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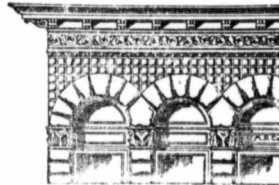


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The Farming World

For Farmers and Stockmen

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Our Cheese Trade in Danger



At the annual convention of the Eastern Ontario Dairymen's Association a report of which appeared in last week's issue, several statements were made regarding the cheese industry, and the quality of Canadian cheese that our dairymen should take into their most serious consideration. A couple of the leaders in the export trade made the startling statement that the reputation of our cheese had gone back five years. To-day the Englishman is enquiring what is the matter with Canadian cheese, that it does not keep as well as it did a few years ago. Surely, if these statements are correct, and no one present expressed a doubt as to their accuracy, we have reached a most serious state of affairs in connection with our most important industry, and one that should stir up every dairyman to do his utmost to remedy matters.

But what has been the cause of this deterioration in quality? Several conditions in connection with the manufacturing and shipping of cheese came out in the discussion at the convention, to which a large share of this deterioration may be ascribed. Notably among these is the practice of many factories of shipping their cheese too green. In a number of cases cheese have been known to have been shipped out of the factory when only a couple of days old, and one or two instances are known where cheese were shipped when only twenty-four hours out of the hoops. Under such conditions how is it possible to supply our export trade with the finest quality of cheese? It can't be done, and factories which adopt such practices are not supplying their customers with cheese, but with raw curd, and should be fined for selling goods under false pretenses.

The explanation of this condition of affairs seems to be this: A few years ago there was an urgent demand for a more meaty and softer quality of cheese instead of the rough, harsh, dry stuff being made at that time. To meet this demand, many makers have, perhaps, gone to the other extreme, and are turning out a quality of cheese deficient in keeping qualities. And, perhaps, the makers are not so much to blame as would appear at first sight. To make a soft, meaty cheese, it is absolutely necessary that the maker should be able to control the temperature of the curing-room. In the majority of our factories the curing-rooms are in such bad shape that if a cheese is not made firm and dry, it will go off flavor quickly. This has resulted in makers where curing conditions are bad, using a large amount of starter, so as to induce the milk to work quickly and the cheese to break down rapidly. To keep such cheese in a dilapidated old curing-room, with

the temperature up near 90 degrees, would mean a serious loss to the factory, and the only salvation is to ship them as quickly as possible. This, as we have pointed out, has been largely practised, and the cheese, while passing inspection on this side, would land in Great Britain in a soft, mushy condition, having no keeping qualities whatever.

No cheese should be allowed to leave a factory till it is at least two weeks old. But to keep cheese in the average curing-room for that length of time during the hot weather, unless they are made stiff and firm, is practically impossible. To get at the root of this matter, then, there must be a renovation of the curing-rooms of probably three-quarters of the cheese factories of this province. While this renovating process is going on, makers should use judgment and common sense in regard to making. It is a foolish, and at the same time a rascally piece of business to ship curd instead of cheese under any conditions. A starter is all right in its place, but when its use is abused, as has been shown in the case of makers rushing through the business too quickly, then it had better be discarded altogether, and the old style of ripening adopted.

Another rascally practice as brought out at the convention is that of getting rid of a lot of old, rancid cheese by grinding it up and putting it in the centre of good cheese. A maker that would do that should be dismissed on the spot. There is no room for him in the business, and he had better seek a living elsewhere. One can hardly credit that such a thing has been done. But it is only too true, and to the lasting disgrace of the maker and the patrons who countenanced such action. Any maker is liable to have a batch of cheese occasionally that may be a little off, and the best way of getting rid of them is to label them as such, and sell them for what they are worth as culls. A half-a-dozen "culls" distributed through a shipment may cause serious injury to a factory's reputation; whereas, if they were especially marked and sold separately from the regular shipment, would go forward without any comment whatever.

The conditions of the past season certainly show that we are not getting any nearer perfection in our cheese-making methods. The too numerous complaints in regard to last year's goods indicate that there is a screw loose somewhere, and that a special education of the patron, the maker, and everyone connected with the business in better methods, is urgently needed. There are no indications that the quality of milk supplied the factories is improving very much, and that makers are as up-to-date and as skilful in their methods as the needs of the trade demand. As the Minister of Agriculture well said at Smith's Falls a week ago,

the time of the instructors employed by the dairying associations should not be taken up with milk inspection, but with instructing the makers and patrons. An instructor cannot do the two and do them well. Let the factories do their own inspection and prosecution of delinquent patrons, and leave the whole time of the instructors free for the work of education so much needed.

We have put these matters as strongly as we know how, in order that patrons, makers and manufacturers alike may see the necessity of providing effective remedies before the new season opens up. Improvement must be forthcoming from some source or the future of the industry will be in danger. We cannot afford to stand still, much less recede in our methods of working. Other countries are on the upward grade in regard to the quality of their dairy products, and Canadians must look to their laurels or their reputation for the finest cheese may be lost to them beyond recovery.

Our Live Cattle Trade

The fifth annual report of the export trade of the port of Montreal, published by "The Gazette" of that city, is a most valuable one. A comprehensive review of the live stock trade is given. Last year's cattle trade had one or two special features worthy of special mention. Early in the season came the order of the Imperial Government prohibiting animals from the Argentine entering any of the markets of Great Britain, which went into force on April 30th. Following this were other orders, but the one concerning Canadians most was that reducing the time in which cattle from Canada and the United States should be killed on arrival in England from ten to five days. Notwithstanding this it was generally conceded that the prohibition of all live stock imports from South America would boom values. Consequently shippers throughout Ontario became excited and rushed to the country in order to secure all the cattle they possibly could. The market naturally became strong and prices advanced until 5 1-2c. to 5 3-4c. per lb. were reached and dealers soon had their wants supplied. Navigation then opened up and by the time shipments arrived abroad values in the London market were up to 13 1-2c., showing an advance of 2 1-2c. to 3 1-2c. over the opening price of 1899, and this figure was fairly well maintained during the first three months of the season. During this period shippers made money, but when the sultry weather set in and supplies from other sources began to increase, the foreign markets generally took a sudden turn for the worse, and prices almost steadily declined for the remainder of the season, and closed at about the lowest point. Shippers are said to have lost all they made on their earlier shipments and more. Consequently the season closed unsatisfactorily and unprofitably for those who stayed in the business to the end.

The quality of the cattle shipped showed little improvement. In the early part of the season the quality of the cattle from Ontario was generally above the average of those that went out a year ago, but notwithstanding this fact the average price paid showed no advance as compared with 1899 as during the last two months of the season the class of stock shipped was not quite as good. There was also an active demand from American buyers for Canad-

ian cattle at times during the season, when high prices prevailed at Chicago, and it is estimated that between 10,000 and 15,000 head were shipped via American ports. The shipments of American cattle via Montreal showed a falling off of 6.068, the figures being 5,677 head for 1900, as against 11,745 head in 1899.

A feature of the cattle trade the past season has been the falling off in the demand from American buyers for Canadian stockers, and not half the business has been done along this line as was done a year ago. The North-West ranch cattle showed much better quality than a year ago, due, it is claimed, to the past winter being a more favorable one than for many years past for stock-raising, while the spring was particularly good for cattle grazing. But notwithstanding these good points a leading shipper of this class of stock claims that they do no good in the foreign markets. He commenced shipping about the first week in June, and the first cable received from London reported sales at 11 1-2c. to 12c., from which prices declined to 11c. About the end of July prices advanced again to 11 3-4c., but only to react again at the close of August to 10 1-2c., at which figure they remained till the middle of November.

The total number of cattle shipped last season was 92,180 head, of which 5,677 were American, shipped through in bond. These show an increase of 10,368 head, as compared with the total of 1899, and this increase is accounted for by the fact that 10,000 head more of ranch cattle were shipped than the year previous. The average cost per head in the country was \$60, making a total value of \$5,530,300, while the ocean freight on the same amounted to \$1,198,236, putting it on an average of \$13 per head, and the railway carrying charges at \$3.25 per head, is \$229,559. 15,000 tons of hay and 2,500 tons of feed were consumed on the ocean voyages, having a total value of \$190,000. This, including insurance, loading fees, etc., brought the total expenditure on the cattle up to \$7,645,703, which, with sheep included, made a grand total of \$7,872,149, showing an increase of \$1,146,167 as compared with a year ago. We will have more to say of the sheep trade later on.

The following table shows the total shipments of live stock from the port of Montreal for twenty-four years:

Year.	Cattle.	Sheep.	Horses.
1900	92 180	34 838	2,812
1899	81,804	58,277	4,739
1898	99 049	34,991	5,827
1897	117 237	60,638	10,051
1896	96 448	76,520	10,421
1895	94,972	210 667	13 303
1894	88 615	139 780	5,623
1893	81,322	3,743	1,660
1892	95 731	15,914	1,739
1891	109,150	32,042	.....
1890	123 136	43,372	.....
1889	85 670	59,334	.....
1888	60 504	60 504	.....
1887	64,631	64,631	.....
1886	63,932	63 932	.....
1885	61,947	61 947	.....
1884	57 288	57,288	.....
1883	49,090	49,090	.....
1882	28 358	28,358	.....
1881	27 536	27 536	.....
1880	41 730	41 730	.....
1879	21 626	21 626	.....
1878	15,963	15 963	.....
1877	6 940	6 940	.....

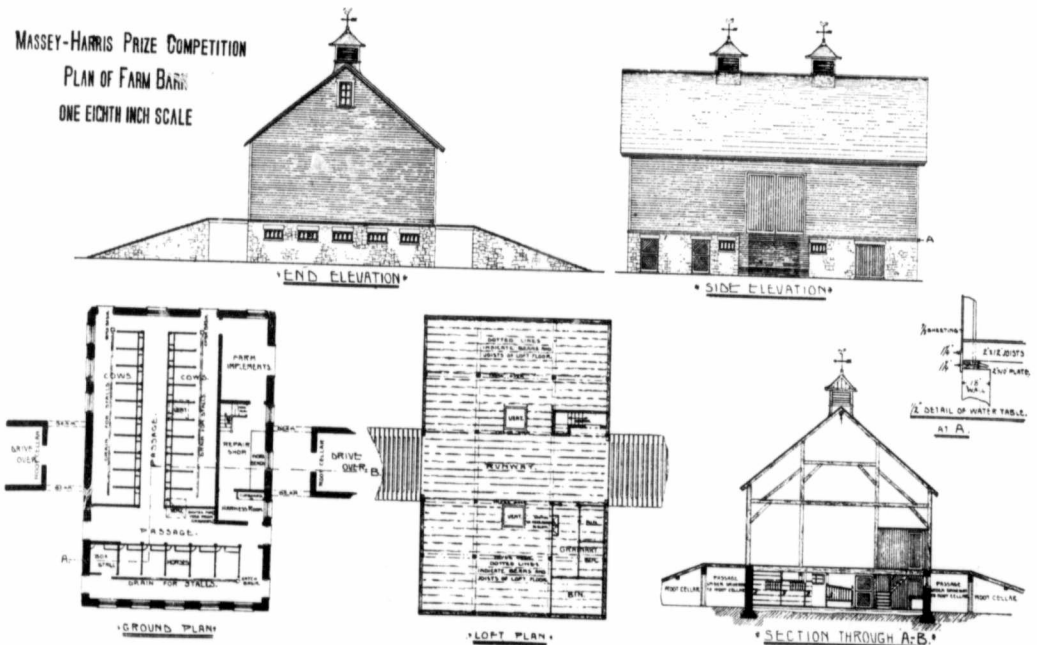
Western Dairymen Meet

The 34th annual convention of the Dairymen's Association of Western Ontario, which took place at London, Ont., last week, was a most interesting and profitable gathering. The attendance, however, was not as large as one would be led to expect from the amalgamation of the Makers' Association with the regular Association a year ago. While the makers were out in large numbers there were very few patrons of factories at the meeting. These are the individuals who are largely responsible for the quality of our dairy products in that they control the raw material, and it is a mistake not to put forth a big effort to get patrons of factories to attend.

The convention opened on Tuesday with the address of the president, which, in his absence, was read by the Hon. Thos. Ballantyne. 1900 had been the greatest year in the production of

year. The proportion of costs to be paid by the factories had been reduced from \$5 per visit to \$3 per visit, with \$2 per day for each extra day. An illustration station had been conducted at Milverton to carry on experiments in cheese-making under factory conditions; to show how an old factory could be fitted up to modern standards at a comparatively small cost, and to illustrate by practical use the methods of disposing of the washings on the most approved plan. At the request of the Agricultural and Dairy Commissioner, a selection of cheese was made from Western Ontario for the Paris Exposition, which brought a grand prize diploma to the Association. The special grant of \$750 made by the Ontario Government was applied to the work at Milverton and towards prizes and purses in connection with the winter dairy exhibition held during the convention. The assets and liabilities of the Cheese and Butter-makers' Association had

MASSEY-HARRIS PRIZE COMPETITION
PLAN OF FARM BARN
ONE EIGHTH INCH SCALE



Plan of Mr. John M. Watt's barn, which won the \$7 prize at the Western Fair, London, 1900, in the Massey-Harris Competition.

dairy products Canada has ever seen. The value of the exports from Montreal was \$2,500,000 more than any previous season. The bad flavor in cheese that gives the most trouble develops in cheese after it is made. This flavor was due to bacteria, and he urged the necessity of greater care to guard against contamination. He suggested that the Association prepare a set of rules to be posted in the factories, with a view to securing greater cleanliness.

The report of the directors noted the change in name from the Cheese and Butter Association of Western Ontario to the Dairymen's Association of Western Ontario, a more comprehensive title. The output being larger the year has been a more profitable one to makers. Both makers and patrons are to be congratulated on the year's business. The work of instruction had been carried on on similar lines to the previous

been assumed by the Association at the time of amalgamation, and a special committee appointed to carry on the work done by the makers' organization.

The secretary-treasurer's report was most satisfactory, showing a balance of \$1,073.69 on hand. The total receipts for the year were \$6,432.35, which was made up of a balance of \$1,037.37 from the year previous.

THE INSTRUCTORS' REPORTS.

The instructors, Messrs. James Morrison, Brantford; John Brodie, Mapleton; Geo. MacDonald, Bluevale; Archibald Smith, Strathroy, presented their reports of the year's operation. They dwelt upon the necessity of greater cleanliness and care in the manufacture and curing of cheese and the manufacture of butter. The bad flavor of cheese was attributed chiefly to lack

of care in ventilation and regulation of temperature in the curing-room. With reference to the purity of milk it was reported that instead of an improvement it was found more difficult each year to manufacture a fine quality of cheese, and some other means of compelling farmers to give more attention to this matter was necessary. One effective means suggested was for factories and creameries to refuse to accept milk which had been rejected by other factories. Complaint was also made that the Magistrates take too lenient a view of the very serious practice of supplying watered milk to the factories and creameries, which does not seem to be decreasing.

An interesting discussion followed on the reports, which was taken part in by J. N. Paget and Geo. H. Barr. It was shown that the patron is the important factor who should be educated. Every maker should secure the services of the instructor. The instructors should come together more and endeavor to make cheese along the same lines. The Association should devote more of its funds to educating the farmers. Prof. Dean gave four essentials to the production of good cheese:—(1) The patrons must deliver to the factory good, cool, clean milk; (2) the abolition of wooden floors and walls, which form a breeding ground for germs in factories; (3) the proper handling of starters by makers, and (4) the maintenance of a temperature not exceeding 70 in the curing.

Mr. C. P. Goodrich, President of the Wisconsin Dairymen's Association, who was one of the chief speakers at the convention, in a few words paid a high compliment to our dairymen when he stated that the farmers of Wisconsin turned with admiring eyes to Canada because of the high prices obtained for their dairy produce. Here the manufacture of fraudulent dairy products was rigidly suppressed. The Americans had sent out "filled" cheese that had ruined their reputation. He emphasized the importance of every factory paying for milk according to its quality.

TUESDAY EVENING SESSION.

Mr. G. E. Goodhand, Milverton, was the first speaker at the evening session, and spoke on cheese-making. He urged the proprietors of factories to take advantage of the annual meetings to talk to their patrons upon the essentials to success in cheese-making, especially with reference to the necessity of cleanliness. He combated the idea prevalent among makers that the business belongs to them, and contended that on the other hand it belongs particularly to the farmers who supplied the raw material. He suggested that the milk be kept better by being placed in small quantities in pails suspended above the ground. With reference to the question of returning whey to the patrons of the factory, Mr. Goodhand said that he and one neighbor who did not do so both got better prices for their cheese than their neighbors who adopted other methods.

Mr. C. P. Goodrich followed with a thoughtful address upon the dairy cow, tracing the history of the animal from the wild state to its present condition. He related his experience of fifty years in gradually improving the standard of his dairy herd by a process of selection and the survival of the fittest. During the course of this long period he discovered that there are certain characteristics of form in cattle indicating excellence for dairy purposes

which he called the "dairy form." By means of a diagram he illustrated the main features in the anatomy of an animal possessing dairy form, the chief of which were broad forehead, large, bright, mild, intelligent eyes, indicative of a strong brain, strong muscular jaw, depth through body, thin neck, strong back, openness of structure, leanness all the way through, high pelvic arch, large milk veins. An immoderate sized udder, however, had fooled more men than anything else. The dairy form was distinct, and was not good for beef cattle. He spoke also on the milking of the cow. The essential point in this was for the milker to put himself in such a relation to the cow that he will take the place of the calf. This can only be done by treating the cow in the kindest manner. No dog or stick should be used. Get hold of the affections of the cow, and it will be no trouble to milk her and get a large flow of milk. After calving, the sooner the calf is removed from the cow the better. He advised putting an arrangement in the box stall where the cow is kept, so that the cow would lick and smell her calf, but the calf could not suck the cow. When a heifer is fondling her calf then is the time for the milker to put himself in place of the calf and take the milk from her. He gave several instances to show how the affection of the cow had been obtained by kind treatment. Would not have a man around his stable whom a cow would kick. The fact that a cow would kick a man showed that she had not received kind treatment at his hands. A cow stable should be warm and at the same time well ventilated, with lots of light. Cows should have water after each meal unless the food is very moist.

Mr. D. Derbyshire, President of the Eastern Dairymen's Association, made a short address, in which he strongly advised co-operation and more unity on the part of everyone connected with the business. To get the cow, get at the man. He gave an experience of a factory near Brockville last season, where one patron received \$65 per cow for eight months' milk supply to a cheese factory, while his neighbor sending to the same factory for the same time only received \$25 per cow.

The closing address of the evening was delivered by the Hon. John Dryden, Minister of Agriculture. He emphasized the necessity of everyone in the trade working in harmony. There were three things necessary to success: organization, instruction and co-operation. There were four factors concerned: the patron, the maker, the dealer and those connected with the transportation of the goods. By the organization of farmers, factories were built. After building men are needed to take charge of the factories, and it is here where instruction came. Hence the necessity for dairy schools. Patrons need instruction also. The increased grant he had been able to make to the Association was for instruction only. Dealers don't need instruction. They are in the business for the money there is in it, but can make more money out of a good quality than out of a poor quality of product. The railways and steamships are not interested in quality, but quantity. The dairymen should solicit the help of the railways, etc., in getting their goods to the consumer in good condition. All must co-operate. The farmer held the key to the success of the whole concern. He, however, cannot be driven. Show him how he can make more

money in the business and he will do better work. We have a reputation for fine cheese, but can lose it in a year. Honest service is needed all along the line.

CARE OF MILK.

This was the subject of a concise and well prepared paper by Mr. J. McHoover, Springfield, Ont. To secure good milk cows must be healthy, and receive the best of care, food and water. There were about 87 parts water and 13 solids in milk, which necessitated both pure food and pure water in order to get good milk. Turnips should never be fed to milch cows. Too much green clover and access to foul weeds should be avoided. In milking, the udder should be wiped or washed clean before beginning. Milk with dry hands and aerate and cool milk to 75 degrees at once. A good plan is to hang pails of milk on a pole in a pure atmosphere. Warm milk should never be added to cold milk. The patrons of a factory should be educated to supply a uniform quality of milk.

In the discussion on this paper, which was opened by Mr. Wm. Waddell, it was shown that in hot weather milk should be cooled to below 70 degrees or under. Bad flavor sometimes comes from unhealthy cows, with diseased udders, etc. Don't feed turnips. Cows should only be kept in well-ventilated stables. There would not be so many fast-working curds if milk were cooled. 75 degrees is not low enough. Ferment should never be added to a starter above 70 degrees. This is necessary to prevent growth of undesirable bacteria. Prof. Dean advised making a box of galvanized iron, about 2 feet deep. Set the cans with the milk in this, and allow running water to flow in and out of the box. This can be done easily where there is a wind-mill on the farm. He advised cooling milk to 60 degrees or lower. If all patrons would cool to this temperature the milk would be more uniform. Too many patrons send milk in the spring before it is fit. Milk is not in normal condition till the 10th or 12th day. The colostrum in milk contains a lot of albumen upon which the rennet does not act. He stated that aeration would, in some degree, eliminate bad flavors from milk caused by the food. Aside from this, he did not think aeration effective, except as an aid in cooling the milk. Cows should not be left in fresh clover too long at the first feeding. They should be allowed to feed an hour the first day, the time being increased as they get accustomed to the feed. By this plan of feeding fresh clover would not injure the quality of the milk. Drinking sulphur water might tend to taint the milk. Mr. A. T. Bell stated that he had never been able to trace a bad taint in milk directly to the feeding of clover.

PREPARING A STARTER.

Mose Knechtel, Dorchester, took up this subject. The starter is an important factor in cheese-making. The mother starter should be prepared by selecting good milk or by pure cultures. The milk used should, in all cases, be pasteurized. His practice was to heat to 160 to 165 degrees and stir for 30 minutes, then cool quickly to 60 or 70 degrees and add mother starter or ferment, and put away for use. Before using, take an inch off the top of the can and mix well by pouring from one can to another before adding to the vat. The discussion was led by A. T. Bell, who pointed out that

a starter should be used intelligently or not at all. It was not always necessary in hot weather, but needed in cool weather. Care should be taken in its preparation. In his factory he had used the same ferment for 18 months. He prepared a little every day, whether he was using a starter or not, so as to preserve the ferment. He used the ordinary shot-gun can in preparing starter. One small can of the starter with the water included was sufficient for a vat. When a starter is disturbed and not used, its value is lost. He cooled to 70 degrees before adding the ferment. Very little ferment is required in hot weather. A vat of milk should not stand more than one hour after heating before being ready to set. When longer, a starter should be used. He would set in half-an-hour after heating if the milk were ready. Mr. James Morrison, Instructor, stated that he found more trouble in keeping a starter in large cans than in small ones. He advised using less ferment on Saturday in making the starter than on other days, and thought that 6 to 7 per cent. of old starter rather much to use in any case. Mr. Waddell advised using less ferment. He would add the starter before the milk was heated, provided the milk were sweet. Prof. Dean advised putting ferment first into a small quantity of milk and after a while add to the full amount of starter required, as it works faster. Makers should use the same ferment as long as possible, as it gives a more uniform quality of cheese.

ILLUSTRATION WORK.

The report of the work carried on at the Association Illustration Station at Milverton was presented by Mr. Arch. Smith, Superintendent. The report was a very valuable one, and showed that the station had rendered good service to the dairymen of the West. Many makers had visited the station during the season. The object in establishing the station was to demonstrate to makers and factorymen the best method of converting an old building into a first-class, up-to-date cheese factory, with fittings and equipments to correspond, and to establish a place where experiments could be carried on for the benefit of makers having any difficulty. Also to illustrate the best methods of making cheese to all who might care to visit the factory and to furnish makers with a good quality of starter in order that the cheese of this Western district might be of a more uniform flavor and lastly, to devise some means whereby the washing of a sewage from the factory could be disposed of in an effective and economical manner.

A great deal of time was spent in the spring in fitting up the factory and equipment and putting in a sub-surface system of drainage. The whey was not returned to the farmers, and the cans were thoroughly washed and steamed at the factory, which enabled them to furnish milk of a better quality. A large share of the time was given up to experiments in cheese-making and to testing the sewage system. We have secured a copy of Mr. Smith's report, which we will publish later, with illustrations, when we will have more space to give to it. A discussion followed on the washing of curds when it was clearly shown that washing tended greatly to improve the quality of the product. Mr. I. W. Steinhoff spoke strongly in favor of washing, and thought the time of

milling was important. It should be earlier when washing. He advised sending out a circular outlining the plan for disposal of sewage.

HON. JOHN GOULD,

of Ohio, closed the Wednesday morning session with a brief and witty speech. He referred to the Grout bill and the anxiety of the dairymen of the United States that it should become law. This bill is to regulate the sale of oleomargarine throughout the States. He was not very sanguinary as to its passing, or whether with the people to the South of the line steer butter or cow butter would predominate. They were going to send their skim-cheese to the Philippines in order to Americanize them. He closed with the statement that the Canadians were the best dairymen on earth.

Owing to the lack of space this week we are compelled to hold the balance of the report over till next week. The balance of the report includes addresses by Mr. Goodrich, Mr. Gould, Prof. Robertson, Prof. Dean, J. A. Ruddick, Dr. Connell and a number of others.

The following are the prize-winners in the cheese and butter exhibits:

White October cheese—1. A. F. Clarke, Poole; 2. J. A. McIntyre, Palmerston; 3. T. O'Flynn, Tavistock; V.H.C., Miss Mary Morrison, Newry, and J. S. Isard, Paisley. Colored cheese, October make—1. W. A. Bell, Pine River; 2. George A. Boyes, Mapleton; 3. J. S. Isard, Paisley. August colored—1. G. B. Brodie, Gladstone; 2. W. B. Thompson, Nile; 3. M. Morrison, Harrison; V.H.C., W. A. Bothwell, Hickson. August white cheese—1. W. A. Bothwell, Hickson; 2. Walter Hamilton, Listowel; 3. W. G. Medd, Medina; V.H.C., M. Morrison, Harrison.

Fifty-six pound box creamery butter for export—1. J. R. A. Laing, Avonbank; 2. T. Malcom, Kinlough; 3. E. M. Johnston, Innerkip; V.H.C., W. A. Bothwell, Hickson. Ten one-pound prints—1. Thomas Malcom, Kinlough; 2. E. M. Johnston, Innerkip; 3. S. P. Brown, Birnam; V.H.C., G. M. McKenzie, Ingersoll.

OFFICERS FOR 1901.

Hon. President, Hon. Thomas Ballantyne, Stratford; Hon. Vice-President, John Prain, Harriston; President, R. M. Ballantyne, Stratford; 1st Vice-President, Aaron Wenger, Ayton; 2nd Vice-President, James Connolly, Porter Hill; 3rd Vice-President, J. N. Paget, Canboro.

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District No. 7, W. T. Petric, Holstein; District No. 8, Harold Eagle, Attercliffe Station; District No. 9, Robert Johnston, Bright; District No. 10, Geo. H. Barr, Stratford; District No. 11, A. F. McLaren, M.P., Stratford; District No. 12, John Brodie, Mapleton; District No. 13, Geo. E. Goodhand, Milverton.

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T. B. Miller, London; J. R. Isaac, London.

AUDITORS.

Col. Hegler, Ingersoll; J. A. Nelles, London. (Report concluded next week.)

The British Egg Supply

The above heading forms the subject of a most interesting treatise on Great Britain's egg supply by Mr. Edward Brown in the journal of the Royal Agricultural Society of England for the quarter ending Dec. 31st last. Fifty years ago agricultural writers were urging the farmers of England to produce enough eggs to supply the home market. But at no time have they succeeded in doing so. In fact, during the past 50 years, Britain's egg imports have increased from 97,000,000 eggs in 1849 to 1,940,000,000 eggs in 1899, an increase of fully eighteen hundred and fifty per cent. Of the articles of food imported by Britain and which are largely produced in the United Kingdom as well, eggs stand third on the list in value. The amount which Great Britain paid to outside countries in 1899, was within half a million pounds sterling as great as that sent out of the country for cheese, and nearly a third of the value of the butter imported, which in that year amounted to £17,213,516; eggs being £5,044,392, and cheese £5,515,091. The relative increase in imports of eggs during the last three decades is shown by the following:

	Increase 1899 over 1859.	Increase 1899 over 1879.	Increase 1899 over 1859.
Eggs	347 per cent.	119 per cent.	61 per cent.
Butter	148 "	66 "	68 "
Cheese	70 "	44 "	23 "

This very large increase in egg imports is due to increased consumption and not to the fact that other countries are supplanting the British egg producer. Evidence is adduced to show that more fowls are kept by farmers and cottagers in England than ever before. Russia is the largest supplier of eggs to Britain. In 1899 Russia supplied 515,231,120 eggs; Germany, 414,598,320; Belgium, 294,906,600; France, 274,627,440; Denmark, 271,923,600; other countries, 93,058,720, and Canada 77,623,940. According to these figures Canada is a long way behind the other countries enumerated. There is big opening here for the Canadian poultrymen. Seventy-seven million is a long way behind even two hundred and seventy million, the number which little Denmark supplied. The writer points out that the Danish egg trade has been practically created within the last two decades, while that of Canada was the result of the McKinley tariff act passed in the United States about ten years ago. Perhaps by the end of another decade Canada will stand higher on the list.

In regard to relative values Canada ranks high. The following are the average values per great hundreds (120) for 1899, taken from the Trade and Navigations Returns: Russia, 5s. 5 3-4d.; Denmark, 6s. 3-4d.; Germany, 5s. 7d.; Belgium, 6s. 2d.; France, 7s. 7d.; Canada, 7s. 2 3-4d.; other countries 6s. 3-4d. General average 6s. 2 3-4d. According to these figures Canada is second on the list, and one shilling per 120 higher than the average price paid for all the eggs imported by Great Britain in 1899. A most encouraging comparison for those engaged in developing our export egg trade.

The Wool Outlook

Reliable reports seem to show that there is not likely to be any relief the coming season from the stagnation which has characterized the wool market for a few years back. The Canadian market is ruled largely by conditions prevalent in the United States. At present these conditions are not at all favorable for a rise in values. In fact, unless something unforeseen at the present time occurs, prices may be lower the coming season than even last year. We base this statement on the fact that at the beginning of 1901 the surplus stocks of wool in the United States more than equalled in amount a whole year's domestic yield, and the new clip is only a few months off. The "American Wool and Cotton Reporter" gives the situation in detail as follows:

"The showing is in some respects one of the most extraordinary which we have ever had occasion to lay before our readers. The striking feature of the situation—a feature which will perhaps excite a great deal of surprise—is the enormous stock of wool which is being carried over from 1900 to 1901 in the United States. The total stock of wool in the country to-day is 352,247,389 pounds, against 157,398,878 pounds a year ago; part of this is foreign wool, but taken altogether the stocks carried over are about 25 per cent. larger than a whole year's domestic clip. A little rough figuring will convince any one of the substantial correctness of our figures. The domestic yield was about 16,000,000 pounds larger in 1900 than in 1899; we have imported about 79,000,000 pounds more from abroad than last year; and the sales in the three principal markets of the United States have fallen off about 278,000,000 pounds. The total of the three amounts is 373,000,000 pounds. The estimates presented elsewhere in this issue are of course not based on such loose figuring as this, but the foregoing is the best kind of corroborative evidence of the soundness of our conclusions.

"In most of the wool centres of the United States the holdings are phenomenally large—the heavy surplus shown by the country as a whole is not concentrated in comparatively few hands. A year ago the stocks that were being carried over from one year to another were to a very noteworthy extent in the hands of manufacturers, who had purchased very liberally in 1899 on the assumption that prices had not reached their highest level. The manufacturers have pursued an opposite policy in 1900. They have drawn as liberally as their needs required on the stocks with which they began the year, but their new purchases of raw material have been of the meagerest description. The result is that the bulk of the surplus wool in the United States at the close of 1900 is in the hands of the wool merchants or the wool growers. The existing stock in the Boston market is abnormally large, amounting to 130,000,000 pounds, including the amount in bond, or about 95,000,000 pounds, excluding the amount in bond. There has also been a noteworthy increase in the holdings in such markets as Chicago, St. Louis and San Francisco."

Eastern Dairymen Meet

The concluding sessions of the Eastern Ontario Dairymen's convention on Jan. 11, were

given up mainly to the reception of reports from instructors and a discussion of the advisability of paying for milk supplied cheese factories according to quality—quality to be determined by the Babcock test.

Inspector Publow reported finding 36 samples of doctored milk out of 5,275 examined, Inspector Bentley 21 out of 5,000, Inspector Zuleit reported \$780 in fines imposed in 65 factories in his district for adulteration, Inspector Lowery found 38 skimmed or watered samples out of 8,211 examined. These were fair sample reports. At the same time there was general unanimity in reporting an improvement in conditions.

There was quite a general expression of opinion in favor of applying the Babcock test as the basis on which payment should be made for milk. A. A. Wright, M.P., went so far as to say legislative authority should be secured to enforce the adoption of this system in all cases, and the applause that followed was the most vigorous heard during the convention.

There was also quite a general expression of opinion that instructors should visit all factories and that a straight salary should be paid for this work. At present instructors go only where they are asked to go by factory owners, and the latter pay a fee for the service rendered. Some expressed the opinion that, in addition to the instructors, inspectors should be appointed by the Government to look after those who adulterate milk.

F. C. Hare spoke on the fattening of poultry for the British market.

We have secured copies of some of the reports and essays read which we will publish later.

Draft Horses

In the raising of draft horses, a wise selection of breeding stock is of the utmost importance. Draft horses with action, good bone, heavy weight, and proper conformation cannot be produced from undersized, inferior and unsound breeding stock. During the great depression in the horse business a few years ago, horse raisers not only stopped breeding, but unfortunately most of them sent their best mares to market, as they were the only kind that were salable, and as a result there are comparatively few first-class draft mares in the country. First of all, a brood mare should be sound and free from hereditary blemishes. A sound mare with good bone and wide draft type, even though she may not be very large, if mated to the right kind of a stallion, may produce drafters of a high order. The stallion is of even greater importance than the mare. On account of there being so many mares that are somewhat undersized it is especially important that the stallion should be large and heavy boned. Soundness in the stallion is essential also, and I am surprised that farmers pay so little attention to this all-important point, both in buying a stallion and when breeding their mares. Next to soundness, size and bone are important. There never was a time when a light-boned, undersized draft stallion was as poor an investment as now. The big, strong-boned, shapely fellows are the ones that will pay in the long run. When I speak of size I do not mean weight alone. Too many

buyers are deceived by mere weight. Weight is necessary, but it is not the only essential. A draft horse at maturity, in fairly good condition, ought to weigh from 1,800 to a ton. If a horse be of this weight, of good disposition, of proper conformation, sound in body and limb, with heavy bone, legs set squarely under him, with feet of sufficient size and quality, possessing at the same time that style and action so frequently seen in the highest type of draft horses nowadays, he ought to make an ideal draft sire.

The value of such a horse for breeding purposes can hardly be over-estimated.

In my opinion, draft horse breeding, when carried on with judgment, will always be a source of profit to those engaged in it, and for many years yet to come the present high prices will continue and even increase. While the demand has largely increased and is still increasing, the supply, on account of the almost entire suspension of breeding from 1893 to 1898 has, in a great measure, been cut off.

While the electric car, the bicycle, and the automobile has, possibly, to some slight extent, displaced the lighter horse, nothing yet has been discovered to take the place of the draft horse in drawing heavy loads up hill and down or over stony pavements or through the mud and snow, and in a hundred other ways meeting the growing and unrelenting demands of commerce and trade.

Spreading Manure on the Snow

An early and heavy snowfall, while tending to diminish natural losses of plant food, is apt to favor artificial losses. It is apt to deter the farmer from hauling out his manure supply. Too many farmers hold to the mistaken notion that spreading manure upon the snow is a wasteful practice, that much of its value is lost by leaching and by running off of the surface in the spring. They point to darkened snows, to discolored waters and to greener meadows at the base of the hillsides as proof of these losses. It is probably true that some loss occurs in this way, but it is less than is usually supposed. Those who are frightened by this, however, should study the barn losses, should know that, as ordinarily kept, manure deteriorates more in the barn cellar or in the manure heap than it does in the field; that it is better for manure to leach on the soil it is meant to fertilize than in proximity to the barn and the family well; that it will ferment less outdoors than it will indoors; that, in short, experiment and experience alike show that the housing of manure in the winter for spring hauling is seldom better and generally worse than spreading it upon the snow as fast as it is made. Some will be lost if spread; more, however, will be lost if kept at the barn; and the spring's work will be just so much the further behind.

Experiment station bulletins preach this doctrine, Institute speakers propound it, and farmers are yearly practising it more extensively. It is the modern notion, and the right one. The winter manuring of a steep sidehill may not be advisable; but moderate slopes or level pieces of not too leachy land may be safely fertilized any day in the year except Sunday.—Vermont Experiment Station.

CORRESPONDENCE

Advantages of the Soiling System

Editor THE FARMING WORLD:

Having read with some interest in The Farming World of Dec. 4 the experiences with soiling at Dentonia Park Farm, I would like to ask Mr. Ketchen, superintendent, if he could not carry on the soiling system more advantageously with corn ensilage and clover hay and a light meal ration. Would it not save hitching up a pair of horses and cutting green oats and peas daily, rain or shine. Could he not grow far more coarse feed on the same number of acres than he could of oats and peas? I would like to hear from Mr. Ketchen or from some brother farmer who has had some experience in soiling, as I intend trying it in the near future.

John R. Campbell.

Vernon P.O., Russell Co.,
Jan. 17, 1901.

Testing of Vitality of Seed

Editor THE FARMING WORLD:

The past season has, in certain localities, been unfavorable for the perfect maturing of grain. In some districts it has been injured by rain during harvest or from being stacked before fully dry, thus causing it to sprout or heat, while in other localities it has suffered more or less from early autumn frost. When exposed to either of these conditions cereals are apt to lose a portion of their vitality or to have it so weakened as to produce when sown an unsatisfactory growth. The character of the crop is greatly influenced by the quality of the seed used, and to obtain the best results it should have its germinating power unimpaired, so that when placed in the soil the young plants may make a prompt and vigorous start. Hence it is very important that farmers should ascertain whether the grain they are holding for seed possesses the vitality necessary to produce a good crop.

By instruction of the Honorable Minister of Agriculture, provision has been made whereby the vitality of seed can be ascertained without cost to the individual, and any farmer in the Dominion, who may have any varieties which he desires to have tested can get the information he seeks, by forwarding to the Director of the Experimental Farms, Ottawa, samples of such grain or seeds. Samples may be sent free through the mail and an ounce or two is sufficient for the purpose. About two weeks are required to complete a test. It is hoped that all who desire to avail themselves of the provision offered will send in their samples early, so that the work may be completed in good season.

Wm. Saunders,

Director Experimental Farms.

Ottawa, Jan. 16, 1901.

RENEWALS

This is the season of the year when most of the subscriptions to The Farming World are due. Subscribers will confer a favor by remitting early. Do not wait for an account to be sent you, but remit early and secure Canada's only Agricultural weekly for another year.

The Agricultural Gazette

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

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

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

BENEFITS OF MEMBERSHIP.

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

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

A member of the Sheep Breeders' 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 10,000 copies of this directory are mailed monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States, also to prominent breeders and probable buyers resident in Canada, the United States and elsewhere.

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

The list of cattle, sheep, and swine for sale will be published in the third issue of each month. Members of the list of cattle, sheep, and swine for sale will 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.

A. P. WESTREVELY, Secretary.
Parliament Buildings, Toronto, Ont.

List of Stock for Sale.

DOMINION CATTLE BREEDERS' ASSOCIATION. Shorthorns.

Arkell, Henry, Arkell—5 bulls, from 5 months to 2 years; cows and heifers in calf.
Bell, Jos., Bradford—4 yearling heifers; heifer, 2 years; 2 heifers, 3 years; 3 heifer calves.
Birdsall, F. & Son, Birdsall—Bull, 13 months.
Biansherd, O. V., Appleby—6 bulls, 6 months to 2 years; females.
Bone, Adam, Paris—2 bulls, 15 months.
Bonneycastle, F. & Sons, Campbellford—yearling bull; 6 bull calves; cows; heifers.
Brien, Edward, Ridgetown—6 bulls, from 6 to 14 months; bulls, 2 years.
Bright, Jno., Myrtle—10 young bulls; 20 young cows and heifers.
Brodie, G. A., Bethesda—8 bulls; 6 heifers, 2 years, in calf; 6 heifers, 1 year; 7 calves.
Campbell, Jno., Woodville—2 bull calves, 10 and 12 months.
Chapman, J. G. & Son, St. Thomas—Bull, 13 months; bull calf, 4 months; heifer calves.
Colwill Bros., Newcastle—Bull calf, 9 months; heifer, 10 months.
Cooper, C. E., Oshawa—3 bulls, 8 to 12 months.
Corley, R., Belgrave—5 bull calves, from 8 to 15 months; 7 cows; 2 heifers, 2 years; 2 heifers, 1 year.
Docker, F. T., Dunnville—3 bulls, 14 months; 5 bulls, 3 to 5 months.
Douglas, Jas., Caledonia—9 bulls, 8 to 14 months; young cows and heifers.
Doyle, Jno., Etoro—3 bulls, 8, 12 and 15 months.
Fink E., & Son, Columbus—4 bulls; imported bull.
Garnham, C. A., Straffordville—5 bull calves, 8 months; bull, 2 years.
Gibson, R., Delaware—3 bulls, 10 to 18 months; 8 heifers, 12 to 22 months.
Graham, Thos., Bell's Corners—5 bulls, 1 month to 2 years; heifers, 1 to 3 years.
Hand, Jno., Tancred—3 bulls, 1 and 2 years; 2 heifers, 2 years; 2 heifers, 1 year.
Hartman, J. W. & Sons, Elmhedge—2 bulls, 10 and 14 months.
Harvie, J. R., Orillia—3 bulls, 10, 12 and 21 months; few young heifers.
Hauer, Ignatius, Weisenburg—4 bulls; 2 bull calves; 12 cows; 6 heifers.
Hind, H. E., Hagersville—3 bulls, 10 to 12 months.
Hardy, J. & G., Ashgrove—6 bulls, 1 year to 22 months.
Holdsworth, R. L. & Sons, Port Hope—3 bulls, 11 to 30 months.
Jackson, G. & Son, Downsview—3 bulls, 9 to 18 months.
Jeffrey, Alex., Whitty—3 bull calves, about 12 months.

Johnston, Arthur, Greenwood—20 bulls, 7 of them imported; 65 cows and heifers, 25 imported.
Johnston, A. J., Vandeleur—3 bulls; 6 females.
Johnston, Jas. H., Hillsdale—Bull, 4 months; cow; heifer calf; heifer, 2 years.
Johnston, S. F., Ashburn—6 young cows in calf; young stock of both sexes.
Harris, T. P., Gowrie—6 bulls, 4 to 16 months.
Jeff, E. & Sons, Bond Head—9 young bulls; 5 young cows; 3 heifers, 2 years; 5 yearling heifers; 5 heifer calves.
Julian, Thomas, Heathcote—4 bulls, 4 years, and 8 to 18 months; cows and heifers.
Kitley, J. J., Dunkerron—8 bulls, 8 to 20 months; 10 heifers, 8 months to 3 years; cows and calves.
Kolb, E. B., Berlin—4 bulls, 3 months to 2 years; 6 cows, 3 to 7 years; 4 heifers, 9 months to 2 years.
Legge, T. H., Temperanceville—2 bulls, 10 months and 2 years; cows and heifers.
Linton, Wm., Aurora, 4 bulls.
MacArthur, Jas., Gobles—5 bulls; 2 heifers, 2 years; 2 heifers, 1 year; 2 calves, 8 months.
McAvoy, T. C., Balsam—4 bulls, 14 to 22 months.
McCallum, J. R. & Sons, Iona Station—5 bulls, 5 to 14 months; young cow and heifers.
McCartney, W. E., Milton West—2 cows; 2 heifers, 5 and 16 months; bull, 13 months.
McCormack, H., Paris—5 bulls, 10 to 16 months.
McDermott, Wm., Living Springs—10 bulls, 5 to 15 months; 20 females.
McDonald, Dugald, Kinloss—Bull calf; heifer, 2 years.
McFarlane, Jno., Dutton—Bull calf, 12 months; yearling heifer; cow.
McKinnon, Alex., Coningsby—Bull, 17 months; heifer, 16 months.
McNabb, John, Rockwood—3 bulls, 11 to 14 months.
Maryn, J. W., Canton—5 bulls, 9 months to 5 years; yearling and 2 year-old heifers.
Meyer, J. E., Kossuth—3 bulls, 10 to 15 months.
Michael, Robt. T., Brooklin—Bull, 15 months.
Mitchell, Jno., Waterdown—2 bulls, 1 year; heifer, 6 months; heifer, 6 months; cow, 5 years.
Mitchell, R. & Son, Nelson—12 bulls, 3 months to 2 years; 25 cows and heifers.
Moore, Alex., Greenwood—6 bulls, 9 to 12 months; young heifers.
Morgan, J. & Sons, Kerwood—Bull, 11 months; heifer.
Newton, Wm., Limehouse—Bull, 12 years; bull, 9 months; cows and heifers.
Parkinson, E. & C., Thornbury—Young bulls.
Pettit, W. G. & Son, Freeman—15 im-

ported and 6 home-bred bulls, 10 months to 2 years; 40 imported cows and heifers; 20 home-bred heifers, 1 to 3 years.

Prophet, E. J. T., Brechin—2 cows in calf; 1 heifer in calf; 3 yearling heifers.

Quereingesser, C., Brodhagen—5 bulls, 6 to 14 months.

Raikes, Geo., Barrie—3 yearling bulls; 3 heifers.

Rankin, Chas., Wyebridge—Imported bull: 5 bulls, 7 to 10 months; 8 imported cows; 20 home-bred cows and heifers.

Riddel, Jas., Beeton—3 bulls, 9 to 15 months; heifers.

Robertson, A., Eden Mills—2 bulls, 9 and 18 months.

Robertson, John—12 bulls, 13 to 15 months.
Robinson, E. L. & W. G., Wallace—2 bulls, 8 and 12 months.

Sanders, W. G., St. Thomas—4 bulls, 1 to 2 years; 5 heifers, 1 to 2 years.

Scott, F. W., Highgate—2 bulls, 10 months; bull, 13 months; bull, 20 months.

Shaw, Henry, Colville—Bulls, 15 to 20 months; cows and heifers.

Shaw, A. J. C. & Sons, Thamesville—4 bulls, 10 to 24 months; 2 cows; 5 heifers.

Sibbald, F. C., Sutton West—6 bulls; 3 heifers.

Smith, Amos, Trowbridge—4 bulls, 4½ to 15 months; 2 heifers, 2 years; heifer calf.

Smith, Jas., Inglis Falls—5 bulls, 8 to 18 months; cows and heifers.

Sockett, Jno., Rockwood—8 bulls, 10 to 23 months; 3 heifers, 1 year.

Steele, Jas., Lochalsh—5 bulls, 9 to 13 months.

Thomson, W. B., Fergus—Cow, 4 years; cow, 8 years; heifer, 3 years; heifer, 2 years.

Toole, J. W., Whitevale—Bull, 10 months; 2 heifers, 3 years; 2 heifers, 1 year.

Turner, D. S., Whitevale—3 bulls, 7 to 11 months; heifers.

Webb Bros., Ospringle—Bull, 4 years; 3 bulls, 14 months; bull, 9 months.

Weber, L. K., Hawkessville—6 bulls, 6 to 12 months; cows and heifers in calf.

Whitelaw, A. & W., Guelph—4 bull calves, 8 to 12 months.

Wilkin, Jas., Balsam—3 bulls, 1 year; 4 heifers, 2 years; 3 yearling heifers.

Ayrshires.

Anderson, J. A. R., Hamilton—Bull, 5 months; heifer, 5 months.

Benning, D. & Son, Williamstown—Bulls, 8 months to 2 years; females, 6 months to 5 years.

Douglas, John H., Warkworth—5 bulls, nearly 12 months; bull, 1 year.

Guy, F. T., Darlington—2 bulls, 1 year; cows and heifers; calves of both sexes.

Hicks, C., Harrowsmith—2 bulls, 9 months and 1 year.

McLeod, Ino., Ridgeway—2 bulls, 9 and 13 months; 2 heifers, 19 and 20 months.

Reed, R. & Co., Hintonburg—4 yearling bulls; 3 bull calves.

Smith, W. M., Seotland—2 bulls, 1 year; 2 bull calves, 4 months; 6 cows and heifers.

Thorn, Wm., Lynedoch—2 bulls, 4 and 10 months; heifer calf; females, all ages.

Vull, J. & Sons, Carleton Place—3 bulls, 2 years; 4 yearling bulls; 4 bull calves; cows and heifers of all ages.

Holsteins.

Bollert, H., Cassel—4 bulls, 7 to 12 months; 2 young cows; 2 yearling heifers.

Gifford, A., Meaford—4 bull calves 7 4 heifers, 1 year; 3 heifers, 2 years; 3 cows. Would exchange any of above for Cotswold sheep or Yorkshire pigs.

Honey, R., Brickley—2 bull calves, bull, 2 years; 2 oows; heifer, 2 years; yearling heifer; heifer calf.

Kennedy, A., Ayr—8 bulls, 13 to 12 months.

Lee, J. M., Simcoe—3 bulls, 7 to 13 months; cows.

Richardson, Matt., Caledonia—6 bulls, 2 to 18 months; 2 heifers, 2 years.

Herefords.

Mossom, Byrd Co., Bobcaygeon—5 bulls, 2 years; 11 bulls, 1 year; 8 bull calves; 6 heifers.

Jerseys.

Birdsall, F. & Son, Birdsall—Bull calf, 6 months.

Gibbs on, R., Delaware—Bull, 1 year; cow; yearling heifer and calf.

Polled Angus.

Bowman, Jas., Guelph—Bulls; heifer calves.

Bart, J. W., Coningby—2 young bulls; females, all ages.

Marsh, C. H., Lindsay—Yearling bull; 2 bull calves.

Young, W. E., Rockdale—Bull calf, 7½ months.

DOMINION SHEEP BREEDERS' ASSOCIATION.

Shropshires.

Bell, Jos., Bradford—Ewes and ewe lambs.

Campbell, Jno., Woodville—10 imported ewes, 1 and 2 years.

Gibson, R., Delaware—Carload ram lambs; carload ewe lambs.

Hawkshaw, W. S. & Son—50 ewes, 1 and 2 years; 45 ram and ewe lambs.

Switzer, N. W., Streetsville—Ram, 2 years; ram, 1 year; 4 ram lambs; 5 ewe lambs.

Vuill, J. & Sons, Carleton Place—Rams and ewes, all ages.

Southdowns.

Jeffs, E. & Sons, Bond Head—2 aged rams; shearing ram; 5 ram lambs; aged, shearing ewes and ewe lambs.

McEwen, Robt., Byron—40 head, aged; lambs of both sexes.

Marin, Wm., Binbrook—8 ram lambs; 3 yearling rams; 10 yearling and 2-year ewes; 12 ewe lambs.

Oxford Downs.

Elliott, Andrew, Pond Mills—20 ewes; 14 ewe lambs; aged ram.

McFarlane, Jno., Dutton—6 ewe lambs; ewes all ages.

Dorset Horns.

Bowman, Jas., Guelph—Rams and ewes, all ages.

Hunter, Jno., Wyoming—Ram and ewe lambs.

Leicesters.

Douglas, Jas., Caledonia—Shearing ewes; ewe lambs.

Jeffs, E. & Sons, Bond Head—Aged ram; ram lamb; aged ewes, ewe lambs.

Cotswolds.

Bell, Jos., Bradford—Ewes and ewe lambs.

Bonnycastle, F. & Sons, Campbellford—9 ram lambs; 20 ewes and ewe lambs.

Sackett, Jno., Rockwood—25 yearling rams.

DOMINION SWINE BREEDERS' ASSOCIATION

Berkshires.

Bonnycastle, F. & Sons, Campbellford—Pigs, 2 to 3 months.

Bowman, T. C., Berlin—Pigs, both sexes, 2 to 5 months.

Brien, Edw., Ridgetown—100 pigs, all ages, both sexes.

Decker, C. R., Chesterfield—15 head, sows in farrow and boars.

Derbyshire, J. B., Wheatley—Boar, 15 months; boar, 6 months; 20 head, both sexes, 2 and 3 months.

Harris, G. N., Lynden—Boar, 4 months; boar, 2 months; 4 sows, 7 months; 2 sows, 4 months; 4 sows, 2 months; 5 pigs under 2 months.

Hauser, Ignatius, Weisenburg—3 boars; 6 sows; 40 head, 2 to 4 months.

Jeffs, E. & Sons, Bond Head—Aged boar; 3 boars, 6 months; 3 sows, 7 months; pigs, 3 months.

Kitching, Jno., Corwhin—Pigs, 6 weeks to 4 months.

Linton, Wm., Aurora—10 boars; 10 sows.

Reid, R. & Co., Hintonburg—Boar, 9 months.

Snell & Lyons, Snellgrove—10 boars, 3; 4 months; 5 boars, 7 to 8 months; 8 sows, 3 to 4 months; 13 sows, 7 to 8 months.

Snowden, Sam., Jr., Bowmanville—5 boars, 2 to 3 months; 2 sows, 2 to 5 months.

Vuill, J. & Sons, Carleton Place—Boar, 1 year; boar, 8 months; sows, all ages.

Yorkshires.

Armstrong, A. B., Codrington—10 pigs, 3 to 10 weeks.

Douglas, John H., Warkworth—25 head, 4 weeks to 4 months.

Brethour & Saunders, Burford—25 boars, 3 to 4 months; 50 young sows in pig; 25 sows, 3 to 4 months.

Gibson, R., Delaware—Young sows; imported boar and young boars.

Honey, R., Brickley—25 boars and sows, from 1 to 8 months.

Lee, J. M., Simcoe—3 sows, 5 months; young pigs.

Ross, A. W., Douglas—2 boars, 3 months; 10 sows in pig; 10 sows, 5 months.

Tamworths.

Brandow, A. W., Walsingham Centre—4 boars and 8 sows, 3 to 5 months.

Colwill Bros., Newcastle—6 boars, 4½ months; 6 boars, 6 weeks.

Fulton, John, Jr., Brownsville—20 pigs, 3 and 4 months.

Hawkshaw, W. S. & Son, Glanworth—Boar, 2 years; sow, 7 months.

Reid, R. & Co., Hintonburg—Boar, 8 months.

Smith, W. M., Scotland—Boar, 3 months.

Chester Whites.

Birdsall, F. & Son, Birdsall—Pigs, both sexes, 10 weeks; 2 sows, 3 months.

Bowman, T. E., Berlin—Pigs, 2 to 3 months, both sexes; sows in pig.

Poland Chinas.

Smith, W. M., Scotland—Boar and sows, all ages.

Duroc Jerseys.

Smith, W. M., Scotland—Boar, 4 months 2 sows, 4 months.

Percheron Stallion for Sale.

Pure-bred Percheron stallion, Captain Pallie, 2985, 2664, for sale, or will exchange for a fast trotter or pacer stallion. Good foal getter. Warren C. Bull, Grafton, N.B.

FARM HELP EXCHANGE.

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

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

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

Help Wanted.

Young man wanted by the year. Must be honest, of good morals and a good milker. Farm is in

Oxford County. Wages, with board and washing, \$150 a year. Will hire at once. No. 651. a

Man wanted to tend a dairy herd and milk. Cream is shipped to Toronto. Would hire by the year and pay good wages to capable man. Must be a good milker and have no bad habits. No. 652.

Wanted, young married man to look after cattle on a farm in Illinois. Must be trusty, attentive and of good habits. No. 653. a

Good farm hand wanted, one with boy about 15 preferred; or, if one or two girls in family, would hire them to milk. Man to feed pigs and care for stock in winter. Good wages to reliable man. No. 654. a

Wanted, good general farm hand, who is good plowman and willing and able to do all kinds of farm work. Middle aged, single man preferred. Wages, \$180 a year. No. 655. a

Man used to farm and dairy work wanted. Single man about forty years old would suit. Good, steady employment. No. 656. a

Wanted, a cheesemaker for the season of 1901 in a small factory. A lady who has taken a term at a dairy school and had some experience preferred. Must be a first-class cheesemaker. Also wanted, good, smart, willing man, married or single, to work on a farm in Lambton Co., duties to commence March 1. Good wages and yearly employment if wished. Man must be able to milk and not be afraid to work. No. 657. a

Wanted, young man, unmarried, of temperate habits, and used to all kinds of farm work and the care of cows. Wages \$150 to \$165 a year and board. Good plowman preferred. No. 643. b

Wanted, by April 1, farm hand, who is well up in farm machinery. No. 644. b

Man wanted, by the year, to work on a farm. Good place for right man. Apply to L. F. Staples, Ida, Ont. b

First-class working foreman wanted on a large farm near Winnipeg. Must be married. Wages, \$35 a month. \$10 a month allowed for boarding other men, with fuel, potatoes, meat, etc., supplied. No. 645. b

Good working farm manager, married, with experience in stock-raising and fruit-growing, required on farm in the Niagara fruit district. Graduate O.A.C. preferred. To have share of proceeds instead of salary, or part salary and part share. Permanent situation to a satisfactory man. Also good, prac-

tical married gardener, sober, industrious, with no small children, wanted. Wife to do general housework, man to raise vegetables etc., for market and work owner's garden. Liberal share in place of wages. Free house. References required. No. 646. b

Young man wanted on a 100-acre farm in Perth county. Must be used to general farm work, and understand horses and feeding and care of beef cattle. No milking. Wages, \$150 a year, board and washing. No. 647. b

Man and wife wanted on a large stock farm in Minnesota. Must be active and industrious. Give references and experiences. No. 648. b

Domestic Help Wanted.

General servant wanted. Must be good tempered, reliable, and fond of children. No milking. No. 649. b

Housekeeper wanted on a Manitoba farm, one who understands dairy and general house work. Steady employment to suitable person. Middle-aged woman preferred. Wages, \$12 a month. No. 650. b

Situations Wanted.

Married man would like a farm to work on shares, where everything is furnished. Would take one-third or work by the year. No. 475. a

Man going to Manitoba in the spring wants a place on a farm out there. No. 476. a

Single man wants a place on a farm to tend cattle, milk and do general farm work. Good references. No. 477. a

Young married man wants a place as herdsman. State wages. No. 478. a

Position as farm manager wanted on a good stock or dairy farm in Eastern Ontario or Western Quebec. Good experience. Advertiser is 38, married, and has family of 2. No. 479. a

Wanted by capable man, position as farm manager. Is associate graduate of O.A.C., and has managed a farm for 6 years. Strictly temperate. Good references. No. 480. a

English boy, 18 years old, with experience of farming in the Old Country, who can milk and do general farm work, wants a place. Would work for reasonable wages for the first year. No. 481. a

Wanted by experienced Englishman, place as herdsman on a dairy or stock farm. No. 482. a

Place on farm wanted by the

year by a man not afraid to work. No. 483. a

Man, aged 32, married, with family of two, with good experience of live stock and farm machinery, wishes to work a good farm on shares. Would go to Manitoba or the United States. No. 470. b

Man 23 years of age, sober and steady, with good experience with live stock and all kinds of farm work, and with good references, wants a place on a stock or dairy farm in the Rainy River District or in Manitoba. No. 471. b

Farmer's son, 22 years of age, strictly temperate and with no bad habits, wants a position on a farm by the year or month. Would work farm on shares or rent a stocked farm. No. 472. b

Young, unmarried man wishes place as manager of a farm, near Toronto or Belleville. Has had good experience in all lines. Or would rent farm if satisfactory terms were given. No. 473. b

Woman, about 30 years of age, wishes position to manage a poultry house for profit; or would run it on shares or for salary. Has had several years' experience in poultry raising at home. No. 474. b

N.B.—Where no name is mentioned in the advertisement, apply to A. P. Westervelt, Parliament Buildings, Toronto, giving number of advertisement.

Farmers' Institutes.

Under this head the Superintendent of Farmers Institutes will each week publish matter relating to Institute work. This will include instruction to Secretaries and other officers, general information about Institutes and Institute work, suggestions to delegates, etc. He will also from time to time review some of the published results of experiments conducted at the various Agricultural Colleges and Experiment Stations of Canada and the United States. In this way he hopes to give Institute members some valuable agricultural information which they might not otherwise receive, on account of not having access to the original publications. If any member at any time desires further information along any of the lines discussed, by applying to the Superintendent he will be put in direct communication with the Institution that has carried on the work.

G. C. CREELMAN,
Superintendent Farmers' Institutes.

Practical Poultry Talks and Demonstrations at Farmers' Institute Meetings.

THE SUPERINTENDENT VISITS
SOUTH WENTWORTH INSTITUTE.

The people of Saltfleet township are among the most progressive in the province. Probably the first Farmers' Institute meeting was held there, and there also the first Women's Institute had its beginning. The President, Mr. Thos. Yeo, is a well-known stock man, dealing both in horses and cattle. He makes a splendid presiding officer, and holds the meeting well in hand all the time.

The first speaker at the afternoon session was Mr. Alex. McNeill, of Walkerville, who discussed the "Farm Water Supply." Mr. McNeill has made a study of this subject for years, and has prepared some splendid charts illustrating his subject.

The feature of the afternoon, however, was an address and practical demonstration on "Poultry," by Mr. G. R. Cottrell, Milton. Though a young man, Mr. Cottrell has had a vast experience in the poultry business. He breeds Brown Leghorns and Barred Plymouth Rocks. He has his hens commenced to lay about the middle of January, when eggs are a good price, and he sells all his fattened chickens to Toronto commission merchants at 10c. per pound. When asked what breeds were best for the Ontario farmer, Mr. Cottrell replied without hesitation, "Plymouth Rocks or Wyandottes." These are what are known as American breeds, and have proved themselves to be the very best all round birds for our ordinary farmers. They are a good size; are good layers; mature early and are quite hardy.

FEEDING FOR EGGS.

"Are there not breeds that are better layers?" asked a member of the Institute. "Yes," said Mr. Cottrell, "there are some breeds that will probably lay more eggs in the year, but after all, egg-laying is a matter of individuals rather than breeds. By this I mean that hens are like cows. You know that in some dairy herds when you come to apply the Babcock test you find that some of the cows are more valuable than you imagined, while others that you thought were all right are scarcely paying for their keep. You know in that case which calves you would rear for dairy purposes. So it is with chickens. You must by the use of nest boxes find out just which hens are laying well and which are not. Then weed out those that are not paying for their keep, and keep for hatching the eggs of those hens only that are producing the largest number of eggs."

"Is it desirable to have hens lay all winter?" some one asked. "That just depends," replied Mr. Cottrell, "on what you purpose doing with the eggs. If the eggs are all to be sold I would have the hens laying their best when eggs are highest in price, which is usually November, December, and January. If, however, the eggs are to be used for the raising of chicks I would pursue a different course. After a hen has laid forty eggs only a small proportion seem to be fertile. Therefore, if you want eggs for hatching in March

and April. I would not start hens laying before the middle of Jan."

"How do you make your hens lay in winter?" some one asked. "I find no trouble at all," said Mr. Cottrell, "in this respect. I keep my hen-house clean, the walls whitewashed and the chickens free from vermin. I allow eight square feet for each hen and give them plenty of room for scratching in the day time. The hen-house should not be too warm, about 45 degrees Fahrenheit being the proper temperature. Where you have a large room and find the temperature falls too low in severe weather, you should place the roosts all close to one wall and arrange a curtain so as to drop in front of the chicks, thus shutting them off into smaller space during the night. In this way you keep them quite warm while roosting. During the day time they will keep themselves warm in the scratching pens."

In reference to food Mr. Cottrell stated that he fed them nothing until about three o'clock in the afternoon, when he gave them a liberal supply of bran and oatmeal mixed, in the proportion of two parts bran and one of oatmeal. After this was eaten up he then scattered whole wheat among the straw and chaff in the pen and made them scratch for it. "It is necessary to keep them at work," said Mr. Cottrell, "if you want them to lay eggs. Too many farmers make the mistake of believing that hens will lay if given plenty of food. Too much feed causes them to put on excessive flesh, and they become lazy. They may not scratch much that night, but coming from the roost hungry next morning, they will spend the entire forenoon scratching for every grain that may be in the straw and chaff."

"How about animal food?" some one asked. "They should have a little," said Mr. Cottrell. "Ground green bone is probably the best, but as bone cutters are more or less expensive the average farmer has got to find some substitute. I buy cows' heads at 15c apiece: boil them thoroughly, and throw into the chickens to pick to pieces. I also hang up a liver once or twice a week in such a way that they have to jump for it. This gives them exercise, and at the same time does not allow them to gorge themselves with one kind of food."

"Two things I would like to emphasize," said Mr. Cottrell, in winding up the subject of egg production. "First, keep only thoroughbred males, and second, each year select eggs for hatching from your best and strongest layers. If you do this you will be surprised in a year or two to find that your

flock has increased in production one, two, or even five hundred per cent."

CHICKENS FOR MARKET.

"Chickens are prepared for market in four different ways," said Mr. Cottrell. "First, the farmer makes up his mind that he will sell a dozen hens. He goes to the barn yard and takes those that are most easily caught. This class constitutes the bulk of chickens that are offered for sale on our local markets to day. Second, the farmer's wife selects the chickens that she wants to kill, puts them in a pen by themselves, and feeds them for a week or two (usually on grain) before killing. Third, the chickens are selected from the flock in the same way, but are put in close boxes or crates, and fed soft foods for three or four weeks before they are killed. Fourth, the chickens are treated exactly as last lot, but in addition they are forced to take their food by means of a cramming machine for a week or ten days after they have shown evidence of being tired of taking their food in the usual way.

"Of course the first method has nothing to commend it. Where the chickens are picked up haphazard from the barn yard there will be no uniformity. Most of them from having to hunt their food, or from being loose and chasing grass hoppers, etc., will have developed hard muscles, even in the younger birds, and they will be in the very poorest shape for table consumption.

"The second method of shutting them up in a box has much to commend it, but they are apt to take to feather picking for lack of proper mixed diet.

"The third form is probably the most desirable where the birds are shut up in close crates, absolutely without exercise, and fed on soft food. The muscles become soft, and the whole flesh tender and nutritious. Enough fat is added to make them plump and present a good appearance in the market. The flesh does not tear so much in plucking, and the actual gain in weight more than repays for the time and labor spent on them.

"The cramming process has much to recommend it, but as it has not become universal, and most farmers have not this machine, it is hardly worth discussing now."

A PRACTICAL DEMONSTRATION.

At this stage Mr. Cottrell donned his overalls, and in the presence of the Institute members gave a practical illustration of killing and plucking a chicken. Before proceeding, Mr. Cottrell stated that for our home markets the trade demanded that the chickens be bled. The best way to do this was to take the chicken's head in the

left hand, open the mouth by slipping the thumb into it, and with a sharp, narrow-bladed knife penetrate the brain through the roof of the mouth, then by cutting the jugular vein in the neck just back of the ears the deed was accomplished. Mr. Cottrell explained that the moment the brain was penetrated all sensation ceased. There might be some flapping of the wings afterwards, but it was explained that this was due to the involuntary action of the muscles. For the British market the trade demands that the neck be broken, but the bird be not bled. Mr. Cottrell illustrated this by using the bird he had in his hands. By holding the bird's head firmly in his right hand and grasping both legs in the left a steady pull soon dislocated the neck. "Hold the head still," said Mr. Cottrell, "and pull only with the left hand. In this way you will never pull the chicken's head off, which you would frequently do if you were to pull the head and hold the body firm." As soon as the neck was dislocated Mr. Cottrell commenced to pluck, first on the back, then on the breast and legs, finishing up on the wings and neck. The whole operation did not take more than five minutes, the bird being completely plucked before the flesh was cold.

In answer to a question Mr. Cottrell stated that it was no trouble to get 10c a pound for properly fed birds on the Toronto market. There was a demand for both yellow and white meat. For the Old Country trade, however, they would take nothing but white meat, whereas in the American market, notably Boston, the preference was decidedly in favor of yellow. "Can you influence the color by feeding?" some one asked. "Yes," replied the speaker, "you can make a white-fleshed fowl yellow in ten days by feeding yellow corn, and on the other hand you can clarify the skin and make it much whiter by feeding skim milk and oatmeal."

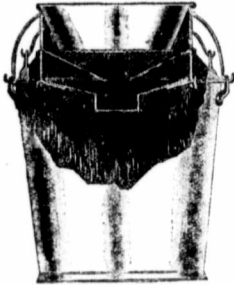
This practical work in poultry was very much appreciated. One man said he had attended many poultry meetings, but had never received so much information of a practical nature before. Mr. Cottrell, Mr. Graham, of the Ontario Agricultural College, and Prof. Gilbert, of Ottawa, will attend many of our meetings this winter. Arrangements have been made for one of these gentlemen to give addresses and practical demonstrations at:

Finch,	January	23.
Uxbridge,	"	24.
Bloomfield,	"	26.
Cobourg,	"	28.
Lansdowne,	"	29.
Aurora,	"	30.
Oakwood,	"	31.
Oakville,	February	8.
Claudeboye,	"	14.

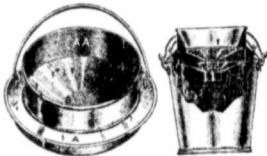
Farm Implement Department

Anti-Dirt Milk Pail.

Someone who saw our new Anti-Dirt Milk Pail said: "There, that is just what I always meant to do, and



never did—invent a milk pail that absolutely excluded the dirt!" This milking pail is made with a closely-fitting cover (a), the top of which is a raised receptacle (aa) to receive the pan 2½ inches deep and 8¼ inches in diameter (b) with the bottom of fine strainer cloth. This pan fits closely into the receptacle, projecting above cover of pail, the bottom of which is funnel shaped, and in the centre is another finer strainer, 1½ inches in diameter. Underneath this strainer is suspended a dirt-collecting cup (c) swinging on two hooks so as to always hang level if the pail is held in an in-



clined position toward the animal while milking. This cup has a wide, inclined flange all around it, so that when the milk flows into the cup it allows any fine dirt or sediment that pass through the two strainers to settle in the bottom of it, as the milk has to flow up and over the rim all around in order to get into the pail, and in so doing the milk is cooled and aerated.



These three pieces can instantly be separated and cleaned as easily as any ordinary strainer or pan. All the seams are smoothly soldered so as to prevent any accumulation or dirt, which is so essential in all dairy utensils.

The pail is used the same as any ordinary open pail by milking through the strainer, which prevents any splashing of the milk, as it would if it were a solid surface.—*English Rural World.*

A Useful Grader.

The one-horse scraper illustrated is easily made, at little cost. Take an old iron frame, double-shovel plow to the blacksmith, and have him cut and bend the side piece of the frame which held the rear shovel, so as to bring both shanks even. On the shanks bolt a piece of one quarter or three-eighths-inch sheet iron about 18 in. wide and 3 ft. long, bending the iron



The One-Horse Scraper.

to fit the shank. If given the same pitch the shovels had, it makes an excellent grader for finishing up roads, opening and filling ditches, etc. If the iron is not procurable, use a hardwood board of suitable size, beveled at the bottom edge, and bolt on a steel plate made from the blade of an old cross-cut saw.—*J. G. Allhouse, Monroe Co., N.Y.*

Incubators and Brooders.

The demand for incubators, brooders and other poultry appliances has

them. Mr. Morgan makes a specialty of the manufacture of poultry appliances and we understand he is the only person in Canada who manufactures this class of goods on a large scale.

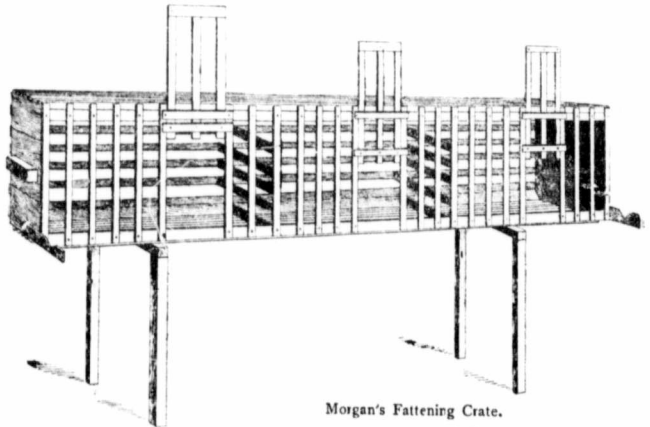
Mr. Morgan's establishment at London is a large one, well-equipped with all modern machinery. He employs only first-class workmen, and is there-



Morgan's Incubator Lamp.

fore in a position to turn out the very best quality of machines. He makes four different sizes of incubators and six kinds of brooders. He also makes the Government improved fattening coops, the same as are used at the poultry fattening stations; also shipping coops for fowl which are filling a long felt want.

Mr. Morgan makes it a rule to put only the highest-priced parts in all his



Morgan's Fattening Crate.

increased immensely during the past few years. Among those who have recently begun their manufacture on a large scale is Mr. A. J. Morgan, of London, Ontario. At the winter fair last month at Guelph, Mr. Morgan made a very fine display, his exhibit being a constant source of attraction to exhibitors.

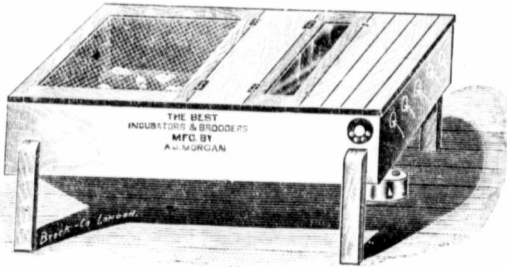
His machines have a very fine appearance and from reports that have come to hand they seem to be as near perfection as it is possible to make

incubators, and is therefore in a position to guarantee every machine he sends out, his customers by this plan running no risk.

Mr. Morgan desires us to warn intending buyers against the cheap, single-walled incubators which are so extensively advertised. After the first batch they are very often useless. We reproduce herewith several illustrations of Mr. Morgan's machines. Parties desiring further information should write for his illustrated catalogue.

An Automobile Sheepfold.

"Of recent years nearly every town is provided with an electric generating plant, and frequently the wires are strung along country roads from town



to town. This fact," says *Electricity*, "has led a man named McNair to attempt the use of electricity on the farm. He has devised a curious pen some fifteen feet square, built of wire and mounted on broad, flat wheels. This pen is designed to run in any pasture, even though it be hilly. Wires connect it with a small motor stationed at one side of the pasture, this in turn being connected with the electric wires from which power is derived. A turn of the button and the pen slowly creeps across the field. That is the essence of the invention, and simple enough too it seems. A machine of this type is being experimented with at the Agricultural Experiment Station of Michigan, at Lansing. Two lambs and part of the time an old ewe have been pastured in the pen during the summer. The field is planted with lucerne, growing thick and heavy. The pen is so arranged that it crawls the full length of the pasture in one month, travelling about two feet an hour; at the end of this time it is switched around and travels back again. As it moves, the sheep eat every bit of the fodder, eagerly cropping next the forward side of the pen as it runs over new ground. A bit of canvas duck is hung over the corner of the pen so that the sheep may be well sheltered, and, curious as it may seem, they have become so ac-

customed to the moving of the pen that when they lie down to sleep they snuggle up close to the forward end of the pen so that they may lie as long as possible without being disturbed by the rear end of the pen as it creeps

toward them. When the pen has passed, of course, the lucerne that has been cropped by the sheep immediately grows up again, and by the time the pen has made its monthly circuit the pasture is again in good condition. The advantages of this electrical pen lie in the fact that the sheep are kept from running over, half eating and tramping down a large amount of pasture, and it keeps the sheep quiet, so that they lay on flesh rapidly."

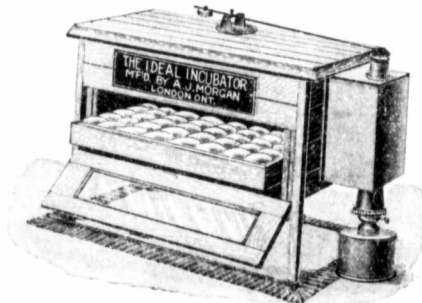
by this machine is remarkable. A man standing in the cabinet can test a case of eggs (1440) every three minutes. Smaller testers of the same make are sold for 12 and 30 eggs respectively, and these are used in broad daylight.

The question of grading is of great importance. Eggs look bigger and sell better if they are of the same size and no margin is needed for "small's" They also carry much more safely in transit than when of various sizes. The Danes have brought this system to a state of perfection, and eggs weighing from 13 to 18 lbs. per long hundred are sold in six sizes, the price varying in accordance with the weight.

Here is a pointer for Canadian egg producers and dealers—buy and sell eggs only by weight. A dozen eggs weighing 1½ lbs. are worth much more than a dozen weighing only 1 lb. When Canadians learn to sell eggs as well as poultry by weight only they will be on the way towards making a much greater success of the poultry business than they are now doing.

Put to a New Use.

Silas—How's farmin' up in your country now, Hiram?



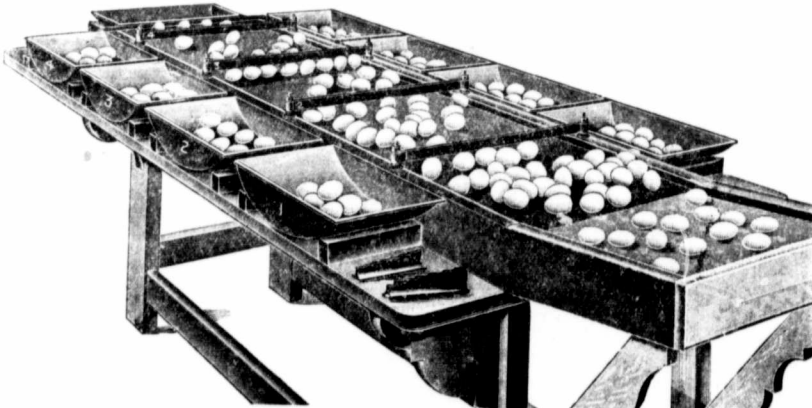
Grading Eggs by Their Size

We reproduce elsewhere the Lyons Egg Grader, an instrument used largely in Great Britain for grading eggs. The rapidity with which eggs can be graded

Hiram—Gosh! but it's stony! Do you know how I planted my corn?

Silas—No. How did you?

Hiram—Why, I borrowed a gatlin' gun from General Miles.—*St. Louis Globe.*



The Lyons Egg Grader.

The Farm Home

The Letter He Did Not Mail.

As he left the house in the morning,
Said his wife: "Here's a letter to mail;
And see that you don't forget it!"
So he told her, of course, he'd not fail.

As he placed it into his pocket
The address on the letter he saw,
And the name of it was somewhat familiar—
It was that of his mother-in-law.

And then a grim fact he remembered,
That his wife had threatened to send
And invite her to make a long visit—
What else could this letter portend?

A look of profound resolution
Did over his features prevail;
For a week it reposed in his pocket—
The letter he did not mail.

Then one evening, when home returning,
He met his dear wife at the door,
Who asked if he'd mailed that letter
She gave him the week before.

He told her, of course, he had mailed it;
"Then it's very peculiar," said she,
"For I'd written before to mother
To ask her to visit me.

"And that letter was to inform her
I'd rather she'd wait till next fall;
But here she arrived this morning—
She never received it at all!"

Until he was alone he waited,
Then kicked himself like a flail,
And tore it into uttermost atoms
The letter he did not mail.

—Geo. Birdseye in the Boston Globe.

"All Work and No Play Makes Jack a Dull Boy."

The above proverb is equally true if written, "makes Mary a dull girl." When we have a family of active young boys and girls around us, and we realize the amount of surplus energy stowed up in their bodies, we are greatly tempted to keep them constantly working and helping, in order to allow no waste of fuel. It is a surprising fact that the more energy is used the more is stored up for use next day. It is also surprising that if they can be led to suppose that work is play it will be completed in an astonishingly short time, and it is perhaps not quite so surprising that if they know there is an hour's play when the work is done, the work will be done more quickly and equally as well. I am strongly in favor of having even the youngest child taught to help rather than cause delay with work. I am equally as much in favor of having the play take the form of bodily exercise, and when this can be combined with music then it is that much the better.

We might as readily wish to see a flock of young lambs on a warm, sunny day standing perfectly still, as though life for them had no pleasure, as to desire our boys and girls to sit meekly with folded hands and quiet feet. In the case of the lambs we would not expect quick growth nor strong constitution; in the case of the other young animals we say, "What lovely quiet children! so good! no

trouble! Why, you would hardly know they were in the house!"

If boys and girls are of a studious, dreamy nature they may take kindly to holding down chairs by way of recreation. But it will be better for their growth, their health and future happiness if we pretend they are young lambs or kittens for a "spell."

It has been my lot recently to be afflicted (?) with some small boys and girls, and they have been the kind with whom we have no trouble inducing them to take bodily exercise, and I find they are not in the dull boy class. In fact it is a constant surprise and pleasure to me to see them so excessively lively, though I must confess they keep me busy finding work for them, for they are equally eager to work and to play.

Since writing the above I stepped into the wash room. I could hear the sound of Jack's axe splitting wood, and the girls' voices up-stairs singing, "Canadian War Song," but I found the room occupied by a dummy. Her foundation was two round blocks of fire-wood, two boards and a stone jug; the latter when surmounted by my barn sombrero was sufficiently life-like. Her clothing was my choring jacket and apron, but by way of decoration she wore a large knot of dried tobacco tucked picturesquely into the front of her jacket.

When the work is done, and often in the middle of it, I am beset with the cry, "Come and play for us, and we'll waltz and do the cake walk for you," and when time for out-door chores comes the story is, "We'll feed the hens," "We'll milk the cows" —"so we will." About the only thing to which these girls do not take kindly is doing fancy work, and as I always say that most fancy work means a useless waste of time and money, I can scarcely conscientiously urge them to make embroidered centre pieces or patch crazy quilts. Keep the children young; they will get old soon enough.

M. E. GRAHAM.

Hints by May Mantou.

Woman's Blouse with L'Aiglon Stock, to be Made From Tucked or Other Fancy Material, No. 3710.

The blouse made from the ready tucked silk, mousseline, cashmere or other fancy material is much in vogue, and has the great merit of requiring the minimum of labor. The smart model illustrated is designed to meet just such a need and includes the fashionable Aiglon stock and the deep girdle, both of which features are found in the best imported models. As shown the foundation is taffeta in biscuit color, the flaring portion of the stock velvet in the same shade, the collar white liberty, and the tie of black velvet. The girdle is of the same material as the waist, and is held by

handsome gold buttons, while tiny ones are used in the flaring portion of the stock. All-over lace, net and all the list of similar materials are suitable, or any soft woolen stuff that can be tucked before cutting, if preferred.

The foundation for the blouse is a fitted lining that should be well boned, but the waist proper includes shoulder and under arm seams only. Both lining and outside material close at the



3710 Blouse with Aiglon Stock
32 to 40 in. bust.

centre front, but separately, and the opening in the waist is rendered invisible by the tucks. The girdle is fitted to the figure and held in place by short bones, and the blouse drops slightly over the top. The sleeves are cut with broad upper and narrow under portions, and are finished with circular cuffs that flare becomingly over the hands. The Aiglon stock includes the plain portion that fits the throat, the flaring sides and the tie, and is finished separately from the waist. If desired, the plain portion only can be used, or the stock can be made of a contrasting color and worn with various waists. Black and white, white and gold, and many other combinations are worn, and as the stock itself is an up-to-date feature it can be made to do the double duty of finishing the blouse and serving as a separate pattern to be used with other waists.

To cut this blouse for a woman of medium size $4\frac{1}{8}$ yards of material 18 inches wide, or $2\frac{1}{2}$ yards 32 inches wide, with $\frac{1}{4}$ yard of bias velvet and $\frac{1}{4}$ yard of silk for flaring portion of stock and tie, will be required.

The pattern, No. 3710, is cut in sizes for a 32, 34, 36, 38 and 40 inch bust measure.

The price of above pattern post-paid is only 10 cents. Send orders to "The Farming World," Confederation Life Building, Toronto, giving size wanted.

The Farming World

A PAPER FOR FARMERS AND STOCKMEN.

Publisher, D. T. McAINSH
Editor, J. W. WHEATON

The Farming World is a paper for farmers and stockmen, published weekly, with illustrations. The subscription price is one dollar a year, payable in advance.

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THE FARMING WORLD,
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TORONTO

Industrial Fair Board.

A. F. MacLaren, M.P., Elected Director.

At a meeting of the Industrial Fair Board held on Wednesday last, Messrs. G. H. Gooderham, representing the Bench Show and educational interests, and A. F. MacLaren, M.P., Stratford, representing the dairy interests, were appointed directors on the Industrial Fair Board in place of the late Messrs. Withrow and Hobson.

The board have paid a graceful tribute to the great dairy industry of this country by electing Mr. MacLaren. There is no one that we know of, better qualified to act in that capacity than he, and we are assured that not only our dairy interests but agriculture generally will receive every attention at his hands while acting as director at the fair.

New Brunswick Farmers' Meetings.

The annual meeting of the Farmers' and Dairymen's Association of New Brunswick will be held at Fredericton on Wednesday, Thursday and Friday, January 23, 24 and 25. Hon. Sydney Fisher, Dominion Minister of Agriculture, Prof. Jas. W. Robertson, Commissioner of Agriculture and Dairying, and F. W. Hodson, Dominion Live Stock Commissioner, will be among the speakers.

Nova Scotia Farmers' Association.

The annual meeting of this organization will open at Kentville, N.S., on

the evening of January 30 at 7 o'clock, and continue in session the two following days. It is hoped that all of the 130 agricultural societies in the province will send delegates.

Among the prominent speakers will be Hon. Sydney Fisher, F. W. Hodson, W. T. McCoun, B. W. Chipman, Prof. H. M. Smith, Supt. Robertson, J. E. Hopkins, Prof. Sears and others. Return tickets on the certificate plan will be given at single fare, which should ensure a large attendance of visitors.

Annual Live Stock Meetings.

Mr. Henry Wade, Secretary, has arranged for breeders' meetings to be held in Toronto on the dates named as follows: Parties purchasing single fare tickets and securing a certificate will be entitled to a return ticket at one third fare:

Wednesday, February 6, at 2 p.m., Albion Hotel, Saddle and Carriage Horse Breeders' Association meeting. Wednesday, February 6, 7.30 p.m., Albion Hotel, Canadian Hackney Horse Society Meeting.

Thursday, February 7, 11 a.m., Albion Hotel, Dominion Shire Horse Breeders' Association meeting. Thursday, February 7, 2 p.m., Albion Hotel, Dominion Clydesdale Horse Breeders' Association meeting. Thursday, February 7, 7.30 p.m., dinner by the Canadian Horse Breeders' Association.

Friday, February 8, 2 p.m., Albion Hotel, Canadian Horse Breeders' Association meeting.

Wisconsin Dairymen.

The annual meeting of the Wisconsin Cheese-makers' Association takes place this week at Madison, Wis. Mr. J. A. Ruddick, of the Agricultural and Dairy Commissioners' staff, will deliver a couple of addresses bearing upon cheese-making in Canada and dairying in New Zealand.

Toronto Poultry Show.

The Toronto Poultry Show, was held last week in the poultry building at the Industrial Exhibition Grounds. The attendance was small, there being only a few fanciers from outside of the city. The exhibits were varied in character.

One of the features of the show was an interesting and valuable display of water-fowl, the property of Mr. W. E. H. Massey, of Dentonia Park Farm, which included several fine specimens of Indian runner ducks, and Pekin ducks and drakes, recently imported. Two large white turkeys, a variety of birds that are very seldom seen in Canada, are also included in Mr. Massey's exhibit, which captured many prizes. In the novice class, Mr. W. Fullerton, of this city, carried off the honors with a large and varied display of black Minorcas.

Most of the prize winners went to local breeders. We may be able to give a fuller report next issue.



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WINDSOR, : : : : : ONT.

Cheese and Butter

Makers of these articles, in many instances, do not pay the necessary attention to the quality of the salt they use. Some people think that "salt is salt," and it does not matter where it comes from or who makes it. This is a great mistake, for it is essential that to produce the best Butter or Cheese nothing but the purest salt should be used.

The number of prizes obtained by users of

"RICE'S or COLEMAN'S" DAIRY SALT

at the various exhibitions is conclusive proof that these brands of salt stand unrivalled. For prices, etc., address

R. & J. RANSFORD,
Clinton, Ont.

Honored at Home.

It has been said that "a man is without honor in his own country," a statement that very often comes true, but not always. On Friday, January 4, the neighbors and friends of Mr. John Campbell, Woodville, Ont., proved the exception to this rule, when they tendered the well-known proprietor of Fairview Farm and his amiable wife a public reception and banquet. The reception and banquet took place in Victoria Hall, in the village, which was gaily decorated for the occasion.

Mr. Campbell is a well-known stock-breeder, having made his name famous chiefly through the breeding of Shropshire sheep. He has, perhaps, won more prizes than any other Canadian breeder in the same line, those of the World's Fair and the International Live Stock Show at Chicago last December being notable ones.

Mr. Campbell, in replying to the toast of "Our Guest," among other things, said: "He was pleased to be present because such a gathering denoted a deeper interest in stock-raising and agriculture generally. Only a few years ago it would much trouble a dealer to purchase a carload of well-finished fat animals in this vicinity. Now they are making daily shipments. It is hard to fully realize the benefits of the change from selling grain to selling live stock. A few years ago an Institute speaker said that we could double our income in fifteen years by adopting improved methods. The past three years have proven this to be true. Have not our cheese and butter factories, our fat cattle, hogs, sheep and poultry been the means of increasing our incomes? Visitors to the Provincial Winter Fair at Guelph could not fail to see the vast improvement in our live stock. This fair is of great benefit to Ontario. There are to be found our best cattle, hogs, sheep and poultry, and after inspecting the animals and forming opinions thereon we could later on compare these opinions with actual results, from the carcasses. Lecturers were there to give advice thereon. Good work was being done there, and he advised everyone interested in farming to visit it. A much greater field for gaining information was to be found at the International Live Stock Show at Chicago. Here immense buildings were to be found for sheep, swine, cattle and horses. Canadian exhibitors did well, but the sheep men were the most numerous. He was delighted with the fair and the courtesy extended them by our American cousins."

Manitoba Dairying.

According to Bulletin 63 of the Manitoba Department of Agriculture the dairy industry of that province seems to be in a fairly flourishing condition. The total amount of dairy butter made in 1900 was 2,083,920 lbs., which at 14.45c. per lb. is valued at \$301,145.64; the total amount of creamery butter was 1,254,511 lbs., at

19.18c. valued at \$240,515.40, and the total amount of cheese made was 1,021,258 lbs., at 10.02c., valued at \$102,330.05, making the total value of the dairy output of the province \$643,991.09.

Deliberate Purpose in Animals.

An amusing incident, which shows that animals are subject to feelings very much like those which occasionally ruffle the bosoms of men, occurred some little time ago at the Jardin des Plantes in Paris.

A large elephant, formerly the centre of attraction, found itself supplanted in public favor by a new arrival—a young camel. The camel was the latest acquisition and very naturally engaged the attention of visitors.

The elephant for a long time showed signs of dissatisfaction, and at last his jealousy reached a point where it must find expression. When the usual crowd gathered about the camel the elephant prepared for action. It filled its trunk with water and, with deliberate aim, discharged the water all over the people who stood looking at the baby camel.

This method of throwing cold water upon the admirers of a rival brought a laugh even from its victims.

Equally wise in making its calculations was a cat that chose a peculiar spot for a bed. Comfort was the cat's object and the chosen spot did not seem to be calculated to afford it. The cat was found fast asleep in a large ship-building yard, lying on what seemed to be a very muddy path.

It was found, however, that the spot chosen by the cat for its couch was the point at which a hot steam pipe passed under the road, so that the mud was baked into a warm, dry clay, which made not only a clean, but an artificially-heated, sleeping place.—*Selected.*

Hasn't Drunk Water for 27 Years.

"There is a man in our company," says a Philadelphia stage manager, "who hasn't drunk a drop of water in 27 years. He boasts of it. He is always the first man into the theatre for a performance, and is as regular as clockwork at rehearsals. No, he isn't a 'rummy.' In fact, liquor is most repugnant to him. But for 27 years he has drunk nothing but tea, and he will probably continue in his present course until he dies. He carries his little portable gas arrangement about with him, and between the acts he makes strong tea—the strongest you ever tasted—in his dressing room, attaching his little heater to the gas fixture with a rubber tube. When this is impossible he carries a bottle of cold tea in his pocket, and when on a long run on the train the other members of the company are yearning for a drink, the old man just pulls out his bottle of cold tea and is happy."



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

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More applications for capable stenographers than there are stenographers to meet the demand. That's suggestion enough of the wisdom of studying shorthand and studying in this College where success comes to the student.

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PURE-BRED STOCK

NOTES AND NEWS FROM THE BREEDERS

These columns are set apart exclusively for the use of breeders of pure-bred stock and poultry. Any information as to importations made, the sale and purchase of stock and the condition of herds and flocks that is not in the nature of an advertisement, will be welcomed. Our desire is to make this the medium for conveying information as to the transfer of pure-bred animals and the condition of live stock throughout the country. The co-operation of all breeders is earnestly solicited in making this department as useful and as interesting as possible. The editor reserves the right to eliminate any matter that he may consider better suited to our advertising columns.

Horses.

All records for the marketing of horses in the United States were broken at National Stock Yards, Ill., in 1900. The total number of horses and mules received and resold was 144,921 against 119,485 the year before. Supplies were forwarded from thirty-two States and Territories. Missouri contributed 64,581 horses and mules to this market in 1900 against 54,801 in 1899. Arrivals from Illinois in 1900 were 37,286 head, which is a 3,000 gain over the Illinois arrivals of the previous year. During the year 1900 Montana sent 5,303 horses, Iowa sent 3,948 horses and mules, Kansas 4,589 and Nebraska 5,404. Texas contributed 4,994 horses in 1900 against 2,403 during the previous year.

The following facts from the report of the Director-General of Haras, the Government stud of France, is interesting: "The total number of stallions in the twenty-two depots has, in compliance with the law passed in 1892, been raised to 3,000, the actual number now in the different depots being 3,038, of which 262 are Thoroughbreds, 365 Arabs pure and crossed with the Thoroughbred, 1,548 demi-sang (French Coachers), 261 Bretons, 71 Norfolk trotters, and 251 other demi-sang, while 278 are Percherons, 61 Boulonnais, 54 Ardennais, and 51 other heavy draught breeds. These stallions covered in the past year 170,155 mares, of which 3,077 were Thoroughbreds or Arabs, 103,045 demi-sang, and 64,093 heavy draught breeds. In addition, 1,334 stallions belonging to private owners have received nearly \$135,000 in premiums, and have covered 67,141 mares; while 187 stallions have been given certificates of soundness, and have covered 8,740 mares, so that altogether 246,036 mares have been covered by stallions with a guarantee of soundness. Out of the 732 owners of approved stallions 478 owned only one, 149 two, 63 three, and 25 four, while only one owner had as many as 17. The new law just passed authorizes the Government to increase the number of its stallions to 3,450, at the rate of 50 every year for nine years. Altogether, including the amount given in prizes at the races, there is a total of \$3,235,000 being spent annually upon the encouragement of horse-breeding, out of which \$465,000 is contributed by the State."

Cattle

The fourth annual meeting of the Central Shorthorn Breeders' Association of America will be held at Kansas City on January 29 and 30 next. Among those who will take part is W. D. Flatt, Hamilton, Ont., who will deliver an address on "The Relation of the Shorthorn Breeders of Canada to those in the United States."

A feature of the beef market at the Union Stock Yards, Chicago, a week ago was a bunch of three Shorthorn steers around forty months old that averaged 2,074 pounds. The cattle were very well finished, but their excessive weight forced them practically out of the running altogether and it was some little time before a buyer could be found for them at a figure far under that which was being obtained for cattle 500 or 600 pounds lighter showing the same degree of flesh and finish. Time was when these steers would have been in the most eager request at the strongest prices, but the end of the nineteenth century has seen the finish of the ultra-weighty beef animal.

Sheep.

The annual meeting of the Shropshire Sheep Breeders' Association and Flock-Book Society was held the other day in Birmingham. Mr. J. Bowen-Jones presided. The annual report stated that the present numerical strength of the Society was 252 life mem-

bers and 211 annual members, making a total of 463. The statement of accounts showed the total assets of the Society up to September 29 to be £1,261. The large and important shipments of Shropshire sheep had, it was said, been a great feature of the year. The breed was now making considerable headway in different countries, both as a pure breed and for crossing purposes. During the year Shropshire sheep had been exported to South America, United States, Canada, South Africa, Russia, Australia, New Zealand, Tasmania, Germany and France to the number of 361 rams and 503 ewes, or a total of 864, as against 1,086 in 1899, and 921 in 1898. The decrease was accounted for by the unfortunate outbreaks of foot-and-mouth disease in this country, which caused Buenos Ayres to be closed against the landing of English-bred stock. The Council recommended that a sum not exceeding £85 be set apart in 1901 for the purpose of promoting the interests of Shropshire sheep breeders, and making more widely known the special attributes of the breed. The report was adopted, and it was resolved to suggest to the Council of the Smithfield Club that the prizes for Shropshire sheep at Smithfield Club Cattle Shows should be £10 and £5 for pens of three fat wether lambs under twelve months old, and £5, £10 and £5 for pens of three fat wether sheep above twelve and under twenty-four months old.—*North British Agriculturist.*

Messrs. Alfred Marsell & Co., live stock exporters, Shrewsbury, have just despatched from Liverpool, per S. S. "Bovic," of the White Star Line, consigned to Mr. Duncan, the manager of the Niagara Stock Farm, 32 high class Shropshire sheep, selected from the old-established and carefully-bred flock of Mr. T. G. Jukes, of Tern, comprising 20 choice breeding ewes, sired by Tern Safety, 8261, bred by Mr. G. Lewis' Tern Medallist, 8778; Tern Chief, 9265, bred by Mr. J. Bowen-Jones' Farmer Chief, 8030; Solidity, 6994, bred by Mr. T. G. Jukes' Friendly, 7502; Thickhead, 9221, bred by Mr. A. E. Mansell's Fair Star, 5177; Tern Coat, 9266, bred by Mr. T. G. Jukes' Tern Medallist, 8788; Tern Medal, 1015, bred by Messrs. Evans' Medallist, 7605. These ewes were all served by high-class sires from the well-known flocks of Mr. Minton and Messrs. Evans, viz.:—Montford Wonder, by the Royal Winner, Phenomenon, 8680, and Sherlow Star, by Star of the Morning, 10145; Royal Member, 8715, by The Member, 8264; ann Tern Solidity, 10152. Six beautiful ewe lambs, sired by Kruger's Hope, 10394, bred by Repts. of the late W. Nevett, by 12nd Broughton, 6196, and Montford Jorocks, 1002, bred by Mr. T. S. Minton, by Vice-President, 9295; the balance comprising five well-grown ram lambs, all sired by Kruger's Hope, 10394, and a typical shearing ram, bred by Messrs. Evans, by Star of the Morning, 10145, from a Corston Artist ewe.—*North British Agriculturist.*

James A. Cochrane, Hillhurst, P. Q., writes: "I am pleased to report that the first Hampshire Down lamb, a lusty, vigorous ram, arrived this morning (Jan. 2) on time, and is in all probability the first twentieth century lamb of his breed or of the Down family. Joy of Morning at twenty-four months old tips the beam at 1,850 lbs.; he has improved steadily since the shows. Scottish Hero in breeding condition now weighs 2,200 pounds at two years and seven months. Scottish Beau, the first of the Silver Plates imported to America (bred by Mr. Duthie, but calved at Hillhurst, is developing into a worthy assistant to the first named sires."

KENDALL'S...

SPAVIN CURE



The old reliable remedy for Spavins, Ringbones, Splints, Curbs and all forms of lameness. It cures without a blister because it does not blister.

North Fayetteville, Ont., Feb. 10, '98.
Dr. R. J. Kendall Co.
Dear Sirs—Will you please give me a remedy for a horse I have a mare that is afflicted. I take pleasure in stating that Kendall's Blister, by using it only once and then applying your Spavin Cure. As long as I live on a horse, I will not be without Kendall's Spavin Cure and Kendall's Blister in my stable.
Very truly yours,

ADOLPHUS GAUTHIER.

Price \$1.50 for \$2.50. As a liniment for family use it has no equal. Ask your druggist for Kendall's Spavin Cure, also "A Treatise on the Horse," the book free, or address
DR. B. J. KENDALL CO., ENOSBURG FALLS, VT.

WAGGONER

Extension Ladder

Light, Strong, Convenient and Cheap.

Port Colborne, April 10, 1900.

Dear Sir—Have you an agent down here for your goods? The ladder I got from you seems to take with the public, and I wish you would send agents' prices so if I can do anything I will take it up or let them know who your agent is.

L. TURNBULL.

(See our ad. in last and next week's issues.)

For stacking, or for picking apples, and for general use about the farm the WAGGONER LADDER is unequalled. Made in all lengths.

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TRY The Farming World

Home Work—profitable—congenial—easy—on new plan. Be your own workmaster in your own home! Send your address on post card and we will send you particulars. PEOPLE'S SYNDICATE, Dept. C, 120 Yonge St., Toronto.

Market Review and Forecast

Office of THE FARMING WORLD,
Confederation Life Building,
Toronto, Jan. 21, 1901.

Although the wholesale trade has not been brisk during the week the outlook is as healthy as ever, with every prospect of a good spring trade. Money, though firmer at $5\frac{1}{2}$ per cent. on call, is ample for all legitimate needs. Discounts or mercantile paper are firm at 6 to 7 per cent.

Wheat.

Cable reports a firmer wheat market in England most of the week, especially for the finer grades of spring wheat, but towards the end an easer feeling prevailed. Mild weather, with some freezing, is not disturbing the favorable outlook for wheat in the United States. The following statement, compiled by the *Cincinnati Price Current*, gives the comparative position of wheat in the United States for two years ending Dec. 31, 1900:

	1900.	1899.
Supply July 1.....	122,000,000	122,000,000
Crop.....	560,000,000	600,000,000
Total supply.....	682,000,000	722,000,000
Exports, six months 92,000,000		98,000,000
Consumption, six months.....	175,000,000	172,000,000
Seeding, autumn.....	42,000,000	42,000,000
Total distribution, six months.....	309,000,000	312,000,000
Remaining Decem-ber 31.....	373,000,000	410,000,000

This estimate is supposed to be reliable and shows a decrease of 37,000,000 bushels in the wheat left in the United States on Dec. 31 last as compared with that on Dec. 31, 1899. The visible supply in the hands of the farmers is always an unknown quantity so that it is hard to estimate accurately. This estimate will still leave about 106,000,000 bushels on hand at the commencement of next harvest. The total world's supply in sight is 89,785,000 bushels as compared with 78,212,000 at this time a year ago. Owing to the heavy receipts in the American Northwest Chicago market after advancing $6\frac{1}{4}$ to $6\frac{1}{2}$ ¢ per bushel lost about $3\frac{1}{2}$ ¢ of the rise during the week.

At Ontario points millers are paying 67¢ for red winter with 66¢ reported as the highest in some places. The mark there is dull and lower at 64¢ for red and white; 63¢ for goose and 68¢ for No. 1 spring east. On Toronto farmers' market red and white bring 68½ to 69¢; goose, 65½¢, and spring wheat, 69¢, per bushel.

Oats and Barley.

Canadian oats continue in good demand in England and values are higher owing to the quantities required for the South African trade. This export demand is helping the demand on this side. No. 1 quality has been selling at points east of Toronto at 28½ to 29¢ per bushel. No. 1 are quoted here at 28½¢, east and No. 2 at 27½¢, middle freights. On the farmers' market oats bring 31½¢ per bushel.

The barley market seems to be quiet, except for No. 1 malting grades. Quotations here are 38½ to 39½¢ for No. 3 and No. 2 qualities. On Toronto farmers' market barley brings 46 to 47¢ per bushel.

Peas and Corn.

Cables are higher for peas. Here peas are quoted at 62½¢ east, 61½¢ middle freights, and 60½¢ west. On farmers' market, white peas bring 62½¢ and blue 59½¢ per bushel.

High prices for hogs in the United States are strengthening corn values. Car lots are quoted at Montreal at 46 to 47¢. Here No. 3 American is quoted at 44½¢ on track.

Bran and Shorts.

Ontario bran is very scarce at Montreal, where it sells for \$16.50 to \$17, and Manitoba bran in bags at the same figure in car lots on track. Shorts are quoted at \$17 to \$18 in car lots.

City mills here sell bran at \$14.50 and shorts at \$15.50 in car lots f.o.b., Toronto. At local milling points west bran is quoted at \$12.50 and shorts at \$13.50 to \$14 in bulk lots.

Eggs and Poultry.

The receipts of eggs at central points are increasing and the mild weather is bringing out more new-laid eggs. Prices at Montreal on the same. The market here is a little quiet with lighter demand. Fresh gathered stock and select are quoted at 19¢, to 20¢, in case lots. On Toronto farmers' market eggs bring 25 to 30¢ for boiling stock, 19 to 20¢ for fresh stock and 14 to 16¢ per dozen for held stock.

There are reported to be some heavy losses on Canadian poultry shipped to England during the past few weeks. Supplies of choice turkeys are scarce at Montreal and bring 9 to 9½¢; chickens 7 to 7½¢; geese 5 to 6¢; and ducks 7½ to 9¢ per lb. in large lots. The offerings here are not large and the demand is light. In a wholesale way dressed turkeys are quoted at 8 to 10¢, and geese at 7 to 8¢; chickens at 35 to 6¢. On Toronto farmers' market chickens bring 50 to 90¢ per pair, turkeys 10 to 11¢, and geese 8 to 9¢ per lb.

Potatoes.

Cars of potatoes on track Montreal are quoted at 45 to 47½¢ a bag. There is no change in the situation here, car lots on track being quoted at 33 to 34¢ per bag. On Toronto farmers' market potatoes bring 30 to 40¢ per bag.

Hay and Straw.

There has not been so much buying by American buyers of late owing to an easier market to the south of the line. Government is still buying hay for South Africa for shipment via St. John, N.B. Montreal prices keep firm at \$10.50 to \$11 for No. 1 and \$9 to \$9.50 for No. 2. Farmers are inclined to hold for higher values. Quotations here are \$10 to \$10.50 for No. 1 and \$9 to \$9.50 for No. 2 in car lots on track here. On Toronto farmers' market hay brings \$12.50 to \$14.50, sheaf straw \$9.50, and loose straw \$6 to \$7 per ton.

Seeds.

The seed market keeps steady. A lot of American clover seed is reported sold to arrive at Montreal at \$5.50. Quotations there are \$5.50 to \$6 for red clover, \$5.50 to \$6.25 for alsike, and \$2 to \$2.50 for timothy. Flax seed is now selling there at \$2 to \$2.25 per bushel. On Toronto farmers' market alsike brings \$5.50 to \$6.60, red clover \$6 to \$6.50, and timothy \$1.40 to \$1.80 per bushel.

Cheese.

It is pretty clear that Great Britain will have to depend upon Canada for the supply of cheese for the balance of the season. Stocks in the United States are 61,000 boxes less than a year ago, and it is not expected that there will be much more go forward from that quarter. Stocks in London and Liverpool are estimated at 312,000 boxes, as compared with 231,000 boxes at this time last year. Notwithstanding that prices on this side are from 1 to 1½¢ lower than at this time last year, English dealers seem to be buying only in small lots. Later in the week there was a better feeling as buyers on the other side are ordering a little more freely and advancing their limits in order to get better stock. Montreal quotations range from 10 to 10½¢, up to 10½ to 10¾¢ for finest, though some holders are asking 11¢.

Butter.

There seems to be very little Canadian butter going forward, and consequently the export trade is playing only a small part in the butter market. The local trade continues active and is absorbing supplies as fast as they come to hand. The *Trade Bulletin* sums up the situation at Montreal as follows: "The butter market continues firm but quiet, as local dealers have purchased sufficient for the time being to meet present requirements, and it is doubtful if the extreme figures of last week could be obtained to-day. Sales are reported to us of between 350 and 400 packages of choice fresh creamery at 22½ to 23¢, although the outside figure is considered quite extreme to-day, 22½¢ being a more faithful representation of the market for good-sized lots. To-day we heard of a very fine lot of fresh creamery comprising 44 boxes at 22¢.

and a very fancy lot of 24 packages at 22½¢. Sales were also reported of about 350 packages, boxes and tubs of seconds at 21¢.

Creamery butter keeps steady here at 22 to 24¢ for prints and 21 to 22¢ for tubs. Trade in dairy butter has been a little quiet, with supplies coming in more freely. Pound rolls are quoted at 18 to 20¢, and large rolls at 18 to 19¢. On Toronto farmers' market pound rolls bring 20 to 25¢, each.

Cattle.

American cattle markets have ruled fairly steady during the week, especially for well-finished animals. There was only a fair run of live stock at Toronto cattle market on Friday, consisting of 779 cattle, 1,308 hogs and 15 calves. The bulk of the cattle which were butchers' stock were generally unfinished. Fully one-half of the offerings should have been fed a month longer. Trade was slow and the market dull, in fact, the worst in months. Drivers were complaining of having to sell for less than they paid the farmers in the country. But if they will persist in paying top prices for half-finished cattle they are bound to suffer. Such action prevents their making money themselves, and hinders others who are looking for good cattle from doing business. There were few exporters' offered, and the best of them went off at \$4.90 per cwt. Butchers' classes were lower, especially in the lower grades. Light and heavy feeders, as well as Buffalo stockers, were easier. Other stock was steady.

Sheep and Lambs.

Prices were steady for sheep at \$3 to \$3.50 per cwt. for ewes and \$2.50 to \$3 per cwt. for bucks. Lambs sold at from \$4 to \$4.50 each, and \$3.75 to \$4.65 per cwt.

Hogs.

The advance in prices noted last week has been maintained. On Friday select bacon hogs sold at \$6.80 per cwt., and light and thick fats at \$6.35 per cwt. Uncured car lots sold at \$6.60 to \$6.75 per cwt.

Montreal market is firmer and higher at \$7 to \$7.12½ for select bacon hogs. The *Trade Bulletin's* London cable of Jan. 17 re Canadian bacon read thus:

"There is a steady market for Canadian bacon at about last week's advanced prices, which are quoted at 58 to 61s. for No. 1, 55 to 58s. for No. 2, and 54 to 57s. for fat and stork."

On Toronto farmers' market dressed hogs bring \$8.25 to \$8.50 per cwt. Car lots of dressed hogs are quoted here at \$7.25 to \$7.75 per cwt.



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and a **Handsome Prize** for every correct answer. This is a **Puzzle Picture**, with a boy concealed. If your eyes are wide open, and you examine the picture closely, perhaps you may be able to find him. When you have done so, take a pencil and mark the outlines of his face and body, then clip it out and return to us with your name and address written very plainly. In your letter enclose six one-cent stamps for postage and packing expenses. The first person sending us a correct answer will receive a **Beautifully Engraved, Gold-Plated Hunting Case Watch**, and all others will receive **Handsome Prizes**. **ART SUPPLY CO., Box 3605 Toronto.**



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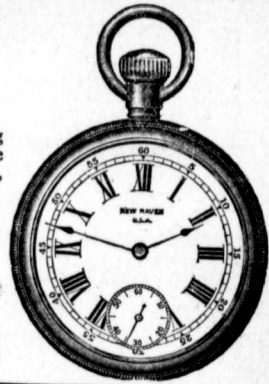
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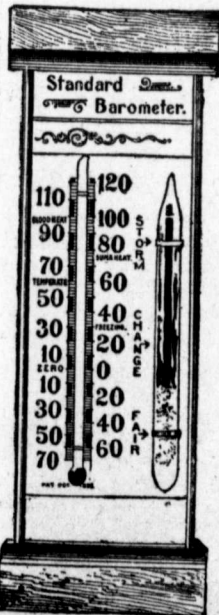
The Farming World
Confederation Life Building
Toronto



THE farmer's business is every year becoming more profitable when conducted on up-to-date lines. The day has passed when mere hard work counts for much. The day of the scythe and cradle has gone by. The farmer today who brings to bear upon his work careful thought, and makes use of all the modern methods, is sure to make a splendid return for the money he has invested. Perhaps in no way can he keep up to date so well as by reading carefully the best agricultural papers. These are really the tools of his trade.

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Actual height of Barometer, 9 inches.

JUST as a clock tells you what time it is, so the thermometer described here will tell you how cold it is, and the Barometer what the weather will be.

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TORONTO

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1st—If the weather is to be fine the substance of the composition will remain at the bottom and the liquid will be clear.

2nd—**Previous to Rain**, the substance will rise gradually and the liquid will be clear, with small particles moving about.

3rd—**Before a Storm** or high wind the substance will be partly at the top, and will have a feathery appearance, and the liquid will be heavy and in fermentation. In this it will usually give notice **twenty-four hours before the weather changes**.

4th—**In Winter**, generally the substance will rise rather high, in snowy weather or white frost it will be white, with small stars in motion.

5th—**In Summer**, the weather being warm and dry, the substance will be quite low.

6th—To know **what quarter the wind or storm comes from**, you will observe the substance will lie closer to the bottle on the opposite side to that from which the storm or wind comes.

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

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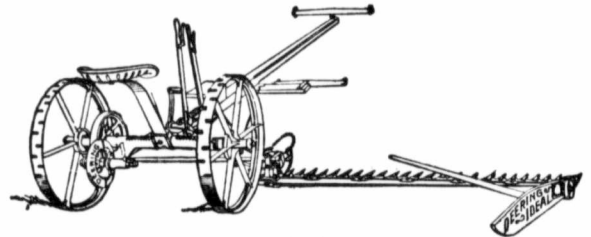
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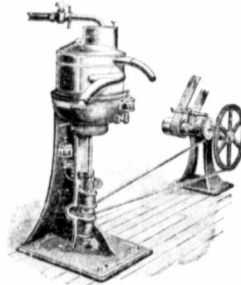
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ARCH. RUSSELL, General Manager

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