. fat produce 26 lbs. cheese @ 8c. 2 08
 300 lbs. milk 4.35 per cent. fat produce 15.21 lbs. @ 20c. 3 04
 300 lbs. milk 3.15 per cent. fat produce 10.50 lbs. @ 20c. 2 10

The difference in value of milk testing 4.35 and 3.15 is 54c. in cheese and 96c. in butter; or a difference of about 1.2 per cent. makes nearly one-half more value in milk which tests 3.15 for butter. According to our old score we would give the cow which gave the 300 lbs. of 4.35 milk:

4.35 x 3 x 20 . . . 261 points for fat.
 9 x 3 x 4 108 points for solids not fat.
 300 lbs. of milk. 300 points for water.

669 points in all.

The cow which gave the 3.15 per cent. milk would score:

3.15 x 3 x 20 . . . 189 points for fat.
 9 x 3 x 4 108 points for solids not fat.
 300 lbs. milk . . . 300 points for water.

597 points.

While the cow's milk which contained the 4.35 per cent. fat was one-half more valuable for butter making than the milk of the cow which gave the 3.15 per cent. fat, for cheese making, the rich milk was worth $\frac{2}{3}$ more, and according to the old test of score the cow which gave rich milk was only $\frac{1}{3}$ more than the cow which gave poor milk.

Now according to proposed scale the cow which gave the 4.35 per cent. milk would get:

1 point for each pound of solids not fat.
 10 points for each pound of fat.
 300 lbs. of 4.35 per cent. fat would give:
 152 points for fat.
 27 points for solids not fat.

179

Cow which gave 3.15 per cent. fat would get:

105 points for fat.
 27 points for solids not fat.

132

Now according to this score the cow which gave the rich milk would get about $\frac{1}{3}$ more for her milk in place of $\frac{1}{3}$, and as $\frac{1}{3}$ is about the difference in value of milk made into cheese and a little less than the difference in value made into butter, it would be much fairer than the old way.

The foregoing was based upon milk with only a difference of 1.2, but when we get milk that tests 3 per cent. and 4.5 there is still a greater difference.

100 lbs. of 4.5 per cent. milk will make 5.25 lbs. of butter; 5.25 lbs. of butter @ 20c. \$1 05
 100 lbs. of 3 per cent. milk will make 3.5 lbs. of butter; 3.5 lbs. of butter @ 20c. 70

A difference of $\frac{1}{3}$ in favor of rich milk.
 100 lbs. of 4.5 milk will score:
 100 points for water.
 36 points for solids not fat.
 90 points for fat.

226

100 lbs. of 3 per cent. milk will score:
 100 points for water.
 36 points for solids not fat.
 60 points for fat.

196

Difference in two scores of 30 points, or about $\frac{1}{3}$ in favor of rich milk, while there is a difference of $\frac{1}{3}$ in manufactured products.

It will be seen from these comparisons that this new plan has many points in its favor and is worth considering by everyone interested in dairy matters. The Dairy Committee of the Provincial Winter Show met at Guelph on Saturday last, when this new scheme, as well as others, was under consideration. The report of the committee will appear in next week's issue. In the meantime the columns of FARMING will be open for a discussion of the whole question,

and we would be pleased to hear from dairy breeders in regard to it.

THE CARE OF MILK.

LET US KNOW HOW YOU DO IT.

We should like a number of our readers, who supply milk to a cheese factory or creamery, to send us answers to the following questions:

- (1) In what way do you guard against uncleanliness when milking?
- (2) Do you strain the milk?
- (3) What plan do you adopt to have the milk properly aerated?
- (4) In what way do you keep the milk over night?

Make the answers as short as possible, and let us have your experience on these points.

Editor of FARMING:

In reply to your four questions in your issue of 10th inst., have to say:

(1) By having a clean whitewashed stable, brush off the cows, and wash and wipe the udder before milking, and by using a covered milk pail into which the milk is strained as drawn from cow.

(2 and 3) We strain and aerate the milk by having a large milk dish punched full of small holes. This dish stands on stout wire legs on the rim of the factory can and twelve inches above it; we put two folds of cheese cloth in it, and the milk falls in a fine shower into the factory can. We have another large milk dish to the bottom of which is attached a long handle underneath. In this dish are about a dozen holes. After the milk is in the can we invert this dish and plunge it down through the milk, the air contained in the dish when put into the milk escaping; and when the dish is drawn up from the milk the milk is considerably agitated and dashes up the sides of the can.

(4) On the milk stand. I may say that if the cows are kept clean with wholesome surroundings there will not be much fear of animal odor or other bad flavors.

J. HOLLINGWORTH,
 May 23rd, 1898. Beatrice, Ont.

ECONOMY, KINDNESS AND CLEANLINESS IN DAIRYING.

By W. J. PALMER, Toronto.

(Read before the Eastern Butter and Cheese Association.)

There are two or three things that farmers should bear in mind if they would make a success of dairying. In going through the country giving instruction with the Travelling Dairy, I observed that there were opportunities for improvement in the way of kindness to animals, in cleanliness of stables and milk houses, and in the matter of economy—a wise and generous economy, so to speak. Those of you who have been farming for years know that to day you must practise economy to a degree that you were never called on to do before. You cannot feed as liberally—as wastefully—as you did before; you must husband your resources very carefully if you would make a living. Your sons will have to make a further change in their methods of feeding live stock if they are to succeed in dairying. You are not now horse-feeding as much as formerly. The horse used to get nearly all the attention, kindness and feed, while the poor cow was neglected as of but little importance; but there is little profit in horse-raising to-day, and so we are turning our attention to the milch cow as the hope of Ontario agriculture. But even to-day there is too much waste in managing dairy cattle. I am in the milk and butter business in Toronto now, and,

in going around among the men from whom we are getting our supplies, I have noticed a good deal of difference in the way they attend to their cattle, and the amount of money they make out of their milk. I have noticed some places where the cattle are very rough looking, and the owners are making very little out of them. I met a man recently in the Niagara district who, according to his own statement, could make a handful of grain go further in feeding cows than any professional dairyman could. He said he could feed a cow on \$10 a year, and get more out of her than any of the scientific chaps who were teaching and lecturing people how to feed cattle could do for \$40. But he made one statement that I think gave him away as an authority on feeding live stock. He said he had kept hens until they were fourteen years old, and that they had laid better than when two years old, and that he had one hen which he killed when twenty years old, and it was as tender as a spring chicken. (Laughter.) A great deal depends upon how cattle are treated. Down in my native province of Prince Edward Island I have known farmers who brought in fine fat cattle fed almost entirely upon turnips. They would bring in a pig almost fat enough to burst which had been fed upon but little else than butter-milk. How was this done? They supplemented their comparatively poor feeding with much kindness. I can assure you that kindness goes a good way in the thrift of live stock. The cost of producing the milk needs to be very closely studied. If it costs you 80 cents to produce a hundred pounds of milk, and you receive only 70 cents a hundred for it, you are a loser, and the more milk you handle the more you lose. But if you make milk for 30 cents a hundred, and you can get 70 cents a hundred for it, you are making money. In order to do this, however, you must have warm stables, well-lighted and ventilated, and cleanliness and kindness must prevail. If you will curry-comb and clean the cow as carefully and regularly as you do a horse it would pay. Every time you scratch that old cow for a few minutes with the comb she will give you a few pounds more milk. We sometimes find cow stables very cold—perhaps as low as 40 degrees, while across the way there is a stable comfortably warm.

My experience with city customers leads me to the conclusion that one of the most important things in the butter trade is to have the print, pat or package in a clean and attractive form. The place where the cheese or butter is made cannot be too clean and pure. Our inspectors are doing much good, and our dairy products are greatly benefited by their work, directly and indirectly; but I am afraid that we still have too much butter made up in unclean and illy ventilated quarters. We have a place in Toronto where bad butter is bought at five cents a pound, and made over again, and then sold for fifteen cents a pound. The consumers are getting more particular every year. No one will knowingly pay a good price for turnip butter, and they will not want it the second time at any price. It is a pity that notwithstanding all that has been said against feeding turnips that some will

persist in using those roots. If only one patron of a creamery or factory will use turnips it will affect the whole make. Turnips are unpopular with city customers; they blame it for nearly every taint or bad flavor in milk or butter. Even "leaky" flavor has been attributed to turnips. A point in dairying worthy of closer attention is to the putting up of butter in neat packages. The taste is often governed by the eye. Butter put up in attractive style generally finds a ready sale, if it has no style in its make up it is not so likely to be called for. I have known a lady to send back a pound of butter because she did not like the taste of it, when she really was objecting to its appearance. That same butter was made up in a neat wrapper and again sent to her, when she declared that it was the nicest butter she had ever tasted. (Laughter.)

Let me emphasize the question of flavor. Our best patrons ship their creamery butter to us every day. They have everything neat and clean and pure about their stables and general surroundings. They aim to have the same flavor every week. Butter made at home cannot have the same evenness of flavor. We get thirty cents a pound for first-class creamery butter, while for much of the farm butter but little more than twenty cents can be had, because it is likely to vary in flavor. If your cream has a bad flavor heat it up to 150° to drive off that bad odor, then cool it down and churn it, and you will have butter that will realize a good price. Do not take white butter to the market; it looks lardy. Color it to suit the taste or preference of your customer. A man said to me once, "If they want green butter make it green for them." If you have not a liking or a love for dairying you had better go into some other line of business.

MANITOBA FARMERS' INSTITUTES.

The summer programme for the Farmers' Institute meetings in Manitoba has been issued. The meetings are arranged in seven groups with a competent staff of speakers for each group. The meetings will begin on June 27th, and continue till July 11th, during which time the leading farming centres in the province will be visited. In the local institutes the meetings will be the regular annual meetings. The general secretary of the institutes is fortunate in having secured an excellent staff of speakers for these meetings. The speakers outside of the province will be Dr. Fletcher, of the Central Experimental Farm, Ottawa; D. W. Willson, editor Elgin Dairy Report, Elgin, Ill.; John I. Hobson, president Dominion Cattle Breeders' Association, Guelph; Isaac Usher, Queenston, Ont. Other speakers will include Dairy Superintendent MacDonald, Charles Braithwaite, A. P. Stevenson, D. A. Stewart, M. Young, V.S., F. Torrance, M.A., A. McKenzie, S. A. Bedford, supt. Experimental Farm, Brandon; H. S. McLean, and Hugh McKellar, chief clerk Department of Agriculture, Winnipeg.

The Central Institute meeting for the province will be held at Brandon on July 5th, 6th and 7th, when most of the outside speakers, together with Hon. Thomas Greenway, will deliver addresses.

The Ontario Agricultural Gazette

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

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

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

BENEFITS OF MEMBERSHIP.

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

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

A member of the Sheep Breeders' 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. HOBSON, Secretary,
Parliament Buildings Toronto, Ont.

Directors' Meetings of the Dominion Cattle, Sheep, and Swine Breeders' Associations.

The meetings of the directors of the Cattle, Sheep and Swine Breeders' Associations and of the Board of Provincial Fat Stock and Dairy Show were held in Brantford, on May 23rd, 24th and 25th. The full Board of Directors were present at each meeting and the following questions were brought before the Board for consideration:

1. Report of Secretary-Treasurer.
2. Election of Executive Committees.
3. Election of two directors to represent the Association on the Board of the Provincial Winter Fair.
4. Revision of the prize list and rules governing the Winter Fair.
5. Election of judges for the Provincial Winter Fair.
6. Date of holding annual meetings.
7. New business.

The report of the Secretary was as follows: (Published in our issue of last week, page 339.)

The Executive Committee of each Association was appointed a Transportation Committee to act on the suggestions of the Secretary regarding additional concessions to be asked from the railway companies.

Each department of the rules and regulations and prize list of the Provincial Winter Show was carefully considered and revised when thought necessary in the best interests of the public.

DATES FOR HOLDING THE SHOW.

It was unanimously decided that the show be held one week earlier than usual, and on Wednesday, Thursday, and Friday instead of on Tuesday, Wednesday, and Thursday. The show will be held at Brantford on November 30th, December 1st and 2nd. There will be, as usual, a large open meeting on the first night of the show, but of the Dominion Live Stock Associations only the Swine Breeders' Association

will hold its annual meeting at this time. The Cattle and Sheep Breeders' Associations have given up their evenings to the American Oxford Breeders' Association and the American Leicester Breeders' Association, who will hold their annual meetings in Brantford on the evenings usually occupied by the Cattle and Sheep Breeders' Associations. In 1899 it is expected that the American Shropshire Record Breeders' Association will hold their annual meeting at the time and place at which the Provincial Winter Show is held.

RULES AND REGULATIONS.

On motion it was decided that the dates up to which entries may be received by the secretary should be strictly adhered to. The rule governing this reads as follows: "Entries should be received on or before November 20th. Entries received between November 21st and 25th, inclusive, will be charged double fees. No entries will be received after November 25th." Owing to serious complaints by exhibitors of dairy cattle, it was thought wise to prohibit dogs entering the building.

The entry fees are as follows, but no entry fees will be charged for special prizes: Cattle, \$2 per entry; swine, 50c. per entry; sheep, 75c. per entry.

A change was also made in the date to which the ages of animals will be computed. These dates are now as follows: Fat cattle, September 1st; sheep and swine, December 1st; dairy cattle, August 1st. Last year the ages of all animals were computed to December 1st.

PRIZE LIST.

Fat Cattle.

The only change made in the prize list in the fat cattle department was in class 4, sections 5 and 6 for grade "heifer, 2 years and under 3," and "heifer, under 2 years." These prizes now are, first, \$20; second, \$15; third, \$10, instead of first, \$15; second, \$10; third, \$5.

Sheep.

In the classes for Cotswolds, Lincoln, Leicesters, Oxfords, Shropshires, and Southdowns, the prizes will be as follows:

- Sect.
1. Ewe, 1 year and under 2—1st, \$12; 2nd, \$9; 3rd, \$5.
 2. Ewe, under 1 year—1st, \$10; 2nd, \$8; 3rd, \$5.
 3. Wether, 1 year and under 2—1st, \$12; 2nd, \$9; 3rd, \$5.
 4. Wether, under 1 year—1st, \$10; 2nd, \$8; 3rd, \$5.
 5. 3 wethers, under 1 year—1st, \$12; 2nd, \$9; 3rd, \$5.
 6. 3 ewes, under 1 year—1st, \$10; 2nd, \$8; 3rd, \$5.

In classes for Dorset Horns and Merinos, and Hampshires and Suffolks, the prizes will be as follows:

- Sect.
1. Ewe, 1 year and under 2—1st, \$10; 2nd, \$8; 3rd, \$4.
 2. Ewe, under 1 year—1st, \$10; 2nd, \$8; 3rd, \$4.
 3. Wether, 1 year and under 2—1st, \$10; 2nd, \$8; 3rd, \$4.
 4. Wether, under 1 year—1st, \$10; 2nd, \$8; 3rd, \$4.

In the class for grades and crosses, "sheep under 2 years" will read "best ewe or wether under 2 years." Otherwise the prizes in this class remain as last year.

Swine.

In all the purebred classes "barrow, 9 months and under 15" was struck out, and the section for "sow or barrow under 6 months" was divided into two classes, one for "sow under 6 months," and the other for "barrow under 6 months," the prizes to be, 1st, \$10; 2nd, \$6; 3rd, \$4.

In the class for grades and crosses "Barrow, 9 months and under 15," and "Sow, 9 months and under 15," were struck out, and sections added for "Sow, under 6 months" and "Barrow, under six months," prizes to be, 1st, \$10; 2nd, \$6; 3rd, \$4. Instead of giving a sweepstake prize it was decided to give a prize for the "Heaviest sow or barrow at the exhibition, any age."

Bacon Classes.

The following bacon prizes will be offered subject to the rules appended:

- | Sect. | 1st. | 2nd. | 3rd. |
|---------------------------|------|------|------|
| 1. 4 Improved Berkshires. | \$25 | \$15 | \$10 |
| 2. 4 Improved Yorkshires. | " | " | " |
| 3. 4 Tamworths. | " | " | " |
| 4. 4 Chester Whites. | " | " | " |
| 5. 4 Poland Chinas. | " | " | " |
| 6. 4 Duroc Jerseys. | " | " | " |
| 7. 4 Suffolks or Essex. | " | " | " |
| 8. 4 Grades or crosses. | " | " | " |

H.R.H. PRINCE OF WALES' PRIZE.

9. 2 Best dressed hogs to be brought to the show alive and killed the second day of the exhibition. \$25 \$15 \$10
10. 4 Best bacon hogs, any breed. " "

Provision for killing has been completed, and arrangements have been made whereby the animals competing in section 9 can be sold in Brantford for the highest market price for dressed pork.

Rules.

(1) No animal deemed unsuitable for bacon purposes by the judges shall be awarded a premium, but no premium shall be withheld merely because there is no competition.

(2) Hogs shown in any other class are eligible to compete in this class.

(3) Other rules governing the swine department will apply to the bacon class.

N.B. Hogs which meet the pork packers' requirements weigh between 160 and 200 pounds. They are long in the body, deep in the side, narrow in the shoulder, with small head, and hams in proportion to the body, and not too fat; the ideal weight is between 170 and 180 pounds.

Dairy Cattle.

The following committee was appointed to go carefully over the rules, regulations, and prize list of the Dairy department: G. W. Clemons, G. E. Day, Prof. H. H. Dean, W. E. Butler, and H. Wade, with power to add to their number. A meeting of this committee was held on Saturday, June 4th.

On account of the amount of work in figuring out the results of the dairy test, it was decided that the prize money in this department need not be awarded for one week after the show is held.

Dressed Poultry.

A Poultry Committee has been appointed to arrange the rules and prize list in the Dressed Poultry department. It is expected that the poultry exhibit will be exceptionally good.

Special to Exhibitors Coming a Distance of over 100 miles.

Any exhibitor requiring to bring his stock over 100 miles from any point in Ontario will be entitled to a rebate equal to the freight charges on his shipment for the distance it was carried over 100 miles. In order to avail himself of this privilege an exhibitor must write the Secretary at least three weeks before the show is held, giving full particulars as to the point of shipment, the distance from the show, and the carrying line. The exhibitor must also at the time of the show furnish a receipt showing the amount paid, the point of shipment, and the number and kind of animals included in the car. No rebate will be allowed unless the above conditions are complied with.

OFFICERS AND COMMITTEES OF THE PROVINCIAL FAT STOCK AND DAIRY SHOW FOR 1898.

Officers.

President, John I. Hobson, Guelph;
Vice-President, J. C. Snell, London;

GAZETTE—Continued.

Secretary-Treasurer, F. W. Hodson, Toronto.

Committees.

Executive and Programme.—President, Vice-President, and Secretary, J. E. Brethour, Burford; James Tolton, Walkerton; H. Wade, Toronto; G. W. Clemons, St. George; C. W. Yapp, Brantford; H. A. Foulds, Brantford.

Committee on Cattle.—John I. Hobson, J. C. Snell, G. W. Clemons, C. W. Yapp, and S. Suddaby, Brantford.

Committee on Sheep.—James Tolton, John Jackson, Abingdon; D. G. Hamner, Burford; E. B. Eddy, Brantford; and H. A. Foulds.

Committee on Swine.—G. B. Hood, Guelph; S. Suddaby, J. E. Brethour, Guelph Green, Fairview; Thomas Teasdale, Concord.

Dairy Committee.—G. E. Day, Guelph; H. Wade, G. W. Clemons, R. G. Murphy, Elgin; J. M. Shuttleworth, Brantford.

Poultry Committee.—E. B. Eddy, George Wright, Brantford; and J. C. Montgomery, Brantford.

Reception Committee.—John I. Hobson, Mayor Raymond, Harry Cockshutt, Brantford; Douglas Reville, Brantford; T. H. Preston, Brantford; Arthur Johnston, Greenwood; Frank Cockshutt, Brantford; Joseph Stratford, Brantford; H. Wade, and F. W. Hodson.

Superintendent of Building.—D. G. Hamner, Burford.

Official Reporter.—R. Gibson, Delaware.

GENTLEMEN IN CHARGE OF JUDGES AND RINGS.

Cattle.—John I. Hobson and C. W. Yapp.

Sheep.—Jas. Tolton and John Jackson.

Swine.—G. B. Hood, F. A. Metcalf, Brantford, and S. Suddaby.

Dairy.—G. W. Clemons.

JUDGES.

Cattle.

Thos. Crawford, M.P.P., Toronto and James Smith, Brantford Reserve, T. G. Colwill, Whitby. Referee, J. T. Gibson, Denfield.

Sheep.

Cotswolds.—Hardy Shore, Glanworth; Jas. Gaunt, St. Helen's Reserve, E. Parkinson, Eramosa.

Lincolns.—E. Parkinson, Eramosa; Jas. Gaunt, St. Helen's Reserve, Hardy Shore, Glanworth.

Leicesters.—James Gaunt, St. Helen's; E. Parkinson, Eramosa Reserve, Hardy Shore, Glanworth.

Shropshires.—Geo. Allen, Allenton, Ill.; Henry Arkell, Teeswater Reserve, J. C. Duncan, Lewiston, N.Y.

Southdowns.—J. C. Duncan, Lewiston, N.Y.; Geo. Allen, Allenton, Ill. Reserve, Henry Arkell, Teeswater.

Oxfords.—Henry Arkell, Teeswater; J. C. Duncan, Lewiston, N.Y. Reserve, Geo. Allen, Allenton, Ill.

Horned Dorsets and Hampshires.—Same as Oxfords.

Grades.—Geo. Allen, Allenton, Ill.; Hardy Shore, Glanworth Reserve, Henry Arkell, Teeswater.

Sweepstake.—James Tolton, Walkerton.

Swine.

Chester Whites, Poland Chinas, Duroc Jerseys, and Grades.—J. G.

Snell, Snelgrove; G. B. Hood, Guelph Reserve, C. W. Yapp, Brantford.

Berkshires, Yorkshires, Suffolks and Essex, and Tamworths.—Thos. Teasdale, Concord; W. H. Jones, Mt. Elgin Reserve, G. B. Hood, Guelph.

Sweepstake Prizes to be awarded by the acting judges in both classes.

Bacon Sections.—James Leach, of the Wm. Davies Packing Co., Toronto Reserve, C. W. Yapp, Brantford.

Dairy.

G. E. Day, Guelph, in charge of the dairy test; and G. E. Day and J. C. Snell, London, judges for conformation.

Reduced passenger and freight rates have already been arranged for from all points in Ontario. The prize list has been increased by about \$300, and it is expected that the show will be the best that has yet been held.

FARMERS' INSTITUTE EXCURSIONS.

South Waterloo Farmers' Institute will hold their annual excursion to the O.A.C., Guelph, on Saturday, June 11th, by the Grand Trunk Railway. Tickets at reduced rates will be issued at all stations on the main line within the limits of the district, and on the W.G. & B. and Elmira branches. Particulars may be obtained from the president or vice presidents, Messrs. Wm. Slater and Munro Shantz, or from Mr. And. Chisholm, secretary, Galt, or Mr. C. D. Brown, assistant secretary, Haysville.

LIVE STOCK AT THE TRANS-MISSISSIPPI EXPOSITION.

Now that it has been definitely settled that cash prizes will be given for live stock at the Trans-Mississippi Exposition to be held at Omaha, Nebraska, this year, breeders will take more interest in the show. An appropriation not to exceed \$35,000 has been provided for prizes for live stock. The prize list has not been issued yet, but the following proposed classification will be of interest to some of our breeders who may contemplate making exhibits. The show will be an important one, representing as it does that portion of the United States west of the Mississippi, and it will be to the advantage of our breeders, especially those in the beef-cattle line, to make exhibits. We would like to see Ontario well represented:

BEEF-CATTLE CLASSES.

Bull, three years or over. Bull, two years and under three. Bull, one year and under two. Bull, under one year.

Cow, three years and over. Heifer, two years and under three. Heifer, one year and under two. Heifer, under one year.

Herd, consisting of one bull, two years and over, one cow, three years or over, one heifer, (Continued on page 352.)

Publishers' Desk.

Little's Sheep Dip.—Every owner of sheep should use the original non-poisonous fluid dip manufactured by Mr. Robert Wightman, druggist, of Owen Sound. There is no better preparation in the market.

Secrets of Success.—The advertisement of Mr. H. DeWeese, "The Gilt-Edged Farmer," of Dayton, Ohio, calls attention to the book published by him containing valuable information at a price within the reach of all, \$1.25.

Keeping Accounts.—The account-books designed by Mr. Thos. J. Dillon, of Charlottetown, P.E.I., will be found very useful to cheese factories and their patrons. Every patron needs his milk pass-book to enable him to know exactly what results he is ob-

taining from the product of his cows, and secretaries of cheese and butter factories can hardly afford to do without them. See Mr. Dillon's advertisement in this issue.

Warning Re Windmills.—Goold, Shapley & Muir Co., Limited, Brantford, Canada, manufacturers of galvanized steel windmills, hereby notify the public that they hold Canadian patent No. 43143 for roller and ball bearings on windmills, and that they will take vigorous means to protect their rights under this patent against any infringement. This applies to both the manufacturer who makes a windmill infringing this patent and to the purchaser and user of such a windmill. They alone in Canada have the lawful right to make and sell windmills fitted with these bearings.

The Wilkinson Plough Co.—On the front cover of this issue will be found a very attractive advertisement of the Wilkinson Plough Company of Toronto. The implements made by this firm are well known to most of our readers to whom the motto, "They last twice as long," is as familiar as a household word. Those who have had business dealings with the company will readily admit that the motto contains no empty boast, as the management never permit any exaggeration of the merits of their manufactures, and assert nothing which is inconsistent with actual facts.

The Lick Butter Package.—These packages are being used extensively by dairymen and farmers for shipping butter to the large cities and for the usual market purposes as well. They are cheap, odorless and convenient for shipping. Will carry butter any distance in perfect safety and keep it in a splendid condition. They are exceedingly light in weight and a great improvement over the packages formerly in use, and save handling to any extent. This company also make cases capable of holding from 50 to 60 lbs. at the small cost of from 10c. to 15c. each. Every farmer should send for a sample butter package, which will be sent free. See the advertisement in another column.

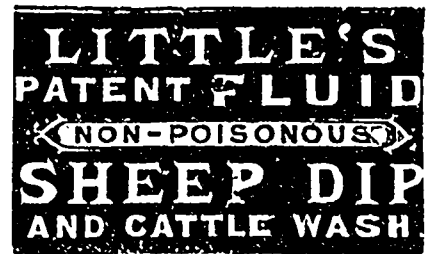
The Wortman and Ward Implements.—One of the largest and most successful firms of implement manufacturers in the province is the Wortman and Ward Manufacturing Co., Limited, of London, Ont. By means of careful attention to every detail, the employment of the most skilled mechanics and of the very best class of materials they have gained a very high reputation for quality, durability and the perfection of construction. Amongst the various implements made by them are spade and disk harrows, iron pumps, the "Daisy" churn, root pulpers and slicers, feed grinders, corn and root cultivators, ensilage cutters, horse, hay and grain unloaders, horse tread powers, pea harvesters, corn shellers, washing machines, thimble skeins and job castings. Those interested in any of these manufactures should obtain a copy of the firm's catalogue.

Stock Notes.

Mr. F. W. TAYLOR, of Wellman's Corners, advertises some excellent young calves for sale. As they are sired by Douglas of Loudoun (1284), and are from deep milking dams, they should prove highly satisfactory to anyone desiring to procure first-class stock.

Mr. T. A. COX, of Brantford, informs us that he has recently made a number of important sales of Berkshires to Manitoba parties for show purposes, the intention being to exhibit the individual animals sold at Western Canada's Great Industrial Fair at Winnipeg in July. The following are some of the sales made: To Mr. McGill, of Nepawa, Man., a pair of aged swine; to Mr. McKenzie, of Portage la Prairie, a yearling boar; to Mr. Brown, of the same place, a boar and sow, and he has also sold a very fine sow to Hon. Thomas Greenway, Premier of Manitoba. He says: "My sales of purebred poultry and eggs have been unusually numerous this season, orders having been received from all parts of the Dominion. I have had splendid results from my stock and poultry advertising in FARMING, and consider it one of the very best advertising mediums in Canada."

Mr. D. H. RUSSELL, of Bonnie Burn Stock Farm, Stouffville, writes: My stock has come through the winter in better shape than ever before, winter being short we had abundance of feed and we have just turned out on grass. We sold all our young bulls (being six) and some cows during January, February, and the first part of March at an advanced price above last year. My young stock bull Kinellar and, sired by Kinellar Sort (imp.) is going on improving immensely, and is going to make a fine thick mossy fellow. My spring calves are coming strong, and are improving very rapidly with two cows to calve yet. My Berkshires are also doing well; have some splendid young ones to offer soon. My Shropshires are of the right type—thick, blocky and well developed sheep, and have done me good service this spring; have got through without losing a lamb.



The Original

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

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

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

Prevents the attack of Warble Fly.

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

No Danger, Safe, Cheap, and Effective.

BEWARE OF IMITATIONS.

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

Sold by all Druggists. Send for Pamphlet

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

A RELIABLE OFFER.

HONEST HELP FREE TO MEN.

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

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

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



For Dairy or Table Use

IT IS UNEQUALLED.

Salt on the Farm

for wire worm, joint worm, army worm and all insects that destroy crops. Salt is the best insecticide. It is also a fertilizer.

TRY IT.

R. & J. Ransford CLINTON, ONT.

MARKET REVIEW AND FORECAST.

Office of FARMING, 44 and 46 Richmond street W., Toronto, June 6th, 1898.

There seems to be renewed activity in nearly all lines of trade. Retail merchants are purchasing very largely for the fall trade. Confidence in business circles seems to be fully restored, credit is more easily obtainable, and remittances and payments have not been as good for years. A great deal yet depends on the crop prospects, though late reports indicate good crops in all parts of the Dominion.

Wheat.

The wheat "corner" seems to have collapsed during the week, and values are now getting down to a legitimate basis. Those who were confident that Leiter would be able to carry his corner through till harvest are disappointed. We have contended all along that there was nothing in the situation as far as supply and demand were concerned to warrant the high values that have been maintained for weeks past.

The London market is reported as being decidedly weaker, with a loss of 4s. to 4s. 6d. per quarter. The break in the boom has upset legitimate trading, and English and European dealers have stopped buying for the time being. The wheat in sight is now quite sufficient to last till after the new wheat is harvested.

Barley and Oats.

The oat market here is easier and prices have receded from over 33c. to 31c. and 30c. for white west. Old country prices are lower in spite of the fact that stocks are light.

Rye and Buckwheat.

At Montreal receipts of rye are increasing and the market is quiet at 66c. to 67c. Here the market is steady at from 60c. to 61c. west. Buckwheat is reported steady at from 47c. to 48c. west. At Montreal supplies are light and the market quiet at 52c. to 53c.

Peas and Corn.

The London market for peas is quiet and a decline of 1s. per quarter is reported. This, however, fails to bring much new business as prices are considered too high. The Montreal market is dull and easier at 66c. to 67c. afloat. Here the market is also somewhat dull and easier at 57c. to 58c. west.

The corn market here has been fairly steady during the week at about 35c. for Canadian and 42c. to 43c. for American at Toronto. Corn is steady at Montreal at 40c. to 41c. afloat. It seems to be very little affected by the slump in wheat.

Bran and Shorts.

Shorts here are reported scarce and the demand active and firm at \$15 west towards

the end of the week. Bran is somewhat easier at about \$10.50 west. At Montreal Ontario bran is 50c. lower and is quoted at \$13 to \$13.50; shorts, \$14.50 to \$15.50.

Eggs and Poultry.

London and Liverpool egg markets are steady. The recent low prices have stimulated consumption and an advance of 6d. per long hundred (120) is the result. The Montreal market is practically about the same as last week's quotations, though an increase in receipts has created an easier feeling. Prices range from 10c. to 10 1/2c. for choice and 9c. to 9 1/2c. for seconds. The market here was easier towards the end of the week and 10c. was the ruling figure for new laid eggs.

The demand for poultry is slow though the market is steady at 7c. to 8c. for turkeys and 50c. to 65c. for chickens.

Hay and Straw.

The market for baled hay is somewhat dull with quotations at \$8 to \$8.50 for cars on track. Baled straw is quiet at \$4.50 on track. The Montreal market is also quiet at \$11.50 to \$12 for No. 1 and \$10 to \$10.50 for ordinary No. 1; No. 2 is quoted at \$9 to \$10. Straw is selling in car lots on track at \$4 to \$5.

Wool.

The wool market is in a somewhat unsatisfactory condition, owing, perhaps, to the weather and to the fact that the present price is lower than it has been for four years past; the receipts of new clip wool have not been very large as yet. The duty of 12 cents per pound, imposed by the United States, is almost prohibitive and is equal to 75 per cent. of the value of the wool in Canada. The price now offered for new clip wool is 4c. to 5c. less than at this time last year.

Cheese.

The present weak condition of the cheese market is a matter of surprise to many. A month ago, when this season's trade opened up, it was reported that old stocks were pretty well consumed, and that the present season would start out with a clean sheet. But old stocks have accumulated very faster during the last month than those in the trade expected.

A special cable to The Trade Bulletin dated London, Eng., June 2nd, is as follows: "The cheese market continues weak, and prices have declined 1s. further; offers from your side made freely at 36s. here and 35s. in Liverpool. At these low figures it is surprising that all offerings are not snapped up. The opinion is that as soon as quality improves, and we get fine grass goods, better values will rule." At Montreal there seems to be a better demand, and several sales of finest Western goods, white and colored, are reported at 7c. to 7 1/2c.

Butter.

According to late cable reports the London market has taken a turn for the worse, which was quite unexpected after the improved tone of a week ago. There have been large receipts of home supplies, which have caused a drop of 1s. per cwt. The Liverpool market is reported to be in a worse condition, and values there have gone down 4s. 6d. to 5s. per cwt. It is hoped, however, that this relapse is only temporary. The Montreal market is now feeling the effects of the decline abroad, and dealers find it difficult to get 16c. to 16 1/2c. from shippers. A large quantity of butter has been purchased during the week at the creameries at 16c. f.o.b. Sales of choice creamery have been made at Montreal during the week at from 16c. to 16 1/2c. The Toronto market is fairly steady at 17c. for prints and 16c. for tubs. Dairy butter is selling at from 12c. to 13c. for choice and from 11 1/2c. to 12c. for store-packed tubs.

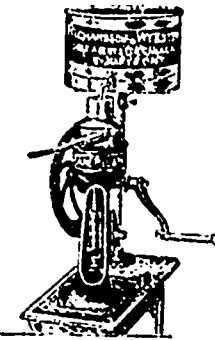
\$70.00....

FOR THE NO. 1

American Cream Separator

Capacity 150 lbs. per hour.

No. 2, 350 lbs. per hour, \$100.00
No. 3, 600 lbs. per hour, \$135.00



THE MOST COMPLETE AND NEAREST PERFECTION OF ANY CREAM SEPARATOR ON THE MARKET TO-DAY.

Get our Catalogue of Prices, Illustrations and Testimonials. Good inducements offered in new localities where our machine is not introduced. AGENTS WANTED.

RICHARDSON & WEBSTER.

ST. MARY'S, ONT.

Cattle.

The cattle situation is practically unchanged, though increased receipts in the west caused beef steers to drop 10c. to 15c. last week. At Cincinnati the market is firmer for butchers' cattle. The cable reports show a quieter feeling on the London market, and holders are more anxious to realize, prices being down 1d. per stone. The lack of space on ocean steamships is still interfering with the export trade.

Export Cattle.—The demand is only steady, and prices were ruling a little weaker on Friday's market at from 3 1/4c. to 4 1/4c. per lb. Some few fancy head sold for about \$4.30 per cwt.

Butchers' Cattle.—There were light offerings early in the week, and prices for the best cattle were from \$3.75 to \$4.15 per cwt. On Friday's market butchers' cattle were a little slow, and choice only brought from 3 1/4c. to 4c. per lb. Common to medium stuff brought from 3c. to 3 1/2c. per lb.

Bulls.—There is a fair demand for bulls for export at from 3 1/4c. to 3 3/4c. per lb., feeding bulls being from \$3 to \$3.30 per cwt.

Stokers and Feeders.—The market was not quite so brisk on Friday's market as it was earlier in the week, owing to the Buffalo buyers not being so active. Prices ruled from \$3.75 to \$3.90 per cwt.

Calf.—Are quiet at from \$3 to \$5 per head. Fancy veal would bring more.

Milk Cows and Springers.—The market for these was slightly weaker on Friday at from \$22 to \$42 each.

Sheep and Lambs

Supplies have been light at Buffalo during the week and prices have ruled 40c. to 50c. higher for lambs. It is not expected, however, that the rise is permanent as the conditions east and west do not seem to warrant it. The London market is about the same with a slightly easier feeling owing to large supplies from Argentina. The market here seems quiet and demand slow. Yearlings are selling at from 4 1/2c. to 5c. Spring lambs are reported dull at \$2.50 to \$4 each. Sheep for export and butchers bring about 2 1/2c. for bucks and 3 1/2c. to 4c. for choice mutton.

Hogs.

Receipts at Western markets show large decreases during the week. The quality continues good, and prices generally are about 5c. per cwt. higher. The demand at Buffalo has been stronger and prices better, owing to less receipts. The feeling is a little weaker



The Maple Leaf Churn

EASIEST AND BEST

Ask your dealer for it, or send direct to the manufacturers,

WILSON BROS. COLLINGWOOD, ONT.

here, and the top figure for the best singers is 5c. weighed off the cars. A few fancy lots brought a little higher. Light and thick fat hogs bring about 4 1/4c. per lb. Stags are dull at 2 to 2 1/2c.

(Continued from page 351.)

two years and under three, one heifer, one year and under two, and one heifer, under one year old.

Young herd, consisting of one bull and four heifers, all under two years, heifers bred by exhibitor, bull may be purchased.

Four animals of either sex under four years, the get of one sire.

Two animals of either sex, the produce of one cow.

Sweepstakes. Bull of any age. Cow of any age.

DAIRY CATTLE CLASSES.

Bull, three years and over. Bull, two years and under three. Bull, one year and under two. Bull under one year.

Cow, four years and over. Cow, three years and under four. Heifer, two years and under three. Heifer, one year and under two. Heifer, under one year.

Herd, consisting of one bull, two years old or over, one cow, four years or over, one cow, three years and under four, one heifer, two years and under three, one heifer, one year and under two, one heifer under one year.

Young herd, consisting of one bull and four heifers, all under two years, heifers bred by exhibitor, bull may be purchased.

Four animals of either sex, the get of one sire. Two animals of either sex, the produce of one cow.

Sweepstakes.—Bull of any age. Cow of any age.

SHEEP CLASSES.

Ram, three years or over. Ram, two years and under three. Ram, one year and under two. Ram, under one year.

Ewe, three years or over. Ewe, two years and under three. Ewe, one year and under two. Ewe, under one year.

Rain and three ewes, all over two years. Pen of five ewes, two years or over, bred by exhibitor.

Pen of two rams and three ewes, under two years, bred by exhibitor. Sweepstakes.—Ram of any age. Ewe of any age.

SWINE CLASSES.

Boar, two years or over. Boar, one year and under two. Boar, six months and under one year. Boar, under six months.

Sow, two years or over. Sow, one year and under two. Sow, six months and under one year. Sow, under six months.

Boar and three sows, over one year. Boar and three sows, bred by exhibitor. Boar and three sows, under one year.

Boar and three sows, under one year, bred by exhibitor. Four swine, get of same boar, bred by exhibitor.

Four pigs, under six months, produce of same sow. Sweepstakes.—Boar of any age. Sow of any age. Boar of any age, bred by exhibitor. Sow of any age, bred by exhibitor.

.. Windmills ..

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

Painted or Galvanized.

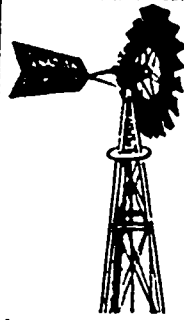
MERITS:

Power Strength Durability

Full line of Pumps, Tanks, Grinders Hay Tools

Woodward Watering Basins

No farmer should be without them.



Power and Pumping.

Ont. Wind Engine & Pump Co. Limited

LIBERTY ST. - TORONTO

New Metal Roofing...



Patent Safe Lock Shingle.



Cut showing Top and Bottom Lock.



Cut showing Side Lock.

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

ALL PEDIGREE STOCK-BREEDERS

Should keep in touch with Herd, Flock and Stud movements by reading the

FARMER AND STOCK-BREEDER

The best, most complete and attractive Agricultural and Live Stock newspaper. Enlarged to 36 pages weekly; frequent special issues 40 to 48 pages. Illustrations are a specialty, each number containing many of the leading prize-winners, etc. Brilliant and practical articles on the Farm, Dairy, Horses, Cattle, Sheep, Pigs, Poultry, Veterinary, etc.

Unequaled as a medium for advertisements intended to reach the best class of breeders and farmers throughout Europe.

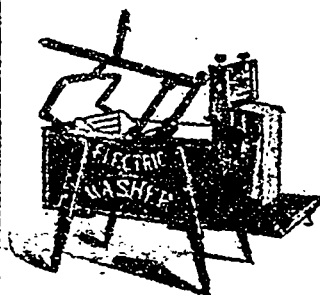
Subscription, postpaid for one year, \$2.50

Intending purchasers of British Purebred Stock should send us particulars of their requirements, large shipments and extensive connections having given our staff of expert buyers that experience which is indispensable in live stock transactions.

Enquiries welcomed. Address—
FARMER AND STOCK-BREEDER, London, Eng

THE ELECTRIC WASHER

The Leading Machine—Exceeds all Others



The most complete and scientific machine, operated by a double-action lever movement. Very light running. It has a uniform rubbing motion.

Made from the best of material, and guaranteed not to leak. N.B.—Agents wanted. Territory for sale.

BENMENS & SON, 174 York St., HAMILTON

Advertisers can best reach 100,000 farmers

in the Maritime Provinces by advertising in the

Co-Operative Farmer

Sussex, N.B. a neatly printed, sixteen-page semi-monthly, and the only exclusively agricultural paper in that part of the Dominion. Write to the publishers for sample copy and adv. rates. Address
CO-OPERATIVE FARMER, SUSSEX, N.B.

Rock Salt For Horses and Cattle

70c. per 100 lbs.; 500 lbs. for \$3.00 here. CASH WITH THE ORDER.

TORONTO SALT WORKS, Toronto, Ont.

Collie Pups

FOR SALE—The best blooded collie pups in America from registered imported stock. All good workers; so toy collies, but the genuine collie. Very cheap.

PHILIP HART, Belleville, Ont.

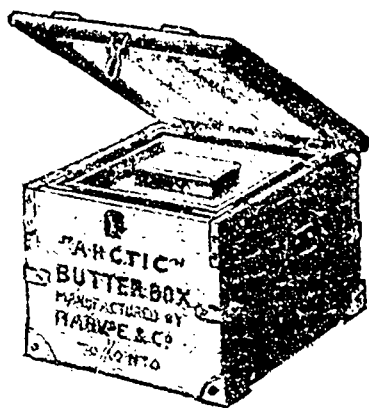
Farmers' Binder Twine and Agricultural Implement Manufacturing Co., Limited. (BRANTFORD, ONTARIO).

WE think it necessary to immediately advise you to refute the treacherous and damnable reports that are being put out and circulated against this co-operative movement of farmers by our enemies. Some are stating that this mill is closed down, others that we are pleading with the Government to reinstate the duty on binder twine; others that raw material has so tremendously advanced, that the present moment is the correct time to buy twine requirements for the harvest of 1908; while still others are claiming that the great American combine must absorb this enterprise, as it will be impossible for us to manufacture twine on a free trade basis. We have simply to say, in answer to all these diabolical statements, that there is not a single word of truth in them; the mill is being run three hundred days in the year to its utmost capacity; we have requested the Government not to reinstate the duty on twine; and we are just now manufacturing a quality of pure Manila 650 feet long, known as our Sampson brand. It and our splendid Red Star (the farmer's pride) are superior to anything that has ever yet been placed on the Canadian market. As in the past, we will again shortly set prices on binder twine for the coming harvest at a fraction above actual cost of production, that all other manufacturers and dealers will have to follow. All we now ask, after five years of honest and determined endeavor in the interest of agriculturists of Canada to hold this Company as an independent concern, is that they, the farmers, give us their continued loyal support. Order our twine easily from our appointed agents, listen to no statements made by the enemy, and remain truly loyal in not purchasing one single pound of American or other twine in opposition to us until they inform themselves positively that every ball of this Company's twine is exhausted. Small samples and prices will be sent you in the near future, or can be had on application. See copy of a letter enclosed that appeared in *The Farmers' Weekly Star*, February 24th, for your careful perusal. We specially request you, as an intelligent man, to stand with your people in refuting the importance of this company getting their undivided individual support unshakable, and to understand what our being driven from existence through indifference or opposition on their part would mean to them in the future. The Salt Act would simply be reported a hardship.

FREE TRADING DUTY ON BINDER TWINE! CAN YOU AFFORD TO PAY MORE FOR YOUR TWINE? CAN YOU AFFORD TO PAY MORE FOR YOUR TWINE? CAN YOU AFFORD TO PAY MORE FOR YOUR TWINE? CAN YOU AFFORD TO PAY MORE FOR YOUR TWINE? CAN YOU AFFORD TO PAY MORE FOR YOUR TWINE?

See copy of a letter enclosed that appeared in *The Farmers' Weekly Star*, February 24th, for your careful perusal. We specially request you, as an intelligent man, to stand with your people in refuting the importance of this company getting their undivided individual support unshakable, and to understand what our being driven from existence through indifference or opposition on their part would mean to them in the future. The Salt Act would simply be reported a hardship.

Faithfully yours,
JOSEPH STRATFORD.



Harvie's "Arctic" Butter Shipping Box

Made of spruce lumber, with galvanized iron ice tank, malleable iron hinges, handles, hasps, and corner plates, almost indestructible. Made in sizes to hold

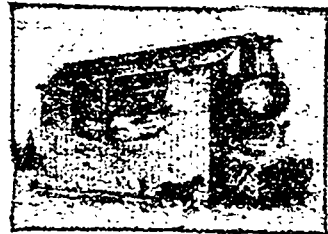
40 lbs. in Summer, or 48 lbs. in Winter	\$3.00.
50 " " " "	\$3.50.
60 " " " "	\$4.00.
100 " " " "	\$4.50.

HARVIE & CO.

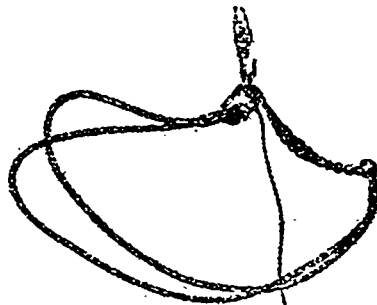
223 QUEEN ST. EAST. - TORONTO.

BUCHANAN'S (Malleable Improved) PITCHING MACHINE

For unloading hay and all kinds of loose grain.



Unloads on either side of barn floor without changing car. No climbing necessary. Malleable iron cars. Steel Forks. Knot Passing Pulleys. Will work on stacks as well as in barns. Satisfaction guaranteed.



The Common-Sense Sheaf-Lifter

Works in connection with Pitching Machine, and is the most complete apparatus ever offered to the public for pitching sheaves. Sheaves left in the mow just as they come from the load.

RESPONSIBLE AGENTS WANTED

Circulars, Prices and Terms on application to
M. T. BUCHANAN, Ingersoll.

DO YOU KNOW

What your cows are doing? Every factory should have

DILLON'S

Milk Test Book

Secretaries of cheese and butter factories will find that Dillon's Improved Milk Book Combined with the Milk Tester and the Dairyman's Pan. Books.

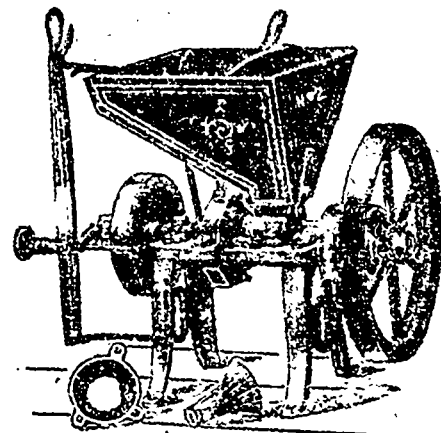
ARE THE BEST AND CHEAPEST

For sale by all Dealers in Dairy Supplies.

Thos. J. Dillon

Charlottetown, P.E.I.

A Double Grinder..



for grinding corn on the cob as well as all sorts of small grain—saves its cost in a short time. The larger sizes are great money-makers in the butter-factories and grist mills.

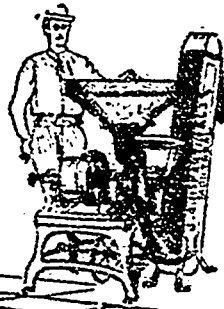
WE MANUFACTURE ALSO

Tread Powers, Threshers, Hay Presses, Feed Cutters, Circular Saw Machines, etc.

Matthew Moody & Sons

TERREBONNE, QUE.

"LITTLE GIANT" GRINDING MILL



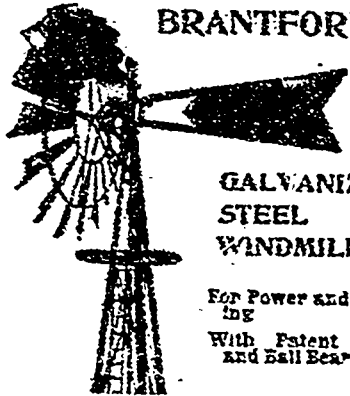
One of the best and cheapest mills in the market, possessing qualities which no other mill of its kind has.

We also make mills to grind corn and cob in the ear, and windmills geared to wood or steel. Also pumping.

Send for circulars and prices.

J.A. McMARTIN & CO., 14 St. George St., Montreal

BRANTFORD



GALVANIZED STEEL WINDMILLS

For Power and Pumping With Patent Roller and Ball Bearings



Makers of the highest running and best constructed Galvanized Steel Windmills and Rollers made.

Write for Illustrated Circulars.



BRANTFORD CAN.

The Backbone

of a Farmer's Implements is the reputation of the manufacturer.

Massey-Harris Company

not only make machines which have established a name the world over, but they are a Canadian company.

MASSEY-HARRIS CO., LIMITED
TORONTO

ULRICH'S ENSILAGE Seed Corn

This Celebrated Corn is Sold all over Canada.

- Giant Prolific,
- Mammoth White,
- Red Cob
- Yellow Dent,
- Improved Leaming.

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

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

CREAM . . . SEPARATORS

THE ALEXANDRA
Hand and Power. Capacity 160 to 2,000 lbs. \$50 to \$350.

THE MELOTTE
Hand Style only. Capacity 330 to 850 lbs. Price \$100 to \$185.

Up-to-date Dairy Machinery and Supplies.

AGENTS WANTED.
R. A. LISTER & CO., Ltd.,
18 St. Maurice Street, MONTREAL.

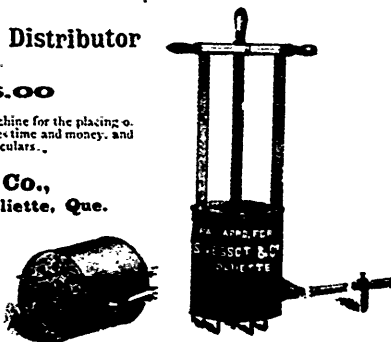
The Vessot Fertilizer Distributor

Patent applied for.
PRICE, \$5.00

The simplest and most effective hand machine for the placing of chemical fertilizers before planting. Saves time and money, and will pay for itself in two days. Write for circulars.

S. Vessot & Co.,
Joliette, Que.

Use no other grinder than the "Joliette."
We are the sole manufacturers.



Common-Sense Manuring

Extract from a letter by Digby Caley, Esq.:

"I was much interested at the result of your experiments in trying to arrive at the proper amount of nitrogenous manure necessary to reproduce correct proportion of grasses amongst

THE LUXURIANT CLOVERS
ALBERTS' THOMAS-PHOSPHATE POWDER
HAD CALLED INTO EXISTENCE."

"I congratulate and compliment you most heartily on what you have already accomplished and demolished, and I consider you have conferred a great public benefit to agriculture generally by having afforded such convincing proofs of what can be done by the liberal use of

ALBERTS' THOMAS-PHOSPHATE POWDER."

WALLAGE & FRASER

Canada Life Building
TORONTO

ST. JOHN, N.B.

Ask for Eddy's

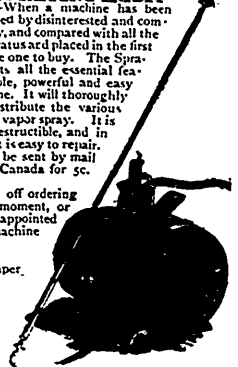
when you order matches. Then you will be sure of having the best.

FORM A SPRAYING HABIT - IT PAYS

When a machine has been thoroughly tested by disinterested and competent authority, and compared with all the best rival apparatus and placed in the first rank, it is a safe one to buy. The Spramotor represents all the essential features of a durable, powerful and easy working machine. It will thoroughly agitate and distribute the various mixtures in a vapor spray. It is practically indestructible, and in case of accident is easy to repair. The valves can be sent by mail to any part of Canada for 5c. postage.

Do not leave off ordering until the last moment, or you may be disappointed in getting the machine promptly.

Mention this paper.



CERTIFICATE OF OFFICIAL AWARD:

This is to certify that at the contest of Spraying Apparatus held at Grimby, on April 2nd and 3rd, 1896, under the auspices of the Board of Control of the Fruit Experimental Stations of Ontario, in which there were eleven contestants, the SPRAMOTOR, made by the Spramotor Co., London, Ont., was awarded FIRST PLACE.

H. L. HURT, Judges.
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