

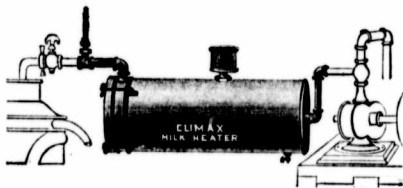
THE Farming World

Address
THE FARMING WORLD

PAPER FOR FARMERS AND STOCKMEN

CONFEDERATION LIFE
TORONTO

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•	5	25 "	8 to 18 "

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Must never walk but always drive'

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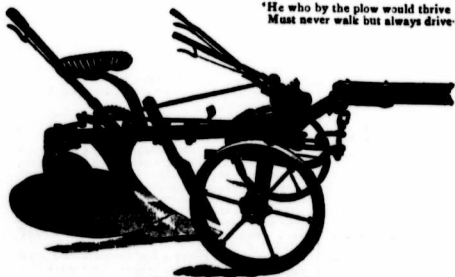
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This plow has a lighter draft than any other plow doing the same work. Anything a plow should be asked to do it can do with less strain on team or ploughman.

It is the simplest plow made and can be run by any man, woman, boy or girl who knows how to manage a team.

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for both the Farmer and his Good Wife**

The De Laval machines were the first in which the principal of centrifugal force was successfully applied to the separation of cream from milk. For more than twenty years they have been in successful operation in every country of the world where dairying is practised.

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Sample copies of The Farming World will be sent to any address, free of charge, upon request. Send us the name of a friend who does not subscribe and we will send the paper for two weeks free on trial. Address, The Farming World, Toronto.

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We have a large list of farms of all sizes. If you want to buy write and say just what you want and we will give you full particulars by next mail.
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The Razor Steel

Secret Temper, Cross-Cut Saw



WE take pleasure in offering to the public a Saw manufactured of the finest quality of steel and a temper which toughens and refines the steel, gives a keener cutting edge and holds it longer than by any process known. A saw, to cut fast, "must hold a keen cutting edge."

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

These saws are elliptic ground thin back, requiring less set than any Saws now made, perfect taper from tooth to back.

Now, we ask you, when you go to buy a Saw, to ask for the Maple Leaf, Razor Steel, Secret Temper Saw, and if you are told that some other Saw is as good, ask your merchant to let you take them both home and try them, and keep the one you like best.

Silver Steel is no longer a guarantee of quality, as some of the poorest steel made is now branded silver steel. We have the sole right for the "Razor Steel" brand.

It does not pay to buy a Saw for one dollar less and lose 25c. per day in labor. Your Saw must hold a keen edge to do a large day's work.

Thousands of these Saws are shipped to the United States and sold at a higher price than the best American Saws.

MANUFACTURED ONLY BY
**SHURLY & DIETRICH,
GALT, ONT.**

The Farming World

For Farmers and Stockmen

VOL. XIX.

NOVEMBER 12th, 1901.

No. 20

A Stockman's Number.

On November 26, two weeks from the date of this issue, a specially illustrated number of The Farming World will be published. This number will deal largely with matters relating to the coming winter fairs to be held at Guelph, Ont., and Amherst, N. S., during the second and third weeks of December. Other specially contributed matter of interest to breeders and stockmen will be given and a very valuable number may be looked for. The illustrations in the main will comprise portraits of a number of the leading men in agriculture and live stock in Canada.

Parties desiring advertising space in that number should write The Farming World at once giving full particulars. A large number of extra copies will be distributed and the issue will be a very valuable one for reaching the best farmers and stockmen in the Dominion.

Why the Pan-American Has a Deficit.

The Pan-American has closed and the great Exposition is over. It is to be regretted that it ended so disastrously from a financial point of view. A deficit of over \$3,000,000 is expected, but according to some late reports, this will be so widely distributed, that no one will suffer. It is to be hoped that such will prove to be the case. It is in any case, a serious loss, and might well cause promoters of world's expositions to hesitate before launching out on similar ventures. The total number of admissions during the six months, was 8,179,674, including passes. An average of 2,000,000 a month had been figured on by the management, but very little over one-half that number of paid admissions per month was the result.

Why an Exposition that has conferred so much benefit upon the commercial interests of the countries represented should fail financially, may be worth inquiring into. For an enterprise for which so much capital was required to get it under way, there was not enough cash on hand to begin with. At St. Louis the company that is responsible for the Louisiana Purchase Exposition in 1903, have already sixteen million dollars in the treasury. Compare this with the million dollars the Pan-American people had at their

disposal at the commencement, and the financial loss is largely accounted for.

In regard to the small attendance some other explanation is necessary. The railway companies were not as liberal toward the Exposition as they might have been, and this is especially true of American roads. The attendance outside of the States of New York, Ohio, and perhaps, Pennsylvania, was comparatively small. Even these States did not do as well as they should have done, and the high railroad rates is to a large degree responsible for it. In some instances the lowest rate to the Pan-American was twice the lowest rate from similar points to Buffalo the year previous. A case in point is that mentioned to us by some parties from Allentown, Pa., who had to pay \$10 for a return ticket to Buffalo this season, whereas in 1900, the regular summer excursion, return rate, was only \$5. Other instances might be given to show that in no small degree the railway companies are responsible for the shortage in attendance.

A second reason for this comparatively small attendance may be found, we think, in the attitude of the management toward the press of the country. Quite early in the game it was given out that no money would be paid for advertising the Exposition in the public press. Instead, a bureau of publicity was established at considerable expense, which fairly flooded the press of the country with literature descriptive of the Exposition and its objects. While a great deal of this material found its way into the daily and weekly press, we venture to say that fully three-quarters of it was relegated to the waste paper basket. Excepting the papers in the immediate vicinity of the Exposition, very little attention was paid to this material by the leading press of the country. If it found its way into the columns of the leading dailies or weeklies it was largely as fill up matter. At any rate it did not elicit from the editor any editorial comment or urgent appeal to the people to visit the Pan-American. In influencing the readers of any journal no item of news can be compared with the personal appeal or personality of the editor, and this with a very few exceptions, the Pan-American did not get.

While this view may appear a somewhat mercenary one, it is

along the line of good, ordinary business sense. The newspapers of this Western Continent, while they may advocate certain principles and uphold certain interests, are essentially business ventures, and any enterprise like a great world's fair cannot hope to obtain the active support of the press unless it is prepared to treat it in a business-like way. In Canada, none of our larger exhibitions expect the free use of the columns of the press to advertise their shows. Every year they make grants, be they great or small, to the various papers for this purpose, and why should a great concern like the Pan-American, that takes so much money out of the district where a paper circulates, expect free use of its columns without in some degree making remuneration therefor. Had the management of this otherwise commendable enterprise judiciously expended a couple of hundred thousand dollars on the press, or diverted a considerable share of the appropriation for the bureau of publicity to this purpose, we believe they would not have had so many complaints to offer to-day in regard to the small attendance.

While on this matter of attendance it might be well to note that Ontario did her share. During the last three months of the show, we believe we are within the mark when we state that fully one-quarter of the attendance was from this Province. Had the Central West and New England States done as well, the financial loss to the Exposition would not have been so large. Then, as to the exhibits: The showing in the live stock classes would have been very small indeed had it not been for the live stock display from this Province. The Pan-American authorities owe a debt of gratitude to the live stock and other interests of the Dominion for their valuable contributions to the show. The press of Canada evidently did its duty by the Exposition, though no remuneration came its way.

Can Be Relied Upon.

W. B. S., Shetland, Ont., writes: "We like The Farming World. The market reports can be relied upon, and then it comes every week, a welcomed, looked-for visitor. A paper published every week that the farmer can talk through, and for him, and does so many things for him is certainly something worth having."

The Decrease in Cheese Consumption.

The marked decrease in the consumption of cheese in Great Britain this season is fraught with somewhat serious consequences to the Canadian trade in that commodity. Already it has influenced this season's market in a very remarkable degree, reducing the price to the Canadian farmer by perhaps one to one and one-half cents from what he would have received had the usual demand for cheese prevailed in England. With a shortage in exports so far this season of nearly 375,000 boxes from the United States and Canada as compared with the same period last year, with a shortage in the make in Great Britain and with a probable shortage in the fall make in Canada of 100,000 boxes, our dairymen had a right to expect higher prices for cheese during the past few months than they have been getting. The falling off in consumption must have been pretty severe to have counteracted these influences, which usually make for higher prices. If this falling off should prove to be permanent, then next season may witness a further lessening of the demand, and our dairymen will have to re-arrange their dairy methods and turn their energies more toward the making of butter, in which there is a much wider field and a larger consuming class to cater to.

The export butter trade so far this season, has been very satisfactory. Never perhaps in the history of the trade has Canadian creamery met with such favor from the British consuming classes as during the past few months. And this is not a transitory popularity, but so permanent that Danish butter makers are beginning to view with alarm the inroads which Canadian creamery is making into a class of the English trade, which Danish shippers have been accustomed to look upon as exclusively their own. This is all very encouraging from a Canadian point of view and indicates what can be done when regular quantities of the right quality of stuff are sent forward. By continuing the methods that have been so successful this season, Canadian butter makers may look forward in a few years to as large an export trade in butter as in cheese.

Pan-American Awards

SOME DIFFICULTY IN GETTING WHAT CANADIANS ARE ENTITLED TO.

Mr. E. B. Elderkin, Canadian Live Stock Commissioner to the Pan-American, was in the city last week. He is busy getting things in shape for his report of the live stock at the Exposition, which will appear shortly. To The Farming World he stated that there is some difficulty in finally adjusting the awards in connection with the model dairy. During the first three weeks of the test, owing to there not being the proper equipment, no

butter was churned. In making the final awards Superintendent Converse estimates the butter for this three weeks on the basis of the churnings during June. This places the Guernseys ahead on actual butter produced. If this three weeks is left out of the reckoning altogether, as Mr. Elderkin contends it should be, and which we believe to be the correct method to follow, the Canadian Jerseys would be ahead on butter produced. Mr. Elderkin has entered a strong protest against counting in this period, which will come before the Pan-American authorities shortly. Should his protest succeed the final awards will be as follows:

The Guernseys win for profit on butter fat produced as estimated by the Babcock test; the Jerseys for actual butter produced; and the Holsteins for total solids and for gain in weight. This would mean three awards for Canadian herds and one for the Americans.

Before the poultry show took place circulars were mailed to poultry men to the effect that prizes of \$5, \$3 and \$2 would be given in each of the classes for pens. Consequently a great many Canadian poultry breeders entered pens at an entrance fee of \$2 for each entry, only to find that when the awards were made no prizes were given for pens, and not even the entry fee returned. Wm. McNeil of London entered 18 pens and is thus out \$36 in fees. Mr. Elderkin is making a special effort to have the fees returned. The large deficit in the finances of the Exposition is responsible for this state of affairs. But this is no excuse why the fees should not be returned. To take fees in this way and give no value in return is a method of obtaining money that cannot be commended.

The final awards in fruit have been made, but as yet have not been made public. Ontario, we understand, obtained between one-fifth and one-sixth of the total awards, including a large number of medals.

Big Prices for Shorthorns

W. D. Flatt's sale of Shorthorns at Chicago on Nov. 7th was an immense success. The gross receipts of the sale were \$50,537.00, an average of \$1,123 per head. The sensation features were the sale of the Royal cow Cicely for \$5,000, and the Royal bull Lord Banfi for \$5,100. Choice Goods, another very fine bull, we understand, was sold by private sale to Robins & Sons, Indiana, at the highest figure ever paid for a Shorthorn bull in America. All the animals sold went to American buyers with the exception of two cows bought respectively by T. Douglas & Sons, Strathroy, Ont., for \$775, and H. Usher, Queenston, Ont., for \$680. The sale was largely attended, many Canadians being present, among them the Hon. John Dryden, Henry Wade, Arthur Johnston, John Isaac, Robt. Miller and Capt. Robson.

The sale was held at the stock yards and Col. Woods wielded the

hammer in his own inimitable way. In opening the sale he said in part: "That the Shorthorn men to-day ought to be the proudest men in America. If anyone will study history he will find they had been victorious in every field. No other breed could enter the lists and show an equal record. They had met every foe in every clime and the result had always been the same. One reason for this was that the Shorthorns were worthy cattle. A second reason was that they were backed by men with a united feeling and a united interest."

He further stated that this was one of the most important days in the history of the breed. No imaginary line should keep the best Shorthorns from any country. It should be a question of Shorthorns. Mr. Flatt had manifested great enterprise, great pluck and a great love for the breed. No money was considered too much for what we wanted in America. The first cow to be offered was without doubt the best cow in Great Britain when she left it, and her presence here was an exhibition of Mr. Flatt's faith in the business.

Cicely was then led into the ring. The first bid made for her was \$2,000, and the fourth \$3,750, and she was finally knocked down to J. E. Robbins & Son, Horace, Ind., at \$5,000. This price was exceeded when Lord Banfi was presented, going to George E. Ward for \$5,100.

The following is the full list of the animals sold with prices:

COWS

Cicely, Robbins & Son, Md.	\$5,000.
Empress 12, Messrs. Baker, Ill	2,015.
Lady Hamilton	1,010.
May Blossom, Fletcher Heines	1,000.
Lady Waterloo, Messrs. Baker	1,100.
Solidity of Pittvie, Fletcher Heines	1,000.
Bracliet, E. J. Mornell	510.
Precious Pearl, E. G. Donahay	750.
Hawthorn Blossom 12, C. I. Ines Ill.	540.
Banner Fortune, Fletcher Heines	900.
Clover Hill Lorne, George Wolverton,	400.
Veronica, H. Usher, Ont.	680.
Susanna, George Ward, Ia.	665.
Lady Mary 2nd, W. B. Owens, 620.	
Ascot Mayflower, Koffman Bros., Md.	1,080.
Clara 59, F. W. Ayers	1,525.
Lavender Rose 2nd, George E. Ward, Ia.	1,100.
Princess Royal 64th, Fletcher Heines,	1,750.
Lady Clara 6th, Harding & Son, Wis.	850.
Pine Grove Mildred 3rd, Messrs. Baker	1,025.
Fame's Matchless, Messrs. Baker	635.
Blythesome 16th, George E. Ward	950.
Missie 164, F. W. Ayers	1,025.
Lavender Princess, N. P. Clark	850.
Golden Chain, Messrs. Baker	800.
Victoria Adelaide, Korn & Lee, Ia.,	1,650.
Carey Victoria, Fletcher Heines	1,600.
Crescent 8th, George Woody, Ia.	1,000.
Martha 10th, H. E. Heeden, O.	620.
Priarose 6th, C. E. Bradt, Ill.	1,000.
Orange Blossom 36, D. A. Tweenen, Ohio.	1,280.
Dalmany Fragrance, calf at foot,	
Koffman Bros.	785.
Rosalini 3rd, F. W. Ayers	975.

Freight Rates

The Farmers' Interest in the Matter. Canada Discriminated Against.

Winter is approaching, and with it the season of discussion. Soon the farmers of the Province will be reviewing their past year, debating on their outlook for the coming year, and making up their minds upon the various questions of public policy which affect them. One question, which it is earnestly to be hoped will be given widespread and careful discussion, is that of freight rates which farmers are called upon to pay. To an increasing degree transportation is coming to be the very breath of life to industry, and as competition grows keener and each great district finds exactly what products suit it best and what markets it can hope to serve, transportation will become more and more the factor which will decide between success and failure. Already the farmers of Ontario are experiencing the pleasure of seeing the products of their American rivals carried past their doors for far less than the best rates they can obtain, already they are called upon to face the fact that rival farmers hundreds of miles further inland than they can get their wares to the seaboard over the same railways far more cheaply than they can.

A warm discussion went on last winter, in which many Farmers' Institutes and several conventions, such as that at the Guelph Winter Fair and that of the Fruit Growers, took an active part, while the press also was active. The railway company's efforts to defend their course were subjected to severe and destructive criticism, and the whole discussion went far towards establishing a basis for an enlightened public opinion. The coming winter should see a revival of this discussion. Every Farmers' Institute should take the matter up, for of what benefit is it for the farmer to improve his methods if the railway company is to confiscate the extra returns? And what does it profit the farmer to contribute his share as a citizen towards the lavish aid given our railways if they systematically give advantages to the American farmer, who has given them nothing, over the Canadian farmer, who is their main support and who is still paying for the bonuses which they have been given?

It may be convenient to recapitulate now a few of the facts arrived at during the discussion of last year. They will give a basis, from which to start the new discussion.

Perhaps as significant a circumstance as any is the general fact that the railways which more especially serve the rural population of Ontario in the first place received huge gifts from the municipalities, and in the second place, for the past twenty years have been gradually advan-

cing their freight rates. No sweeping increases have arrested public attention, but by small advances here and there, consistently maintained the rates have crept up. Twenty years ago, as an instance, the Northern & Midland Railways carried lumber to Toronto and Port Hope for \$1 a thousand feet, and now the rate is double that. The net effect is that the farmers of to-day pay higher freight rates than did the farmers of twenty years ago. This is very serious. The general cost of transportation has undergone an immense decline. Organization and consolidation have made such progress that railways, when they wish to, can carry goods at extraordinarily low rates. For instance, this autumn oats grown on the eastern foothills of the Rocky Mountains, will be taken across the continent, transferred to ships, and landed in South Africa at a price which will at once undersell the oats of Great Britain and the U. S., and give the Alberta farmers prices one-fourth as large again as those they have hitherto been receiving. In the face of such advances in efficiency the railways increase their charges to the Ontario farmer. The land on the whole produces more, new lines of agricultural produce have appeared, the roughness of pioneer days has disappeared, and still the rates go up. Grave deficiencies of service also occur, except at competing points, as cattle dealers can abundantly testify.

Again, certain lines of trade are practically forbidden to Ontario people. For instance, the facts that we have large fruit growing districts and that our Northwest is not a fruit country, should point to a profitable market for Ontario fruit in Manitoba and the Northwest. But the railway intervenes and cripples the Ontario man; this, too, in the face of the fact that one reason assigned by the railway companies for the high rates charged western farmers is the difficulty of getting return freights. Fruit growers have explicitly stated that they are charged rates which render trade impracticable for grain cars sent west to move the wheat crop, cars which ordinarily would be sent empty. The late John McMillan, ex-M. P., in a review of the subject, told of a charge of \$518 freight for a car load of apples shipped from Seaforth to Prince Albert, while cattle were being shipped from Prince Albert to Montreal for \$107. A sharp controversy took place over the question of the rates charged for sending fruit from Ontario to Brandon. The apologists for the railways made certain claims, but the discussion revealed the fact that the classification was so manifested as

to prevent the shipping of car loads of mixed fruit to Brandon, and the town is not large enough to justify the sending to it of a car loaded exclusively with one sort of fruit. The inequalities are not confined to this branch of the trade. Grapes can be sent from Detroit to Chicago (175 miles) for 19 cents a hundredweight, but the charge on them from Windsor to London (75 miles) is 32 cents a hundredweight. Apples shipped to the British market from Seaforth are charged 5 cents a barrel, or 39 a car, more than when shipped from Ingersoll and Wingham, which happen to be competing points. Thousands of Ontario farmers are interested in our canning industries. Ontario canned goods are carried to the seaboard for 22 cents a hundredweight, and canned goods from points in the State of New York are taken to the sea for from 12 to 15 cents.

It is perfectly well known to everyone that the railways systematically favor foreigners at the expense of Canadians. They themselves admit it. Just to keep in mind the enormity of the injury done to Canadians, a few facts may be recalled. Clover seed is brought from Toronto to Seaforth for 24 cents a hundredweight. Clover seed is brought from Chicago by way of Toronto for 19 cents a hundredweight. Men who raise sheep in Ontario cannot ship the wool to Toronto as cheaply as men in England or even in Australia can ship to the same place; for the rate from Bradford in England to Toronto is 17 cents a hundredweight, and the rate from Dundas to Toronto is exactly the same; from Hamilton to Toronto is even higher. In 1897 an investigation into the rates per cwt. on cattle from western points to Montreal showed the following facts:

	Average Miles.
10 points in Illinois ...	828 26c
7 points in Indiana ...	783 26
7 points in Ontario ...	552 28
29 points in Ontario ...	488 27
9 points in Indiana ...	714 25
59 points in Michigan ...	661 25
94 points in Ontario ...	475 26
15 points in Michigan ...	614 24½
47 points in Michigan ...	586 25
101 points in Ontario ...	427 25
20 points in Michigan ...	549 21½
49 points in Ontario ...	395 24
14 points in Michigan ...	536 20
25 points in Ontario ...	330 21

What are these discriminations practised by Canadian railways, ready on occasion to claim that it is a patriotic duty for Canadians to help them, and largely built as a free gift with Canadian money, but iniquitous? The farmers of Ontario are hundreds of miles nearer the sea coast than the farmers of Michigan, Illinois and Indiana, and our own railways wipe out that natural advantage and give the foreigner 250 miles further away better rates than their fellow-countrymen. And the instances given simply touch upon the wealth of illustration at hand.

Several things should be done this winter. Freight rates should

be closely watched and comparisons made as far as possible. Every man who has goods to ship has an interest in the matter and should be an observer. Instances of injustice should be reported and discussed. The Farmers' Institutes form an excellent medium for this branch of the work, and publicity

should be sought through the columns of the press. All conventions and gatherings of farmers should take the matter up, and resolutions dealing with the matter passed. Let the winter of 1901-02 see a long step taken in the awakening of public interest and the organizing of public opinion.

A Year on a Tuberculosis Milk Diet.

A distinguished French physician, Dr. Garnault, will shortly, with Dr. Koch's consent, commence experimenting upon himself to ascertain whether bovine tuberculosis is communicable to man. From an interview which he recently had with him, Dr. Garnault states that Dr. Koch stands unreservedly by his opinion that bovine tuberculosis is not communicable to man, and that his views are certainly based upon an extremely solid scientific system. One of his arguments is that cowherds living with tuberculosis cattle are not infected. Dr. Koch believes that the most convincing demonstration will be obtained not by inoculation, but by absorption of unboiled milk regularly during several months.

Dr. Garnault has determined to act upon this idea, in his experiment upon himself. After having been inoculated with bovine tuberculosis, he will immediately begin to follow a tuberculosis milk diet. For the space of a year he will drink nothing else. He will obtain milk as rich as possible in tuberculosis bacilli, which will be analyzed every fortnight. He will drink this, mixed with a little ordinary water. Every two months to make doubly sure, he will be inoculated with a virulent culture of tuberculosis bacilli, the force of which will have to be tested on calves. At the expiration of a year of this treatment Dr. Garnault is not consumptive, he will conclude, he says, that, "under the condition in which he was placed, bovine tuberculosis is at any rate, not easily communicable to man." Dr. Koch affirms with perfectly serene conviction, that he will come out of the ordeal quite unscathed.

Other experiments will be conducted in England this season by scientists who are determined to reach the truth by independent investigation. The royal commission on tuberculosis has begun experiments, a special feature of which will be tests made with diseased animals. No experiments will be conducted there, however, on the lines to be followed by the plucky Frenchman, the outcome of which will be looked forward to with the greatest interest.

To Judge at Chicago.

Among the judges selected for the big live stock show at Chicago the beginning of December, are the following Canadians: Southdown sheep, John Jackson, Abingdon, Ont.; Lincoln sheep, Hardy Shore, Westminster, Ont., and Robert Beith, Bowmanville, Ont., on Clydesdales, Richard Gibson, Delaware, Ont., is a member of a committee to supervise the judging of a car load exhibits. Robert Miller, Stouffville, Ont., will make the awards on sheep in the Agricultural College exhibits. The judges in the swine classes have not been announced yet.

Our Western Letter

Plowing Stopped. Threshing Only Half Done. Western Institutes. Grain Movement.

Winnipeg, Nov. 4th, 1901. Winter is here, but whether here to stay or not remains to be seen. Saturday night brought a strong northwest wind with a temperature of 10 degrees above zero, and a light fall of snow. The cold continues and the indications are for more snow. Everything points to an early commencement of steady cold weather.

Cold weather in itself has no terrors, but there never was greater reason than at the present moment to hope for its postponement. Threshing is not more than half done, and fall plowing is not much more than nicely begun. Threshing may be continued, it is true, throughout the winter, if necessary, though every farmer prefers to get this work done before the snow flies. In this aim the Ontario farmer, who may have ten or twelve thousand bushels to thresh, will sympathize with him, as also will the young men who have gone through the experience of threshing in Manitoba.

Ploughing, of course, must cease with the first hard freeze. The ground froze last night beyond all possibility of plowing, and should the present weather continue, not one-half the usual area will be prepared for crop this fall. This in turn presages a decreased area in crop next year, a matter for no very great regret.

There have been many innovations this year, resulting mostly from the extraordinary crop, but the newest of all is the plan originated by Hon. D. H. McFadden, Provincial Secretary, to hasten the completion of threshing by moving the outfits from districts where work has been completed to others where their services are required. Usually, when the threshing in a certain locality is finished, the thrasher puts up his machine with the conviction that his duty to his country has been faithfully done. This season he will apply to the authorities of the railway company to be shipped, with his outfit wherever he may be needed. Just how the scheme will work out in practice remains to be seen. The thrasher will have no objection to lengthening his season in this way, but perhaps those whose season is shortened by the intrusion (?) of outsiders may claim a certain amount of consideration for their interests.

The Farmers' Institutes have commenced their winter series of meetings. Things have been going from bad to worse with these organizations during the last year or two. The new regulations requiring fifty members, and at least five meetings to secure a Government grant, looks like one of the old-fashioned kind of kill or cure remedies. The Institute which is sufficiently strong to stand the dose, will be the better for it, and perhaps those which are not, will be just as well out of the way. These more-than-half-dead Institutes are of no use in the world, from whatever point of view they may be considered.

The grain movement for October is this year the largest on record. The report of the Chief Inspector at Winnipeg shows that there were graded during the month 7,626 cars of wheat, 175 cars of oats, 41 cars of barley and 37 cars of flax. Last year the total number was 1,825, and in 1899, 6,412, for the corresponding period. Almost the whole quantity was of good milling grades, No. 1 hard, No. 1 Northern and No. 2 Northern. Nearly all that went below this grade, 1,345 cars, can be made into milling wheat by drying. This process will be applied in the elevators at Fort William, commonly referred to as the "Wheat Hospital." At the close of the markets on Saturday, prices were as follows: No. 1 hard, 70 cents; No. 1 Northern, 66½ cents; No. 2 Northern, 64½ cents. Prices in the country are the same, with the deduction of the freight rates.

The following paragraph is from the Winnipeg Free Press: "Referring to the Dominion Government creameries in the Territories, Prof. Robertson says: At Calgary, the headquarters for the creameries, a new mechanical refrigerator plant was installed this summer, which has been found to give splendid results. This summer, in order to let the Manitoba creameries have a good advance in their shipping to British Columbia markets the department of agriculture arranged for the export of butter from the Government creameries in the Territories to the United Kingdom. By this means Manitoba was left free to supply the British Columbia markets. This year there has been sent to the United Kingdom from the Territories about 400 packages.

Correspondence

Housing Cows.

Editor THE FARMING WORLD:

In reply to your correspondent, I would say that there is no doubt the bad returns from his cows when kept in at night were due to two things: First, and the most important, the sudden change from outdoor to indoor life, as nothing so interferes with the flow of milk as any change in the conditions of the dairy cattle, even for one night. Second, the change in the ration fed, as hay, millet, and corn stover are not nearly such good milk producers as clover grass. In the case of such farmers as stable their cows during inclement weather, the cattle have become accustomed to such protection and take it as a matter of course. Had your correspondent kept on stabling his cattle in the bad weather, I am quite confident that in a short time he would have seen good, rather than bad, results following his treatment.

J. H. Grisdale,
Agriculturist.

Central Experimental Farm,
Ottawa, Oct. 30, 1901.

A Scotchman's Advice to a Scotchman.

Editor THE FARMING WORLD:

Noticing an inquiry in The Farming World for a small farm near Montreal or Quebec, I am writing to give your correspondent full information to the questions he asks. Unless he had some particular reason for wanting a farm near the two places he mentions, I would strongly advise him to come to Ontario, for the following reasons: First, he would find it more like the home land, farming being carried on somewhat similar, being more up-to-date in its methods than near Quebec or Montreal. Prices, no doubt, are good there for all produce, being near good markets, but one can grow anything one wishes out-doors in Ontario, peaches, plums, apricots, pears, apples, cherries, melons, grapes, etc., which cannot be done in the lower province. On a small farm, say 25 to 100 acres, you can have fruit, stock and poultry. This is the end of Nov., and 12 miles east of Hamilton I could show him, were he here, places where there has been no frost yet this fall.

I am writing to your correspondent as a brother Scotchman, having come out here 10 years ago from East Lothian, the best farmed county in the world. We rented a farm for 10 years, and I have just moved on to one we bought this fall. We consider it a first-class farm, 124 acres, for which we paid \$6,500, or, roughly speaking £1,300. We paid £800 down, the balance on interest at 4½ per cent, payable whenever we like. If your correspondent made a good payment on a farm, say one-half to two-thirds the value, he could ar-

range to pay the balance when he liked.

Now, as to the farm we bought, there are ten acres of splendid apple trees on it, capable of bearing from 2 to 5 barrels of apples per tree, according to the season; 10 acres of grapes, which produce in good bearing condition, 2½ to 3 tons of grapes per acre, besides pears, plums, cherries, etc. We are going to plant out more fruit in the spring, peaches, cherries and pears. We are half a mile from a creamery, and the same distance from the station, one mile from an electric railway that runs to Hamilton, and three miles from another railway. It is a beautiful part of the country in the Niagara peninsula, lying 40 miles from Toronto and 12 miles from Hamilton, between Lake Erie and Lake Ontario, about three miles from the latter. We have a herd of 20 dairy cows on our farm, also thoroughbred poultry, pigs and all kinds of stock.

We have had to learn a great many things from experience which I would be only too pleased to tell any stranger interested in farming. My advice to him would be, if he has a family to come out himself, say next February or March, stay in the district he intends settling in for one year, and he will then see the methods of doing work, and be more competent to judge for himself.

I will now answer your correspondent's questions, and should I be of any service to him in any capacity whatever, I shall only be too glad to help him select a farm, should he decide to come here. I have no farm to sell, so of course I am not putting forward inducements that some might, in order to further their own ends. I expect that the editor of The Farming World will comment on this letter, so I will stand by his remarks. There are lots of farms (small) suitable for piggery, poultry, and cattle in this vicinity, with the addition of having fruit, being near the creamery, where all the butter-milk one wants can be had for 1½ cents a gallon. Prices here range for such a farm as he would want, at from forty dollars per acre, that is £8 to £15, or as much higher as one cares to go, according to locality. He can get a first-class farm for £12 an acre. They rent for from \$2 to \$2 per acre, but by all means let him buy one if he can, it is more satisfactory. Hoping I have given him the information desired.

Very truly yours,

H. B.
Wentworth County, Nov. 3, 1901.

An Experience With Moth Catchers.

Editor THE FARMING WORLD:

I noticed some time ago a request in The Farming World for the experience of anyone who has used a "Moth Catcher" during the past

season, and as we have used one I thought I would tell you about it.

We got ours (only one) from A. G. Hull & Son, St. Catharines, Ont., last spring. They certainly do catch a lot of insects, moths and other bugs, when they are managed rightly, but I am afraid that I don't altogether understand ours yet, as I think that we might have caught more moths than we did. Nevertheless, I think it is really worth any one's while to try it.

We used ours until the plums were grown quite large, well, for two months, anyway, and I think longer. We moved it about through the orchard, and then our apples were very wormy, nearly all being so, but I think they would have been wormy in any case. Last year, though apples were so abundant, scarcely any wormy ones could be found, and I have seen it that way before. Maybe if we had had two moth catchers we might have saved the apples. I would very much like to hear from others who have succeeded with them.

Wilbert B. Stevens,
Shelburne, Ont., Oct. 28, 1901.

That Anthrax Affair.

If parties who are responsible for sensational and unreliable reports circulated through the press knew the injurious effect they have in moulding opinion in other countries they would perhaps hesitate somewhat before giving them to the public. A few weeks ago a most sensational telegraphic despatch went the rounds of the Canadian dailies announcing a serious and widespread outbreak of Anthrax in the Northwest Territories. This report has reached the Old Land and has been quickly seized upon by the opponents of raising the quarantine against Canadian cattle entering Great Britain as a strong proof against such a course. It will be remembered that in connection with this report the Live Stock Dealers' Association of this city met to consider the outbreak and the possibility of its affecting the live stock trade in Eastern Canada. The North British Agriculturist in referring to this whole matter, says:

"When the stockowners in the eastern provinces of Canada are demanding that they shall be protected against the importation of stocks from the 'disease-infected districts' in the western part of the Dominion, it is hardly a suitable time to advocate the repeal of the Diseases of Animals Act and the reopening of our ports to Canadian stores."

Here is direct evidence of the injury done to the Canadian live stock trade by the circulation of this highly sensational and, now that the facts are known, totally unwarranted report. Though the prospects for having the quarantine raised against the importation of Canadian cattle into Great Britain are not very bright just now, there is no use of piling up additional evidence in this careless and uncalled for way against the advisability of doing so.

Studies in Nature

A Review of Insect and Bird Life on the Farm

Edited by C. W. Nash

BIRD NOTES.

On the 25th of October, just at day-light I was out along the shore of Lake Ontario and saw several small flocks of snow buntings pass over me, flying from east to west, since that time I have seen several other small flocks of them, all working in the same direction. Every year at about this same date there seems to be a small migration of these birds from the north, how far south they go at this time I do not know, but I think that most of them remain here in this Province, frequenting the sandy beaches of the great lakes. Later on, if the winter should be severe, and snow deep, great numbers will come and spread themselves all over the open country, feeding upon the seeds of weeds that stand up above the snow, but these later migrants do not appear to be stationary anywhere, they roam about the country so long as the snow remains deep and the weather cold, but as soon as a thaw sets in, they disappear. In Manitoba they behave in the same way, always sticking closely to the snow line, and vanishing when the bare ground becomes visible. These little creatures are truly birds of the north; no human being has yet penetrated so far into that mysterious region of snow and ice which surrounds the pole, but that he has found snow birds there, and it ever the North Pole is reached, no doubt they will be there also.

A great many people suppose that snow buntings are merely the grey birds of summer (as they call them), which, like the northern hare and other animals, turn white in winter, this is not the case, all the so-called grey birds of summer go south for the winter, and never change the general color of their plumage. The prevailing color of the snow bunting is always white, the proportion of this, however, changes somewhat with the seasons, but at all times the white predominates. We have another winter bird here, which is sometimes confused with the snow bunting, though it in no way resembles it. This is the familiar little fellow that frequents the barn yards, and which is sometimes called the blue snow bird, slate-colored snow bird, or white bill. Its upper parts are dark slate color, below white, the outer tail feathers and beak are also white; scientifically, it is known as *Junco hyemalis*, and it is generally called by those who are familiar with it, the "Junco." Its note is something like that of the chipping sparrow, and in the winter its ways are much like those of the "chippy" in summer.

One of the most interesting and

highly valued of our game birds is the woodcock. Unfortunately for us it is becoming very scarce, so much so, that in a few years I feel sure that it will have gone the way of the passenger pigeon and the buffalo. Its destruction is not attributable altogether to the excessive shooting in this country, or the Northern States, but rather to the netting and other poaching methods adopted by negroes and market hunters in the South, where the birds spend the winter. The ways of the woodcock are full of mystery and but little known even to sportsmen, who have hunted them all their lives, they generally know where to look for them in their various haunts during the shooting season, both before they commence to migrate and during the flight, but of their habits in the earlier part of the season they know little or nothing. Woodcock are chiefly nocturnal in their habits, moving but little during the daylight, and their favorite haunts are the swampy thickets having a bottom of rich black muck, into which they bore for their food. In the summer it is almost impossible to investigate these retreats so as to discover what the birds are doing, the rank vegetation growing in such places effectually screens everything under its cover, the soft, treacherous bottom causes one to stumble and blunder so that everything is disturbed around you, and the mosquitoes, taking advantage of your helplessness when mired irritate beyond human endurance. What we do know about the woodcock has been learned by taking advantage of the fortunate opportunities which sooner or later present themselves to persistent observers. Mr. F. Norman Beattie, of the Wellington Field Naturalist's Club, has favored me with some remarkably interesting notes on the woodcock's spring song, this musical performance is indulged in by the mates during the season of courtship, and is, no doubt, highly appreciated by the ladies for whose entertainment the serenade is intended.

WOODCOCK NOTES.

It was a lovely moonlight night that night of the 28th of April. I had been out in the woods all day and was tramping home after sundown. Suddenly, as I was passing a piece of swale, a harsh "pake" grated on my ears from close at hand. Stopping still instantly, I listened for a repetition of the sound. It soon came, and I recognized it as a probable woodcock note. Its author was evidently seated in a partially cleared spot covered with logs and stumps at one end of the swale, so for this spot I crept with all due caution,

and succeeded in getting quite close to the "pake," when it flew, and commenced its "towering" twitter. This "towering," as everyone versed in bird-lore knows, is the mating and love song of the woodcock. It is a flight song accompanied by various gyrations and twistings in the air, generally ending with a spiral drop into the bush. When my bird had flown, I lay down beside a log to await developments, and ere long the twittering seemed to come closer. Then suddenly it ceased, and a moment later there was a rush of wings directly over my head and a woodcock dropped in a little open space only a couple of yards from my stump. I could see it easily in the bright moonlight as it toddled around among the logs and stumps. It made now a queer clucking noise, a sort of "qu-r-r-ut," or lengthened "quirt" with the "r" trilled. Suddenly it uttered the "pake," immediately after one of the "quirt" notes, and so close was the bird, and so intense the sound, that I was fairly startled. In every instance it uttered the "pake" directly after the "quirt," and followed it so closely that it seemed to come in the same breath thus: "qu-r-r-ut-pake," without a pause between. The "quirt" note was very low, and I suppose would be audible only a short distance away.

About every five minutes it would "tower," uttering a low, sweet, twittering noise. This was kept up for a short time, when the sound appeared to get nearer, and then to suddenly cease, and a moment later the bird would be seen alighting with short rapid beats of the wings. I had not been studying this bird long when several more appeared on the scene, two of which alighted close to me, while calls came from other parts of the swale also. For two blessed hours I lay, cramped up against that stump, during which time I had always at least one bird in sight, and often heard the rush of their wings overhead. This one thing I noticed in their flight, whereas, in rising to "tower," they rose silently, in dropping into the brush their wings always made a rushing or whistling noise. In about an hour the towering seemed to have ceased, and the birds sat about the swale uttering their "qu-r-r-ut-pake" notes till at last all were quiet but one, which sat close by me, and uttered its notes at regular intervals. This I noticed, that although in every case the "pake" was preceded by a "quirt," every "quirt" was not followed by a "pake." Alarmed at last by some slight move on my part, this last bird flew up over the swale and was silent, so I rose and stretched my stiffened limbs, and tramped the four miles between me and home carrying with me the memory of a pleasant evening with that curious bird the woodcock.

Teacher: Willie, what's the masculine of laundress?

Willie Wiseguy: Chinaman!—Exchange.

The Sugar Beet World

Devoted to Sugar Beet Culture in Canada and Allied Industries. Specially
Representing the Farmers' Interests

Edited by JAMES FOWLER

Sugar Beetlers

A factory should be established at a place where the beets can be most easily carted by the farmer, and no beet-sugar enterprise can be successfully launched that is not founded from its inception upon promising natural conditions supplemented by agreements on the part of the farmers of the neighborhood to devote stipulated areas to the cultivation of beets.

There is no industry that can come to a country, which means more to all classes than that of a Sugar Beet Sugar Refinery, which produces a standard granulated sugar grown from the beets in the neighborhood of the Refinery. Its benefits permeate all branches of trade, the coal mine, the coke ovens, the lime-stone quarries, the manufactories of barrels and bags, the producers of lubricating oils, the blacksmith's shop, the manufacturers of chemicals and chemical instruments, the railroads, the laborers, your merchants, and in fact, every one feels the benefit of an industry of this kind, and none more than the farmers.

Some growers, and their numbers constantly grow, say they had just as soon take care of a crop of beets, especially at harvest time, as a crop of corn. This is because they are not only getting used to it but also they are learning how to handle it best.

The farmers around Benton Harbor, Michigan, will experiment with the use of sugar beet pulp from the sugar mill in that city as fertilizer. The pulp is said to be extensively used for this purpose in California, and with highly successful results.

There is no doubt about the advantage of early planting, "but it is very important that the ground should be so dry that there is no sign of sticking to the implements of tillage; otherwise much harm may be done which no amount of late cultivation and care in the treatment of the crop can overcome. Better plant late than before the soil is in a good condition. Experience has shown that this must be particularly observed in regard to the heavier soils.

The beet in wet weather grows more above ground, while during dry weather it reaches down with its long tap root for moisture and becomes a more valuable crop on account of the increase in sugar percentage.

466 wagon loads of beets were received at the Caro, Michigan, factory in one day.

Over 100 car loads of beets have been shipped to the Lansing, Michigan, factory.

Guelph

The Board of Trade and the City Council each sent a deputation to Michigan to look into the "Beet Sugar Industry." The deputation, including some newspaper men, left on Tuesday, 5th, and returned on the 8th, highly pleased with what they saw. A report will be submitted, after which it is expected the Royal City will boom with beet sugar.

Galt

The business men of Galt are determined to have a sugar factory. That it will be built and controlled by Messrs. McMullin & Phillips, is not so certain. Negotiations are still going on, and it is quite evident, from the length of time required to conclude the deal, that there are some points upon which the parties do not



Harvesting Sugar Beets on the Farm of Robert Sokes, Sombra Township, Ontario.

agree. Acreage contracts are being secured by the Committee of the town, and will be offered to others as an inducement to locate, if the present deal falls through.

Berlin

Acreage contracts, under the personal direction of Prof. Shuttleworth, are being rapidly written up for the factory to be built by the Ontario Sugar Co., at this point. So eager are the farmers to grow beets, that many of them are offering to contract for more than it is thought they would be able to handle to advantage the first year. Great care is being exercised in regard to this matter, and only such amount as is considered advisable is given to each farmer. The condition of the soil and the ability of the farmer is taken into consideration, before he is given a contract for more than a small amount. Many vacant lots around the town are to be put into sugar beets next spring, and towns people are trying to rent from one to five acres from the farmers in the immediate vicin-

ity to plant beets, intending to do work after working hours in the different factories. In the town you hear nothing talked of but sugar beets, and now that the project has been so thoroughly endorsed by the "Trades and Labor Union," nothing remains but to count the ballots for the bonus by-law on the 12th inst.

"Too Much Sugar Beet."

One of our farmer friends, recently had the courage (and he still lives), to tell us that this valuable journal is being spoiled, because it contains so much "Sugar Beet." The only reason he could advance was that sugar beets might be a good thing for the Western farmer, but could not be grown by the farmers in the Eastern part of the Province.

That we cannot have too much of a good thing, goes without saying, and that the growing of sugar beets is profitable has been fully demonstrated by the experience of farmers in the State of Michigan. From no other crop can such profits, directly and indirectly, be obtained as from the growing of sugar beets for a factory.

Our columns week after week contains statements of facts that cannot be refuted. To be fully convinced that the "hall has not been told," it is only necessary to visit one of the beet sugar factories during the season of operation. 466 wagon loads of beets, each containing from 1½ to 2½ tons, were received at the Caro, Michigan, factory in one day. Could any argument be more convincing? Surely those 466 farmers would not be engaged in growing an unprofitable crop, and continue at it.

Now as to the section of country, Eastern Ontario can grow beets fully as well as Western Ontario. The industry would be just as profitable to them, and it only requires the energy and enterprise of the Eastern farmer to secure the erection of a factory. But the first requisite is to have some knowledge of the sugar beet and how to grow it. Then it is necessary to prove that the right quality and the proper quantity of beets to support a factory will be grown. The failure of the industry in the Province of Quebec was not due to the quality of the beets, because it is clearly shown that beets containing sufficient saccharine matter to make them profitable to a factory were grown. The trouble was in the farmer not understanding the crop, and not growing enough of them; but more particularly was the gross mismanagement of the factory.

Eastern Ontario can grow beets,

and we would strongly advise our farmer friends to take the matter up vigorously, and not leave it to your Western friends to reap all the benefits of a "good thing."

Looking After Business

Messrs. Bartlett, Hayward & Co., Baltimore, Ind., whose advertisement appears in our columns this week for the first time, is one of the most reliable firms in the United States. While they have, perhaps, not built quite so many sugar factories as some other firms, their work has always given satisfaction. The sugar factories at West Bay City, Michigan, and Sugar City, Colo., are monuments of their skill. It is said there is no better factory in the United States, than the one they built at Sugar City.

F. W. Fearman's Opinion.

F. W. Fearman, of Hamilton, was recently in Michigan in the beet root sugar districts, and has given the Spectator of that city the result of his observation, as follows:

On a late visit to some of the Western States I called at several towns and cities in the State of Michigan and found the people much interested in the growth and manufacture of the sugar beet. I went through a large sugar house in the town of Caro in that State, which is now in full operation. Four hundred and sixty-six wagon loads of beets were received in one day, besides several carloads. The wagons contain from 2½ to 3 tons. The load is driven on to a scale and weighed, and the driver is given a bushel basket, with the gross weight of the load on a ticket fastened to the basket. He fills the basket with a bushel of beets. They are taken to the laboratory, weighed there, well scrubbed, trimmed of all fibrous roots and dirt, and the weight entered on the ticket. The beets are pressed and the juice is caught in a vessel and passed to the chemist, who fixes the value of the load by his test, 12 degrees at \$4.50 per ton, 14 at \$5. I did not enquire what the degrees meant, but I suppose the strength of the saccharine in the beets test-

ed. I was told by the farmers there that the crop averaged twelve to fifteen tons to the acre, and that it netted to the farmer \$40 to the acre. They were all well pleased with the price. After my chat with the people who brought in the beets and the men who handled them, I was presented with a permit and took a stroll through the sugar house, and I will try and follow the product of the basket of beets through its progress from the farmer's wagon into the railway car, loaded and ready to be shipped to Chicago or anywhere else. On a trip from shed to sugar house there are three larger sheds, 400 feet long, under one wide roof. A deep pit is dug the full length of them, and a stream of water running through the bottom of each pit in a flume that is constantly carrying beets across and under the yard into the sugar house. There are railway tracks and wagon roads on the sides of these pits, and the pits will hold 6,000 tons of beets. Part of them were 20 feet deep with beets when I saw them. I go on to the sugar house and again see the beets. They are now in a large long wooden box filled with running water and are constantly being stirred up with steam-driven long arms and pushed on and out of the box quite clean. Then they fall into the beet wheel and then into more washers and into a hopper. Still they travel on into an elevator and into sugar scale buckets, and when it is loaded with 1,000 pounds it dumps its cargo into the cutters, where the beets are cut up into flinders, chips and strips. They are carried on into twelve large tanks, each holding 8,000 lbs., where the sugar is extracted from the beet. When this takes place what is left is called pulp, good for cattle feed only. The juice then goes on and is measured and is treated with lime and sugar by the Steffen process, to remove impurities, and is concentrated in the vacuum pans, and is now crystallized and is run into the centrifugal machines, where the sugar takes on its fine white condition, and to rid it of the syrups and crystals. After passing through the granulation state, where it is dried by steam, it appears coming through spouts

down into the barrels, when I caught in my hands some of it, pure and white, and in a few minutes it was covered up, weighed, marked and loaded into the cars. A shipment to Chicago a short time ago contained 700,000 lbs., on twenty cars. This factory is 400 feet long and 200 feet wide, cost \$400,000, and \$200,000 in alterations afterwards. It has a capacity of more than 500 tons of beets per day of 24 hours, and requires 3,000,000 gallons of water every 24 hours. Four hundred barrels are made in the cooper shop every day; 6,000 tons of coal will be used in the season; 5,000 tons of lime stone. An average of 275 men have been engaged in one season. The vacuum pans, where the sugar is brought to crystallization, hold 50 tons of product. I saw the white sugar in the centrifugal machines when it was near finished, where it is separated from the syrups, which are treated again in a different way. All the machinery is of very fine manufacture and came from New York. The farmers are exceedingly well pleased with their share of the business. I do not pretend to give a perfect description of such an establishment as this is, as my time was short and I was alone and had to gain most of my information from the different men who were employed on the works.

Rotate Your Crops.

The arrangement of the crops so as to secure a system of rotation that will not only make the land better every year, but also enable it to produce larger crops, has been studied by scientists and practical agriculturists for centuries, but owing to the variable condition affecting soils it has been impossible to formulate any system that is applicable to all farms. Even when some farmer learns exactly what his farm demands, and how to conduct rotation of crops to the best advantage, his plans may be changed by his location. If he is an eastern farmer and his land is well adapted to wheat, he may be forced to abandon wheat by reason of western competition, and resort to some other crop that gives a larger profit in his local or nearest markets. But all farmers admit

The Kilby Manufacturing Co.

FOUNDERS AND MACHINISTS

Corner Lake and
Kirtland Streets,

Cleveland, Ohio

New York Office:
220 Broadway.

Builders of Complete Machinery for Beet, Cane and
Glucose Sugar Houses and Refineries.

E. H. DYER & CO.

Builders of

SUGAR
MACHINERY

Cleveland, Ohio

Will contract to build complete beet sugar plants, including all machinery and buildings; also furnish the necessary technical and skilled help to operate them.

that the only correct mode of farming is to rotate the crops and also that the growing of grain year after year on the same plot is liable to reduce the productive capacity of the land in time unless by the expenditure of a large sum for fertilizers. Whether fertilizers are used or not the land will always gain by rotation, as rotation permits of the formation of humus and moisture. Rotation also prevents soil exhaustion by balancing the plant foods removed and permits of drawing on the almost inexhaustible stores of the sub-soil for the dormant plant foods, which may be brought to the surface and used for the production of

operation next season. The season for the operation of a beet sugar plant extends over a part of two calendar years."

From the figures at present available it is estimated that Michigan alone will have before the close of the next year a capacity of 10,850 tons of beets daily. It is estimated that the beet growers will receive an average of over \$5 per ton for their season's product, while still further benefits are set forth as to the employment of labor, the Bulletin saying upon this point:

"The construction of these sugar plants has given, and is still giving, employment to a vast amount

plus help of the vicinity is required. This item alone carries thousands of dollars into families of a class where it is most highly appreciated, providing the necessities of life, and often furnishing luxuries not otherwise obtainable."—London Advertiser.

What the Michigan College Did for Beets.

Latest statistics show that one person in every eight in the State of Michigan is directly interested in the culture of sugar beets, yet, familiar as that eighth individual may be with the full grown industry, he is doubtless nearly as ignorant as the other seven of its early history.

For twenty years experiments have been carried on in the laboratories of the Agricultural College with plants, native and foreign, from which sugar can be made. For more than a decade these experiments have been confined to sugar beets, and the direct result of them is the great and growing sugar industry in the State of Michigan.

In 1890, after long and patient effort, Dr. Kedzie was given an appropriation with which to purchase one-half a ton of sugar beet seed. This, when received from Germany, was distributed through sixty counties, together with complete instructions for the cultivation of the beet.

"Complete instructions" is an easy phrase, that conveys, usually, the idea of a set of rules compiled from no one knows where, for the utter undoing of the benighted man who would follow them. It is interesting to note the difference between the ordinary irresponsible directions and the information furnished by men who publish the bulletins of the Agricultural College.

This is information obtained regarding that remarkable creature, the sugar beet.

After having been plowed and harrowed and stirred up generally, after the farmer's manner of vexing the surface of the earth, the land devoted to the experiments is divided into equal sections. One of these is left in a state of nature; to the others are added fertilizers



An Eighty Acre Field of Sugar Beets Grown in 1901. Owned by A. Watson, Sombra, Ontario.

large crops. Every farmer, however, must judge for himself of the requirements of his soil and rotate according to conditions affecting his land and locality.

Michigan Beet Sugar.

Large quantities of sugar beets are being shipped to Michigan from the counties bordering on Lake Erie, the price realized being three dollars a ton. At this figure it will pay farmers to grow beets for export, even if no sugar factories are built on this side of the line. It is said, however, that once our people get in the way of producing beets of the right quality and in sufficient quantity to justify it, money will be forthcoming to erect factories in Canada. Meanwhile, the status of the industry in Michigan, as set forth in a bulletin of the State Bureau of Labor and Industrial Statistics, may be of interest to Canadians. In this it is said:

"It is but a few years since the growing of the sugar beet, and the manufacture of sugar therefrom, was but an experiment in Michigan. The first sugar made from the sugar beet in this State was by the Michigan Sugar Co., at Bay City, in October, 1898. The experimental stage has passed, and the manufacture of beet sugar is one of the leading industries in the State. Ten immense plants were in operation last season, to which three more will be added this season, and six additional ones are building and are pushing their work, expecting to be ready for

of labor, those employed being from the highest skilled mechanics, commanding large wages, to the ordinary laborer whose daily wage averages about \$1.60. Aside from the army of laborers employed in constructing these plants, the factories give employment to a large operating force, and at wages averaging over \$2 per day. Some of the highest skilled work required commanding large annual salaries, although the operating season of the factories averages only about four months. The operating force this year will aggregate about 2,400 persons, an average of about 185 for each factory.

"There is another class of labor which receive great benefits from the industry; that is the help employed by the growers in the beet fields. During the season of weeding and thinning the beets, and again at the harvesting all the sur-

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THE FARMING WORLD

of various sorts, and each section is sown in rows 18, 21 and 24 inches apart, and at intervals from April 12 to June 5. All are cared for alike, and when the crop is removed the different sections are compared as to the relative quantity of beets produced. From each section, also, tests are made to discover the per cent. of sugar, and all these facts are carefully recorded. Then the farmer is told in a bulletin exactly what soil plus what fertilizer produced at each date of planting a known quantity of sugar in the beets.

Information could hardly be fuller in detail than that. Such a bulletin was issued in each of the two years after the first distribution of seed to farmers, and it did its good work in the great scheme of education planned by the Institution.

Up to 1893, Prof. C. D. Smith had been doing the same sort of work in Minnesota. In that year he came to the college, and began working heartily with Dr. Kedzie, to the end that Michigan farmers might remember the sugar beet.

Its seeds were distributed annually; analyses of beets grown by the farmers from this seed were made in the laboratories, and the results published. Above all, at the Farmers' Institutes men were reminded of the beet's history in Germany and of its possibilities in Michigan. In all this the students had, of course, their share. They planted, they watched the growth, they assisted in the analyses, and so acquired invaluable information at first hand.

In 1896 the first 100 acres were planted at Saginaw, under the supervision of S. G. Higgins and William Lenders. In 1897 the Department of Agriculture furnished 700 pounds of seed for distribution through the college. A certain number of the right sort of people had been convinced by this time that the men who had been talking sugar beets so long were something more than theorists, and in

1898 the first sugar factory in Michigan was built at Bay City, by N. B. Bradley, Thomas Cranage and Joseph Williams, Sr. These were the men who had watched with greatest interest the experiment at Saginaw two years before. The Agricultural College did all the preliminary work. That

statement needs no modification, and the building of the first factory was a triumph that belongs to Dr. Kedzie, Prof. Smith and the others who had labored faithfully and long in the cause.

In the school itself the subject in all its phases has never been for a moment neglected. Constant experiments with fertilizers, with methods of planting, cultivating and handling, are carried on with zeal, the students doing a good deal of the actual work. A drive with Prof. J. D. Towar through the spick and span plots and fields where the sugar beets are doing their own little chemical experiments, gives a small notion of the things that are done. The weeds on that farm are relegated to the place where they belong, the botanic garden.

At this season, too, there is an unexpected pleasure in watching the process of harvesting the beets. It may be all prose to the men, women and children who work at it, but it looks like poetry. The groups of human figures, with the horses waiting patiently for the loads, "compose" beautifully in the tender autumn light, and any youthful Millet seeking anxiously for a subject for his brush, is respectfully referred to the beet fields.

With the establishing of more sugar factories came a demand for men who were trained chemists and experts in sugar making. With the chemists lies the whole question of profit or loss in a sugar factory. That is, the difference between 210 and 230 pounds to the ton in the 600 tons a day that the factory uses. Perfect machinery, every appliance known to science,

are without avail if the trained mind does not direct the delicate processes. Naturally the college was asked to supply the demand for this sort of men, and two years ago a short, practical course was arranged, that fits the student by actual work as well as theoretical training, to become an assistant and very soon a head chemist in a factory. The man knows all about it when he leaves school. He needs only the mature judgment that a year or two of work in a factory will give to make him what he theoretically is—an expert. There are men from M. A. C. in every sugar factory in the State and many out of it, and the supply falls far short of the demand.

One thing more this institution has done for Michigan sugar: Whenever there is a question of a factory being built, Prof. Smith or some one from the school is called for to go over the country for miles around the proposed site and make a report concerning the soil, the water and everything that has to do with the growing of beets. When the question of where is settled, begins the work of educating the nearby farmers in the "how" of it all. Literature, lectures, Farmers' Institutes, all ways of disseminating the important information are used, and the flourishing factories in the State tell the tale of what success.

This, in imperfect detail, is a history of the share the Agricultural College has had in making beet sugar in Michigan. In other words, the college introduced the beets, taught men how to grow them, chose the sites for the factories and finally furnishes the men to make the sugar—Lansing Exchange.

Twinkle, twinkle, little star,
How I wonder what you are,
Speck of fine celestial dust,
Are you banded in a trust?
—Cleveland Plain Dealer.

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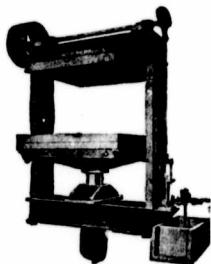
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The Agricultural Gazette

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

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

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

BENEFITS OF MEMBERSHIP.

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

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

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

The name and address of each member, and the stock he has for sale are published once a month, 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 Association, and to advertise swine he must be a member of the Dominion Sheep Breeders' Association.

The list of cattle, sheep, and swine for sale will be published in the third issue of each month, and the undersigned by letter on or before the 15th 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. WESTERVELT, secretary,
Parliament Buildings, Toronto, Ont.

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.

Wanted.—A good trustworthy young man, one skilled in the care of cows and dairy work, and capable of taking charge of a farm in the absence of his employer. Willing and able to do all kinds of farm work. Good moral character. Steady employment and good wages. \$200 a year. No. 860. a.

Wanted.—A man to take charge of pigs and help milk. A middle-aged man preferred. Farm within one mile of Ottawa. No. 861. a.

Wanted, young man to take charge of stock farm near Spokane, Washington State, U. S., must be thoroughly practical, and understand the raising and breeding of fancy cattle, sheep and swine, and above all must not be afraid of hard work. \$30 a month and board to begin with, and if satisfactory would be given an interest in the Jersey herd. b.

Wanted at once, first class farm and stock man to work on a large grain farm and attend thoroughbred stock. Must be active, willing, trustworthy, temperate and no smoker. Wages vary according to experience and age from \$200 to \$250 per year, including board and washing. Address F. W.

Brown, Plainview Stock Farm, Portage la Prairie, Man. b.

Wanted, two good men and strong boy for dairy farm. Will pay good wages to good man. Must be able to milk and willing to learn. No. 859. b.

Domestic Help Wanted.

Wanted at once, servant girl to hire by the year. One with experience on a farm and used to country life. A good position for a smart willing girl. Wages for first year \$120 with board. Address Mrs. F. W. Brown, Plainview Stock Farm, Portage la Prairie, Man. b.

Situations Wanted.

Position wanted by a good, steady, reliable man, with experience in all kinds of farming. Wishes to begin work about the last of December. No. 954. a.

A position wanted by a young man taking care of stock going over to the Old Country. Is willing to give services for passage and a moderate wage. No. 955. a.

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

Ontario Provincial Winter Fair.

Visitors to the Provincial Winter Fair of 1901 in the Cattle, Sheep and Swine Departments, will undoubtedly witness the greatest gathering of butchers' animals ever brought together in Canada. Exhibits in the classes for the various ages will demonstrate the process of development of the animals at different stages of maturity.

The Provincial Department of Agriculture has given the show liberal assistance during the past years in order to teach breeders and feeders how to produce and finish animals so that they may bring the highest price in the best markets. But not only is it necessary to demonstrate the best sort

of animals to feed, but it is also necessary to study selection and breeding to produce an animal, which when properly fed and finished, will bring the highest price. With these objects in view it was decided by the Minister of Agriculture for Ontario, that to properly conduct the work aimed at, by holding this fair, that it would be necessary to erect a building, which would require to be specially fitted for the purpose, so that in addition to providing plenty of accommodation for the exhibits it would also provide facilities for lecturing and demonstrating both with live animals and dressed carcasses along the lines laid down as above. The city of Guelph generously agreed to erect the building, while the Ontario Department of Agriculture supplied all that was necessary in the way of special fittings. The Department is justly proud of the success which attended the holding of the first fair in the new building in December of 1900.

Early last year the Ontario Poultry Association decided to unite with the other Live Stock Associations and hold the poultry show annually at Guelph in connection with the Winter Fair. There was a very large exhibit, and this feature added greatly to the interest taken in the fair by those in attendance.

In past years the Department, through the Ontario Agricultural and Arts Associations and the Cattle, Sheep and Swine Breeders' Associations, liberally supported this fair, and it has up to the present time been conducted by the Department through these associations, together with the assistance of the local authorities at the place in which the fair was held. From 1892 until 1896, inclusive, it was at Guelph; in 1897 and 1898 at Brantford; and in 1899 in London. In 1900 the fair was permanently located at Guelph. When the fair was held at Guelph in 1892 the gate receipts amounted to \$203.25. In 1892 the amount received for entry fees was \$220.50. In 1900 the entry fees had grown to the substantial sum of \$1,782.85, including the poultry department. In 1900 there was taken in at the gate \$1,147.70.

Still greater efforts are being put forth to make the fair of 1901 the most successful in its history. In each of the departments lecturers have been arranged for, who are experts in their particular lines and who know exactly what is necessary in an animal to bring the highest price, and also how to procure that animal by selection and breeding. No effort will be spared by the members of the different committees to make all the features of the show as practical and instructive as possible.

So much interest was taken in

these lectures last year that the lecture room provided for the purpose did not provide sufficient accommodation; this year the lecture room has been enlarged and will accommodate almost twice as many persons. The accommodation in other respects will also be improved.

Lectures on poultry, including instruction on the use of incubators for the production of early chickens will be delivered.

The Ontario Farmers' Institutes will again be well represented. A large number of these have already affiliated this year and have signified their intention to do everything in their power to have their members and those located in their district attend the Provincial Winter Fair. Arrangements can be made with the secretary of the fair for the free admission of members of Farmers' Institutes. Members of Farmers' Institutes wishing to avail themselves of this privilege should communicate with the secretary of their local Farmers' Institute as early as possible.

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. CHEFMAN,
Superintendent Farmers' Institutes.

Change of Speakers in Division 10

Since publishing the list of regular meetings for December, it has been necessary to make a change in Division 10. Prof. Harcourt, of the Agricultural College, Guelph, was, on the resignation of Prof. Shuttleworth, made Professor of Chemistry at that Institution. This necessitated Prof. Harcourt's constant attendance at the College during the next few months, and he has had to give up his work in the East.

We are pleased to announce, however, that he will be succeeded in Division 10 by Mr. Chas. S. Moore of Stanbridge East, Quebec. Mr. Moore is a successful, practical farmer, with a splendid education, and as he has been successful in the dairy business, he will be able to supply much useful information to the farmers of Leeds, Renfrew, Carleton and Lanark.

Speaker's Subjects.

ANDERSON, D. C., Rugby.—"Soil Cultivation," "Root Growing," "Management of Manure," "Cattle Raising," "Green Crops as Fertilizers," "The Bacon Hog."

Evening Subjects—"Poultry on the Farm," "Advantages of Farm Life," "The Farm as a Financial Investment."

CAMPBELL, Mrs. Colin, Goderich.

Regular and Supplementary Meetings for January and February, 1901, and Delegates Therefor.

N. B.—The list of meetings for December and the speakers therefor were published in this Department in the issue of October 22nd.

DIVISION 1.

G. C. Caston, Craighurst; J. E. Meyer, Kossuth; Mrs. Colin Campbell, Goderich.

1 Clifford (Town Hall)	Union	Jan. 7th.
2 Lakelet (Temperance Hall).....	Union	Jan. 8th.
3 Walkerton (Town Hall).....	S. Bruce	Jan. 9th.
4 Paisley (Town Hall).....	C. Bruce	Jan. 10th.
5 Port Elgin (Town Hall).....	W. Bruce	Jan. 11th.
6 Tara (Vandusen's Hall).....	W. Bruce	Jan. 13th.
7 Spry (Schoolhouse).....	N. Bruce	Jan. 15th.
8 Lion's Head (Town Hall)	N. Bruce	Jan. 16th.
9 Chesley (Town Hall).....	C. Bruce	Jan. 17th.
10 Durham (Town Hall).....	S. Grey	Jan. 18th.
11 Holstein (Town Hall).....	S. Grey	Jan. 20th.
12 Gorrie (Town Hall).....	E. Huron	Jan. 21st.
13 Brussels (Town Hall).....	E. Huron	Jan. 22nd.
14 Clinton (Town Hall).....	W. Huron	Jan. 23rd.
15 Dugannon (Temperance Hall).....	W. Huron	Jan. 24th.
16 Hildrood (Temperance Hall).....	S. Bruce	Jan. 25th.

DIVISION 2.

D. Drummond, Myrtle; G. R. Cottrell, Milton; Elmer Lick, Oshawa.

1 Milverton (Grosch's Hall).....	N. Perth	Jan. 7th.
2 Shakespeare (Temperance Hall)	N. Perth	Jan. 8th.
3 Mitchell (Town Hall).....	S. Perth	Jan. 9th.
4 Brucefield (Dickson's Hall).....	S. Huron	Jan. 10th.
5 Exeter (Town Hall).....	S. Huron	Jan. 11th.
6 St. Mary's (Town Hall).....	S. Perth	Jan. 13th.
7 Kintore (Foresters' Hall).....	N. Oxford	Jan. 14th.
8 Thorndale (Harding's Hall).....	E. Middlesex	Jan. 15th.
9 Herrietsville (Oddfellows' Hall).....	E. Middlesex	Jan. 16th.
10 Coldstream (Township Hall).....	N. Middlesex	Jan. 17th.
11 Adelaide (Town Hall).....	N. Middlesex	Jan. 18th.
12 Parkhill (Town Hall).....	N. Middlesex	Jan. 20th.
13 Ailsa Craig (Town Hall).....	N. Middlesex	Jan. 21st.
14 Forest (Town Hall).....	E. Lambton	Jan. 22nd.
15 Kingscourt (Schoolhouse).....	E. Lambton	Jan. 23rd.
16 Oil Springs.....	W. Lambton	Jan. 24th.
17 Bridgen (McKenzie's Hall).....	W. Lambton	Jan. 25th.
18 Appin (Township Hall).....	W. Middlesex	Jan. 27th.
19 Mt. Bridges (Township Hall).....	W. Middlesex	Jan. 28th.

DIVISION 3.

C. W. Nash, Toronto; R. S. Stevenson, Ancaster.

1 Mount Elgin (Foresters' Hall)	S. Oxford	Jan. 8th.
2 Norwich (Foresters' Hall)	S. Oxford	Jan. 9th.
3 Courtland (Town Hall).....	N. Norfolk	Jan. 10th.
4 Delhi (Morgan's Hall).....	N. Norfolk	Jan. 11th.
5 Aylmer (Town Hall).....	E. Elgin	Jan. 13th & 14th
6 Middlemarch (Grange Hall).....	W. Elgin	Jan. 15th.
7 Dutton (Town Hall).....	W. Elgin	Jan. 16th.
8 Rodney (Township Hall).....	W. Elgin	Jan. 17th.
9 Highgate (Highgate Hall).....	E. Kent	Jan. 18th.
10 Croton (Croton Hall).....	E. Kent	Jan. 20th
11 Eberts (Township Hall).....	W. Kent	Jan. 21st.
12 Dover Centre (Grange Hall).....	W. Kent	Jan. 22nd.
13 Tecumseh (St. John's Hall).....	N. Essex	Jan. 23rd.
14 Essex (I.O.F. Hall).....	S. Essex	Jan. 24th & 25th.
15 S.Woodslee (St. Lawrence Hall).....	N. Essex	Jan. 27th.

DIVISION 4.

Major Jas. Sheppard, Queenston; Miss Blanche Maddock, Guelph.

1 Princeton (Duke's Hall).....	N. Oxford	Jan. 7th.
2 Buriord (Cornish Hall).....	S. Brant	Jan. 8th.
3 Oshweken (Council House).....	S. Brant	Jan. 9th.
4 Ancaster (Township Hall).....	S. Wentworth	Jan. 10th.
5 Stoney Creek (New Hall).....	S. Wentworth	Jan. 11th.
6 Campden (Fry's Hall).....	Lincoln	Jan. 13th.
7 Queenston (Schoolhouse).....	Lincoln	Jan. 14th.

ich.—"Aims and Objects of Women's Institutes," "Bread and Bread Making," "Canning and Preserving," "Household Economics," "Home Influence."

CASTON, G. C., Craighurst.—"Problems of the Soil," "The Importance of Succulent Food in the Feeding of Live Stock," "Our Export Bacon Trade, How to Increase and Maintain it," "Orchard Fruits—the best Varieties and How to Grow Them," "Cold Storage and the Transportation and Marketing of our Perishable Products."

Evening Subjects.—"Horticulture on the Farm," "Poultry on the Farm," "The Agricultural College and the Education of the Farmer," "The Land we Live in."

CLARK, J. W., Onondaga.—"Poultry Raising and Fattening for the English Markets," "Suitable Breeds and How to Select Them," "How to Manage an Incubator," "How to get a Large per cent. of Fertile Eggs," "Hog Raising," "How to Breed and Feed for the Export Trade," "Care of Sheep," "Management of Manure."

Evening Subjects.—"Destruction of Weeds," "Poultry Raising as an Occupation for Boys, Girls and Women."

COTRELL, G. R., Milton.—"Poultry for Profit on the Ordinary Farm," "The Different Breeds of Poultry and Their Characteristics," "The Preparation of Poultry for Home and Foreign Market," "How to Build a Poultry House and Keep the Poultry Healthy."

Evening Subject.—"Poultry Production for Boys and Girls."

DRUMMOND, D., Myrtle.—"Bacon Hog and Pork Production," "Selection, Breeding and Care of Dairy Cattle," "Cultivation of the Soil," "Corn for Silo, Varieties and Cultivation," "Notes on Chicken Feeding," "Summer Care of Dairy Cow, or Soiling."

ELFORD, F. C., Holmesville.—"Alfalfa as a Soiling Crop," "Summer Feeding of Hogs," "Fattening Chickens for the British Market."

Evening Subject.—"The Growing Lad for the Growing Country."

ELLJOTT, ANDREW, Galt.—"How to Maintain Fertility and Moisture in the Soil," "Corn and the Silo a Necessity," "Clover and Clover Hay," "Economic Feeding," "Improved Methods in Dairying Necessary to Success," "The Dairy Cow," "What we Gain by Keeping Sheep," "The Bacon Hog," "Concrete on the Farm."

Evening Subject.—"Our Farm Homes."

FRASER, W. S., Bradford.—"Hog Raising for Profit," "Corn as a Fodder Crop," "Care and Management of Sheep," "Clover Crop and How to Handle it," "Care of Implements," "Underdraining," "Beef Rings Among Farmers."

Evening Subjects.—"Farmers'

8	Crowland (Town Hall)	Weland	Jan. 15th.
9	Ridgeway (Town Hall)	Weland	Jan. 16th.
10	Marshville (Town Hall)	Monck	Jan. 17th.
11	Attercliffe (Cheese Factory)	Monck	Jan. 18th.
12	Fisherville (Town Hall)	Haldimand	Jan. 20th.
13	Hagersville (Opera House)	Haldimand	Jan. 21st.
14	Waterford (Town Hall)	N. Norfolk	Jan. 22nd.
15	Vittoria (Lecture Room)	S. Norfolk	Jan. 23rd.
16	Langton (Town Hall)	S. Norfolk	Jan. 24th.

DIVISION 5.

T. G. Raynor, Rose Hall; J. W. Clark, Onondaga.

1	St. George (Library Hall)	N. Brant	Jan. 7th & 8th.
2	Rockton (Township Hall)	N. Wentworth	Jan. 9th.
3	Freelton (Township Hall)	N. Wentworth	Jan. 10th.
4	Nassagaweya (Township Hall)	Halton	Jan. 11th.
5	Nelson (Township Hall)	Halton	Jan. 13th.
6	Milton (Town Hall)	Halton	Jan. 14th.
7	Stewarttown (Town Hall)	Halton	Jan. 15th.
8	Ospringle (Schoolhouse)	C. Wellington	Jan. 16th.
9	Belwood (Township Hall)	C. Wellington	Jan. 17th.
10	Rockwood (Town Hall)	S. Wellington	Jan. 18th.
11	Aberloyle (Town Hall)	S. Wellington	Jan. 20th.
12	Galt (Town Hall)	S. Waterloo	Jan. 21st.
13	New Hamburg (Wm. Tell Hall)	S. Waterloo	Jan. 22nd.
14	Linwood (Spahr's Hall)	N. Waterloo	Jan. 23rd.
15	Elmira (E.M.S. Hall)	N. Waterloo	Jan. 24th.
16	Drayton (Town Hall)	W. Wellington	Jan. 25th.
17	Moorfield (Township Hall)	W. Wellington	Jan. 27th.
18	Farewell	E. Wellington	Jan. 28th.
19	Conn (Orange Hall)	E. Wellington	Jan. 29th.

DIVISION 6.

Duncan Anderson, Rugby; Dr. Henry G. Reed, Georgetown.

1	Kemble (Schoolhouse)	N. Grey	Jan. 7th.
2	Owen Sound (Y.M.C.A. Hall)	N. Grey	Jan. 8th.
3	Flesherton (Township Hall)	C. Grey	Jan. 9th.
4	Shelburne (Town Hall)	Dufferin	Jan. 10th.
5	Camilla (Private Hall)	Dufferin	Jan. 11th.
6	Tottenham (Town Hall)	S. Simcoe	Jan. 13th.
7	New Lowell (Town Hall)	W. Simcoe	Jan. 14th.
8	Stayner (Stewart's Hall)	W. Simcoe	Jan. 15th.
9	Thornbury (Town Hall)	C. Grey	Jan. 16th.
10	Meaford (Town Hall)	N. Grey	Jan. 17th.
11	Minesing (Workman's Hall)	C. Simcoe	Jan. 18th.
12	Phepston (Village Hall)	C. Simcoe	Jan. 20th.
13	Waverley (Orange Hall)	C. Simcoe	Jan. 21st.
14	Wevale (Orange Hall)	C. Simcoe	Jan. 22nd.
15	Lafontaine (Piquac Hall)	C. Simcoe	Jan. 23rd.
16	Midland (Town Hall)	C. Simcoe	Jan. 24th.
17	Matchedash	E. Simcoe (aft.)	Jan. 25th.
18	Coldwater	E. Simcoe (eve.)	Jan. 25th.
19	Orillia	E. Simcoe	Jan. 27th.
20	Stroud (Temperance Hall)	S. Simcoe	Jan. 28th.
21	Kettleby (Temperance Hall)	N. York	Jan. 29th.
22	Newmarket (Temperance Hall)	N. York	Jan. 30th.

DIVISION 11.

T. H. Mason, Straffordville; F. A. Sheppard, Queenston.

1	Powassan (Stewart's Hall)	E. Parry Sound	Jan. 7th.
2	Trout Creek (Trussler's Hall)	E. Parry Sound	Jan. 8th.
3	South River (Library Hall)	E. Parry Sound	Jan. 9th.
4	Sundridge (Orange Hall)	E. Parry Sound	Jan. 10th.
5	Burk's Falls (Wilson's Hall)	E. Parry Sound	Jan. 11th.
6	Kearney	E. Parry Sound	Jan. 13th.
7	Sprucedale	E. Parry Sound	Jan. 14th.
8	Starrat's Corners	E. Parry Sound	Jan. 15th.
9	Magnetawan (Orange Hall)	E. Parry Sound	Jan. 16th.
10	Dunchurch (Keley Hall)	W. Parry Sound (aft.)	Jan. 17th.
11	McKellar, Armstrong Hall	W. Parry Sound (eve.)	Jan. 17th.
12	Broadbent (Schoolhouse)	W. Parry Sound (aft.)	Jan. 18th.
13	Orrville (Schoolhouse)	W. Parry Sound (eve.)	Jan. 18th.
14	Parry Sound (Town Hall)	W. Parry Sound	Jan. 20th.
15	Carling (Schoolhouse)	W. Parry Sound (aft.)	Jan. 21st.
16	McDougal's Schoolhouse	W. Parry Sound (eve.)	Jan. 21st.
17	Falding (Rankin's Hall)	W. Parry Sound	Jan. 22nd.
18	Novar (Atkin's Hall)	N. Muskoka	Jan. 23rd.
19	Huntsville (Court House)	N. Muskoka	Jan. 24th.
20	Hillside (Schoolhouse)	N. Muskoka	Jan. 25th.
21	Emberson (Orange Hall)	N. Muskoka	Jan. 27th.

Needs," "Farm Home," "The Home Dairy."

FIELD, R. H., Addison.—"Corn Growing and the Silo," "Care and Growth of the Dairy Cow," "Keeping Cows for Profit," "Silo Construction," "Raising Calves, and their care until three years old," "Profit in Hog Raising."

Evening Subjects.—"The P's and Q's of the Farm," "Farming My Choice."

GARDHOUSE, JOHN, Highfield.—"Horse Breeding for Profit," "Care and Management of Horses," "How to Select and Feed Beef Cattle," "Care and Management of Sheep," "Raising Feed for Live Stock."

Evening Subjects.—"How to Improve Present Farm Conditions," "How to Interest the Young People in the Farm."

GEE, MYRON A., Fisherville.—"Care of Sheep," "Hog Raising," "Poultry, their Housing and Care," "Soil Cultivation," "Corn and Fodder Crops."

Evening Subjects.—"Poultry on the Farm," "Elements of Success," "Farm Problem."

GLENDENNING, H. V., Manilla.—"Cultivation of the Soil and Rotation of Crops," "Underdraining," "Weeds, and How to Destroy Them," "Grasses for Pasture," "The Growing of Red and Alsike Clover for Seed," "Breeding and Feeding of Hogs for Market," "Feeds and Feeding," "Poultry on the Farm."

Evening Subjects.—"The Farm Water Supply," "The Farmer's Fruit and Vegetable Garden," "Spraying for Insects and Fungus Diseases."

HALLMAN, A. C., New Dundee.—"Breeding and care of the Dairy Herd" (Illustrated), "Useful Hints on the Swine Industry" (Illustrated), "Cultivation of Fodder Corn and the Silo," "Catch Crops," "Cultivation of the Soil and Clover," "Root Culture," "Water Supply on the Farm and the Value of Indoor Watering System," "The Farmer's Fruit Garden," "The Cream Separator and Butter Making on the Farm."

HARCOURT, R., B.S.A., Guelph.—"Economic Cattle Feeding," "Soil Moisture in Relation to Plant Growth," "Soiling and Soiling Crops," "Milk Production," "The Care and Handling of Milk for Creameries and Cheese Factories," "Flour and Bread Making."

HOLLINGWORTH, MISS A. Beatrice.—"Butter Making," "The Weed Question," "What Women Have Done, and Can Do," "The Importance of Good Housekeeping," "Healthy Homes," "Our Friends the Flowers."

HUTT, W. N., Southend.—"Pruning the Orchard," "Spraying Mixtures and their Application," "Injurious and Beneficial Insects," "Management of the Farmer's Wood Lot," "Crop Failures and How to Avoid them," "Seeds, Seed Grain and Seeding," "Birds in Re-

22	Ravenscliffe (Patrons' Hall)	N. Muskoka	Jan. 28th.
23	Stisted (Township Hall)	N. Muskoka	Jan. 29th.
24	Utterson (Town Hall)	C. Muskoka	Jan. 30th.
25	Port Sydney (Music Hall)	C. Muskoka (aft.)	Jan. 31st.
26	Allansville (Schoolhouse)	C. Muskoka (eve.)	Jan. 31st.
27	Raymond (Orange Hall)	C. Muskoka (aft.)	Feb. 1st.
28	Uford (Mr. Kay's House)	C. Muskoka (eve.)	Feb. 1st.
29	Bracebridge (Town Hall)	S. Muskoka	Feb. 3rd.
30	Baysville (Town Hall)	S. Muskoka	Feb. 4th.
31	Uffington	S. Muskoka (aft.)	Feb. 5th.
32	Germania (Wiese's Schoolhouse)	S. Muskoka (eve.)	Feb. 5th.
33	Gravenhurst (Town Hall)	S. Muskoka	Feb. 6th.
34	Bala (Currie's Hall)	Pt. Carling & Bala	Feb. 7th.
35	Port Carling (Victoria Hall)	Pt. Carling & Bala	Feb. 8th.

DIVISION 8.

A. McNeill, Walkerville; Eiland Lee, Stony Creek.

1	Lakhurst (Town Hall)	W. Peterboro (aft)	Jan. 7th
2	Hall's Bridge (School House)	W. Peterboro (eve)	Jan. 7th
3	Ennismore (Town Hall)	W. Peterboro	Jan. 8th
4	Stewart's Settlement (Union Hall)	W. Peterboro	Jan. 9th
5	Douro (St. Patrick's Hall)	E. Peterboro	Jan. 10th
6	Warsaw (Town Hall)	E. Peterboro	Jan. 11th
7	Havelock (Town Hall)	E. Peterboro	Jan. 13th
8	Westwood (Town Hall)	E. Peterboro	Jan. 14th
9	Hastings (Town Hall)	E. Northumberland	Jan. 15th
10	Menie (Lamb's Hall)	E. Northumberland	Jan. 16th
11	Wooler (Town Hall)	E. Northumberland	Jan. 17th
12	Castleton (Town Hall)	E. Northumberland	Jan. 18th
13	Centreton	W. Northumberland	Jan. 20th
14	Coldsprings (Township Hall)	W. Northumberland	Jan. 21st
15	Baltimore (Chapman's Hall)	W. Northumberland	Jan. 22nd
16	Consecon (Killip's Hall)	Prince Edward	Jan. 23rd
17	Wellington (Town Hall)	Prince Edward	Jan. 24th
18	Bloomfield (Town Hall)	Prince Edward	Jan. 25th
19	Cherry Valley (Town Hall)	Prince Edward	Jan. 27th
20	Milford (Town Hall)	Prince Edward	Jan. 28th
21	Cressy (A. O. U. W. Hall)	Prince Edward (aft)	Jan. 29th
22	Waupos (Town Hall)	Prince Edward (eve)	Jan. 29th

DIVISION 9 A.

Andrew Elliott, Galt; F. M. Lewis, Burford; Mrs. Elizabeth Torrance, Chateauguay Basin, Que.

1	Harder's (School House)	W. Hastings	Jan. 7th
2	Gilbert's (School House)	W. Hastings	Jan. 8th
3	Turner's School House)	W. Hastings	Jan. 9th
4	Glen Ross (School House)	W. Hastings	Jan. 10th
5	Springbrook (Foresters' Hall)	N. Hastings	Jan. 11th
6	Marmora (Town Hall)	N. Hastings	Jan. 13th
7	Eldorado (Town Hall)	N. Hastings	Jan. 14th
8	Queensboro (Orange Hall)	N. Hastings	Jan. 15th
9	Bogart (School House)	E. Hastings	Jan. 16th
10	Moira (Workmen's Hall)	N. Hastings	Jan. 17th
11	Foxboro (School House)	E. Hastings	Jan. 18th
12	Read (Hanley's Hall)	E. Hastings	Jan. 20th
13	Shannonville (A. O. U. W. Hall)	E. Hastings	Jan. 21st
14	Switzerville (School House)	Lennox	Jan. 22nd
15	Odessa (Town Hall)	Lennox	Jan. 23rd
16	Sillsville (Town Hall)	Lennox	Jan. 24th
17	Adolphustown (Town Hall)	Lennox	Jan. 25th
18	Emerald (Cheese Factory)	Amherst Island	Jan. 27th
19	Stella (Town Hall)	Amherst Island	Jan. 28th
20	Joyceville (Joyce's Hall)	Frontenac	Jan. 29th
21	Sydenham (Town Hall)	Frontenac	Jan. 30th
22	Enterprise (Merrill's Hall)	Addington	Jan. 31st
23	Tamworth (Town Hall)	Addington	Feb. 1st.
24	Gananoque (Town Hall)	S. Leeds	Feb. 3rd
25	Seely's Bay (Select Knights' Hall)	S. Leeds	Feb. 4th
26	Delta (Town Hall)	S. Leeds	Feb. 5th

DIVISION 9 B.

A. W. Peart, Burlington; John Gardhouse, Highfield.

1	Athens (H. S. Hall)	Brockville	Jan. 7th
2	Caimiton (Presbyterian Church)	Brockville	Jan. 8th
3	Lyn (School Hall)	Brockville	Jan. 9th
4	New Dublin (Township Hall)	Brockville	Jan. 10th
5	Algonquin (Temperance Hall)	S. Grenville	Jan. 11th
6	Domville (Epworth Hall)	S. Grenville	Jan. 13th
7	Spencerville (Town Hall)	S. Grenville	Jan. 14th
8	Mainsville (School House)	S. Grenville	Jan. 15th
9	Moulinette	Cornwall	Jan. 16th

lation to Agriculture," "Beautifying the Home."

KINNEY, MRS. A., Grandview.—"Home-made Bread and Butter," "Our Women's Institutes."

Evening Subjects.—"The Cheerful Life on the Farm, Social and Domestic," "Evening at the Home-stead."

LEE, ERLAND, Stoney Creek.—"Lessening the Injurious Effects of dry Weather on our Crops," "Breeding and Feeding the Dairy Herd," "Corn and the Silo," "Care of Milk for Cheese Factory or Creamery," "Cream Separator and Butter Making on the Farm," "The Use of Farmers' and Women's Institutes."

LEWIS, F. M., Burford.—"The Orchard and its Care," "Soil Moisture and How to Retain it," "Manures, Barnyard and Green, and Their Application," "The Farmer's Garden," "The Farm Home."

LICK, ELMER, Oshawa.—"The Handling and Marketing of Fruit," "Fruit Growing from a Commercial Standpoint."

LINTON, MISS LAURA, Guelph.—"Principles of Cooking," (with simple demonstration), "Our Daily Bread," "Dairying on the Farm," "The Comfortable Home."

McCULLOCH, R., Snelgrove.—"Dairy Farming and its Relation to Soil Fertility," "Improving our Dairy Herds," "Cow Foods, their Composition and Effect on Butter Flavor" (Illustrated), "Milk and Cream for City Trade."

Evening Subjects.—"Farm Houses," "The Prosperity of our Country Depends on the Prosperity of the Farmer."

McEWING, JAS., Drayton.—"Farm Drainage," "How to Maintain Fertility of the Soil," "Mistakes Made in Farming," "Soil Cultivation and Rotation of Crops."

Evening Subjects.—"Some Things Boys Should be Taught," "The Gospel of Home Influence," "The Farmer as a Factor in National Progress."

McNEILL, A., Walkerville.—"The Fruit Marks Act, its Effect on Foreign and Domestic Trade," "Export Trade in Apples and Pears," "Spraying for Insect and Fungus Diseases," "Apple Culture," "Cold Storage Buildings and Fruit Houses," "Modern Methods in Fruit Growing," "Packing and Shipping Fruit."

Evening Subjects.—"Light and Shades of Farm Life," "Fruits and Flowers on the Farm," "Some Social Problems," "How to Get the Most Out of the Farm."

MADDOCK, MISS BLANCHE, Guelph.—"Domestic Science," "Dairying," "Bread Making," "Bacteria," "Women's Institutes," "Mission of Flowers and How to Grow Them."

MASON, T. H., Strathfordville.—"The Hog as a Money Maker," "Sheep Raising," "Care and Food of Dairy Cattle," "Corn Growing for Grain and Silage," "Butter Making."

Evening Subjects.—"Changing

10	Cornwell Centre (Township Hall)	Cornwall	Jan. 17th
11	Martintown (St. Andrew's)	Glengarry	Jan. 18th
12	Lancaster (McRae's Hall)	Glengarry	Jan. 20th
13	North Lancaster McDonald's Hall	Glengarry	Jan. 21st
14	Monkland (Truax Hall)	Stormont	Jan. 22nd
15	Avonmore (Beaver Hall)	Stormont	Jan. 23rd
16	Newington	Stormont	Jan. 24th
17	Berwick (Town Hall)	Stormont	Jan. 25th
18	Inkerman (Workmen's Hall)	Dundas	Jan. 27th
19	Chesterville (Foresters' Hall)	Dundas	Jan. 28th
20	Casselman (Town Hall)	Russell	Jan. 29th
21	Fourrier (McGregor's Hall)	Prescott	Jan. 30th
22	Curran (School House)	Prescott	Jan. 31st
23	Billing's Bridge (Town Hall)	Russell	Feb. 1st

DIVISION 10.

A. C. Hallman, New Dundee; R. H. Field, Addison.

1	Frankville (Brownbridge's Hall)	N. Leeds & N. Grenville	Jan. 7th
2	Easton's Corners (Warren's Hall)	N. Leeds & N. Grenville	Jan. 8th
3	Bishop's Mills (Temperance Hall)	N. Leeds & N. Grenville	Jan. 9th
4	Millard's Corners (Orange Hall)	N. Leeds & N. Grenville	Jan. 10th
5	Burritt's Rapids (School House)	N. Leeds & N. Grenville	Jan. 11th
6	North Gower (Town Hall)	Carleton	Jan. 13th
7	Manotick (Harmony Hall)	Carleton	Jan. 14th
8	Burnstown (Temperance Hall)	S. Renfrew	Jan. 15th
9	Mount Patrick	S. Renfrew	Jan. 16th
10	Northcote (Temperance Hall)	S. Renfrew	Jan. 17th
11	Loch Winoch (School House)	S. Renfrew	Jan. 18th
12	Golden Lake (School House)	N. Renfrew	Jan. 20th
13	Locksley (School House)	N. Renfrew	Jan. 21st
14	Pakenham (Agricultural Hall)	N. Lanark	Jan. 22nd
15	Clayton (Foresters' Hall)	N. Lanark (alt.)	Jan. 23rd
16	Middleville (Town Hall)	N. Lanark (eve)	Jan. 23rd
17	Watson's Cr's. (Temperance Hall)	N. Lanark (alt.)	Jan. 24th
18	McDonald's Cr's. (Agri. Hall)	N. Lanark (eve)	Jan. 24th
19	Lanark (Town Hall)	N. Lanark	Jan. 25th
20	Balderson (McGregor's Hall)	N. Lanark	Jan. 27th
21	Drummond (Township Hall)	N. Lanark	Jan. 28th
22	Gillies (School House)	N. Lanark	Jan. 29th

DIVISION 12.

W. S. Fraser, Bradford; Myron A. Gee, Fisherville.

1	North Bay (Town Hall)	W. Nipissing	Jan. 7th.
2	Sturgeon's Falls	W. Nipissing	Jan. 8th.
3	Verner	W. Nipissing	Jan. 9th.
4	Warren	W. Nipissing	Jan. 10th.
5	S. Tarentarus (Schoolhouse)	C. Algoma	Jan. 11th.
6	E. Korah (Schoolhouse)	C. Algoma	Jan. 13th.
7	W. Korah (Schoolhouse)	C. Algoma	Jan. 14th.
8	Base Line (Schoolhouse)	C. Algoma	Jan. 15th.
9	Desbarats	St. Joseph's Is. (alt.)	Jan. 16th.
10	McLennan (Temperance Hall)	St. Joseph's Is. (eve)	Jan. 16th.
11	Richard's Landing (Town Hall)	St. Joseph's Is.	Jan. 17th.
12	Jocelyn (Kent's Hall)	St. Joseph's Is.	Jan. 18th.
13	Marksville (Town Hall)	St. Joseph's Is.	Jan. 20th.
14	Cloudslee (Schoolhouse)	E. Algoma (alt.)	Jan. 21st.
15	Thessalon (Town Hall)	E. Algoma (eve.)	Jan. 21st.
16	Sowerby (Maccabee's Hall)	E. Algoma	Jan. 22nd.
17	Iron Bridge (Orange Hall)	E. Algoma	Jan. 23rd.
18	Bellingham	E. Algoma	Jan. 24th.
19	Walford (Schoolhouse)	E. Algoma	Jan. 25th.
20	Massey (Schoolhouse)	E. Algoma	Jan. 27th.
21	Providence Bay (Schoolhouse)	E. Manitoulin	Jan. 29th.
22	Mindemoya (Schoolhouse)	E. Manitoulin	Jan. 30th.
23	Tehkummah (Schoolhouse)	E. Manitoulin	Jan. 31st.
24	Manitawaning (Town Hall)	E. Manitoulin	Feb. 1st.
25	Green Bay (Schoolhouse)	E. Manitoulin	Feb. 3rd.
26	Sheguiandah (Trotter's Hall)	E. Manitoulin	Feb. 4th.
27	Little Current (Turner's Hall)	E. Manitoulin	Feb. 5th.

Supplementary Meetings.

DIVISION 1.

J. E. Orr, Fruitland; D. Drummond, Myrtle.

1	Harriston (Town Hall)	Union	Feb. 4th.
2	Drew (Temperance Hall)	Union	Feb. 5th.
3	Dromore (Russell Hall)	S. Grey	Feb. 6th.
4	Ayton (Doersam's Hall)	S. Grey	Feb. 7th.
5	Hanover (Telford's Hall)	S. Grey	Feb. 8th.
6	Elmwood (Elmwood Hall)	S. Grey	Feb. 10th.
7	Hepworth (Schoolhouse)	N. Bruce	Feb. 11th.

THE AGRICULTURAL GAZETTE

Conditions in Canadian Agriculture," "Poultry Raising for the Boys and Girls."

MEYER, J. E., Kossuth.—"Keeping Poultry for Profit on the Farm," "Raising Poultry for the Market," "Different Varieties of Poultry and their Characteristics," "How I Built my Silo," "Experiences with Rape as a Forage Plant," "How I Endeavor to Utilize every foot of land on my Farm."

MOORE, CHAS. S., Stanbridge East, Que.—"Feeding Dairy Cows so as to produce the Greatest Profit for Food Consumed," "Cultivation of the Soil," "Care and Application of Farm Manures."

Evening Subject.—"A Study of the Clovers and their Relatives."

MORDEN, E., Niagara Falls.—"The Farmer's Fruit Garden," "How to grow Small Fruits," "Best Varieties of Fruits," "Some of the Newer Fruits," "Insects Injurious to Fruits," "Japan Plums," "The New Currant Culture," "The Road Problem," "How to Beautify the Farm," "The Chemistry of Every-day Life."

NASH, C. W., Toronto.—"Chemistry of the Soil," "How Plants Grow," "Evolution of Domestic Animals," "The Value of our Birds," "The Enemies of our Plant," "Our Insect Pests," "Nature About the Farm," "The Enemies of the Pea Crop and How to deal with Them."

ORR, J. E., Fruitland.—"Notes on Plum Culture," "A Practical Talk on Spraying," "Some Insect Enemies the Orchardist has to Fight," "The Latest Ideas in Controlling the Codling Moth," "The San Jose Scale and Some Other Scale Insects," "The Care of Fruit Trees," "A Few of the More Common Diseases of Fruit Trees, their Preventives and Remedies."

PEART, A. W., Burlington.—"Apples, Pears, Plums, Grapes, Blackberries, Raspberries, Currants, their Varieties, Cultivation, Marketing, etc.," "Insects and Fungi Injurious to our Orchards and Methods of Combatting Them," "Underdraining," "Management of Soils," "The Application of Fertilizers."

Evening Subjects.—"Agricultural Education," "Leaks on the Farm."

QUINN, M. J., Toronto, 107 Gladstone Ave.—"House Heating, Ventilation and Sanitation," "Simple Methods of Disposing of Household Wastes, Including Sewage and Garbage," "Simple Methods of Cold Storage Construction."

RAYNOR, T. G., Rose Hall.—"Stock Improvement," "The Value of Foods" (Illustrated), "Soiling Stock," "Selection and Management of Dairy Cow," "Some Common Diseases Affecting Stock," "Apple Culture," "Modern Methods of Soil Cultivation," "How to Feed the Soil," "Clover and Corn," "The Bacon Hog," "Concrete and its Use."

Evening Subjects.—"Some Common Mistakes in Farming," "Agri-

8 S.S. Sec. No. 4. (Anabel Sch'l H)	N. Bruce (aft.)	Feb. 12th.
9 Warton (Town Hall)	N. Bruce (eve.)	Feb. 12th.
10 Mar (School House)	N. Bruce	Feb. 13th.
11 Allanford (Orange Hall)	W. Bruce	Feb. 14th.
12 Arkwright (Township Hall)	W. Bruce	Feb. 15th.
13 Port Elgin (Town Hall)	W. Bruce	Feb. 17th.
14 Ribbey's Schoolhouse	W. Bruce	Feb. 18th.
15 Underwood (Township Hall)	W. Bruce	Feb. 19th.
16 Tiverton (Town Hall)	W. Bruce	Feb. 20th.
17 Kincardine (Town Hall)	C. Bruce	Feb. 21st.
18 Ripley (Agricultural Hall)	C. Bruce	Feb. 22nd.
19 Bervie (Orange Hall)	C. Bruce	Feb. 24th.
20 Glamis (Mechanics' Hall)	C. Bruce	Feb. 25th.
21 Chepstowe (Hartleib's Hall)	C. Bruce	Feb. 26th.
22 Cargill (Foresters' Hall)	S. Bruce	Feb. 27th.
23 Mildmay (Township Hall)	S. Bruce	Feb. 28th.
24 Belmore (Foresters' Hall)	S. Bruce	Mar. 1st.
25 Teeswater (Township Hall)	S. Bruce	Mar. 3rd.
26 Lucknow (Town Hall)	S. Bruce	Mar. 4th.

DIVISION 2 A.

Andrew Elliott, Galt; C. W. Nash, Toronto.

1 Wingham (Town Hall)	W. Huron	Feb. 4th.
2 Auburn (I.O.G.T. Hall)	W. Huron	Feb. 5th.
3 Port Albert (Foresters' Hall)	W. Huron	Feb. 6th.
4 Benmiller (Gledhill's Hall)	W. Huron	Feb. 7th.
5 Bayfield	S. Huron	Feb. 8th.
6 Zurich (Town Hall)	S. Huron	Feb. 10th.
7 Crediton	S. Huron	Feb. 11th.
8 Greenway (Wilson's Hall)	N. Middlesex	Feb. 12th.
9 Sylvan (Maccabees' Hall)	N. Middlesex	Feb. 13th.
10 Beechwood (Grange Hall)	N. Middlesex	Feb. 14th.
11 W. McGillivray (Town Hall)	N. Middlesex	Feb. 15th.
12 Lucan (Town Hall)	N. Middlesex	Feb. 17th.
13 Granton (Town Hall)	N. Middlesex	Feb. 18th.
14 Lobo (Masonic Hall)	N. Middlesex	Feb. 19th.
15 Alvinston (Town Hall)	E. Lambton	Feb. 20th.
16 Inwood (Orange Hall)	E. Lambton	Feb. 21st.
17 Oakdale (Schoolhouse)	E. Lambton	Feb. 22nd.
18 Rutherford (Township Hall)	W. Lambton	Feb. 24th.
19 Beacher (Schoolhouse)	W. Lambton	Feb. 25th.
20 Wilkesport (Richmond Hall)	W. Lambton	Feb. 26th.
21 Courtwright (Stewart Hall)	W. Lambton	Feb. 27th.
22 Petrolia (Council Chamber)	W. Lambton	Feb. 28th.
23 Sarnia Tp. (Moore Line Sch'l H.)	W. Lambton	Mar. 1st.
24 Sarnia Town (Council Chamber)	E. Lambton	Mar. 3rd.
25 Uttoxeter (Orange Hall)	E. Lambton	Mar. 4th.
26 Arkona (Showies' Hall)	E. Lambton	Mar. 5th.

DIVISION 2 B.

W. N. Hutt, Southend; Prof. W. R. Graham, O. A. C., Guelph; Miss Helen McAllister, Coventry.

1 Rostock (Hall)	N. Perth	Feb. 4th.
2 Monkton (Town Hall)	N. Perth	Feb. 5th.
3 Atwood (Agricultural Hall)	N. Perth	Feb. 6th.
4 Millbank (Town Hall)	N. Perth	Feb. 7th.
5 Gowansdown (Hall)	N. Perth	Feb. 8th.
6 Bluevale (Foresters' Hall)	E. Huron	Feb. 10th.
7 Fordwich (Donaghey's Hall)	E. Huron	Feb. 11th.
8 Molesworth	E. Huron	Feb. 12th.
9 Ethel (Town Hall)	E. Huron	Feb. 13th.
10 Walton (Workmen's Hall)	E. Huron	Feb. 14th.
11 Murdie's (School House)	S. Perth	Feb. 15th.
12 Staffa (Public Hall)	S. Perth	Feb. 17th.
13 Kirkton (Aberdeen Hall)	S. Perth	Feb. 18th.
14 Russeldale (Chosen Friends)	S. Perth	Feb. 19th.
15 Sebringville (Foresters' Hall)	S. Perth	Feb. 20th.
16 Tavistock (Public Hall)	S. Perth	Feb. 21st.

DIVISION 3 A.

Henry Glendenning, Manilla; Miss Blanche Maddock, Guelph.

1 Drumbo (Town Hall)	N. Oxford	Feb. 4th.
2 Braemar (Town Hall)	N. Oxford	Feb. 5th.
3 Brooksdale (Foresters' Hall)	N. Oxford	Feb. 6th.
4 Lakeside (Town Hall)	N. Oxford	Feb. 7th.
5 Wellburn (German Hall)	E. Middlesex	Feb. 8th.
6 Bryanston (Temperance Hall)	E. Middlesex	Feb. 10th.
7 Crumlin	E. Middlesex	Feb. 11th.
8 Ilderton (Foresters' Hall)	E. Middlesex	Feb. 12th.

cultural Education," "Agricultural Development."

REED, HENRY G., V.S., Georgetown.—"The Influence of Natural Laws on the Breeding of Live Stock," "Ordinary Diseases of the Stomach of Cattle," "Horse Breeding for Profit," "Diseases Incident to Newly Calved Cows and Preventive Treatment," "Care of the Brood Mare and her Foal," "The Horse's Feet in Health and Disease," "The Horse in Peace and War."

RENNIE, SIMPSON, Toronto.—"The Importance of Underdraining," "Cultivation of Field Roots and Potatoes," "Weeds and how to Destroy them," "Rotation of Crops and Fall Cultivation," "Buying and Feeding Cattle for Profit," "Feeding and Marketing Hogs," "Beet Culture for Sugar Purposes."

REYNOLDS, A. J., Scarboro Junction.—"Objects and Methods of Cultivation," "Corn and Silo," "Summer and Winter Dairying," "Clover Growing," "Application of Manure," "Some of the Essentials for a Successful Institute."

ROSE, MISS LAURA, Guelph.—"Science in Butter Making," "Food Value of Milk, Butter and Cheese," "Milk, its Secretion, Composition and Management," "Difficulties in Dairy Farming and How to Overcome them," "The Making of Bread and Buns," "A Chat with Housekeepers on Housekeeping," "One Eye in the Field, the Other in the Town," "As Others See Us," "A Three Months' Drive Through Cape Breton."

SHEPPARD, F. A., Queenston.—"Propagation of Fruits, Grafting, Budding, etc.," "Small Fruits, Varieties and Cultivation," "Planting and Care of Orchards," "Tomato Growing for Early Market and Factory," "Packing and Transportation of Fruit," "Cultivation and Conservation of Soil Moisture," "The Use of Concrete for Farm Buildings."

Evening Subjects.—"The Codling Moth and its Effect on the Apple Crop," "Birds in Relation to Agriculture and Horticulture," "The Advantages of Farm Bookkeeping, and some Methods of Keeping Them" (Illustrated).

SHEPPARD, MAJOR JAMES, Queenston.—"The Packing and Sale of Apples," "Planting and Care of Orchards," "Four Reasons Why we Till the Soil," "Forty Years' Experience in Growing Corn," "Tomatoes for Home and Market," "Ensilage and the Round Silo," "The Export Bacon Trade."

Evening Subjects.—"Propagating Fruits, Grafting, Budding, etc.," "Three Historical Days on the Niagara River."

SMITH, MISS AGNES, Hamilton.—"Principles of Cooking" (with simple demonstrations), "Food in its Relation to the Body," "Domestic Science," "The Sanitary Home."

SMITH, MRS. J. L., Whitby.—"A Practical Talk to our Young People," "The Young Man on the Farm: His Advantages and Disad-

9 Hyde Park.....	E. Middlesex ..	Feb. 13th.
10 Dorchester Station (Town Hall)...	E. Middlesex ..	Feb. 14th.
11 Belmont (Masonic Hall)	E. Middlesex ..	Feb. 15th.
12 Glanworth (Hall)	E. Middlesex ..	Feb. 17th.
13 Lambeth (Masonic Hall)	E. Middlesex ..	Feb. 18th.
14 Riverside (Schoolhouse) S.S. No. 1..	W. Middlesex (aft.)	Feb. 19th.
15 Melbourne (Woodman's Hall)	W. Middlesex (eve.)	Feb. 19th.
16 Walker's (School House)	W. Middlesex (aft.)	Feb. 20th.
17 Napier (Township Hall)	W. Middlesex (eve.)	Feb. 20th.
18 Glencoe (Town Hall)	W. Middlesex ..	Feb. 21st.
19 Wardsville (Town Hall)	W. Middlesex ..	Feb. 22nd.

DIVISION 3 B.

A. McNeill, Walkerville; Dr. Henry G. Reed, Georgetown; Mrs. A. Kinney, Grandview.

1 Shedden (Morrison's Hall)	W. Elgin ..	Feb. 4th.
2 Dutton (Town Hall)	W. Elgin ..	Feb. 5th.
3 West Lorne (Township Hall)	W. Elgin ..	Feb. 6th.
4 Ridgetown (Township Hall)	E. Kent ..	Feb. 7th.
5 Bleheim (Township Hall)	E. Kent ..	Feb. 8th.
6 Bridgend (Grange Hall)	E. Kent ..	Feb. 10th.
7 Thamesville (Town Hall)	E. Kent ..	Feb. 11th.
8 Zone (Town Hall)	E. Kent ..	Feb. 12th.
9 Tupperville (Keith's School House)	W. Kent ..	Feb. 13th.
10 Fletcher (Morphy's Hall)	W. Kent ..	Feb. 14th.
11 Tilbury (Palmer's Hall)	W. Kent ..	Feb. 15th.
12 Wheatley (Gibson's Hall)	W. Kent ..	Feb. 17th.
13 Leamington (Town Hall)	and South Essex ..	Feb. 18th.
14 Kingsville (Town Hall)	S. Essex ..	Feb. 19th.
15 Harrow (Town Hall)	S. Essex ..	Feb. 20th.
16 Amherstburg (Town Hall)	S. Essex ..	Feb. 21st.
17 Maidstone	N. Essex ..	Feb. 22nd.
18 Sandwich S. (Orange Hall)	N. Essex ..	Feb. 24th.
19 Belle River (Town Hall)	N. Essex ..	Feb. 25th.
20 Comber (Town Hall)	N. Essex ..	Feb. 26th.
21 Yarmouth Centre (Town Hall)	E. Elgin (aft.)	Feb. 27th.
22 Sparta (Royal Templar's Hall)	E. Elgin (eve.)	Feb. 28th.
23 Mount Salem (Garner's Hall)	E. Elgin (aft.)	Mar. 1st.
24 Stratfordville (Town Hall)	E. Elgin (eve.)	Mar. 1st.

DIVISION 4 A.

T. G. Raynor, Rose Hall; T. H. Mason, Stratfordville; (Feb. 11th to March 5th). C. A. Zavitz, B. S. A., Guelph, (4th to 10th inclusive).

1 Bealton (Bealton Hall)	N. Norfolk ..	Feb. 4th
2 Windham Centre (Town Hall)	N. Norfolk ..	Feb. 5th
3 Kelvin (Kelvin Hall)	N. Norfolk ..	Feb. 6th
4 Scotland (Fosters' Hall)	S. Brant ..	Feb. 7th
5 Harley (Township Hall)	S. Brant ..	Feb. 8th
6 Mount Pleasant (Foresters' Hall)	S. Brant ..	Feb. 10th
7 Cathcart (Foresters' Hall)	S. Brant ..	Feb. 11th
8 Oxford Centre (Town Hall)	S. Oxford ..	Feb. 12th
9 Beachville (Town Hall)	S. Oxford ..	Feb. 13th
10 Ingersoll (Town Hall)	S. Oxford ..	Feb. 14th
11 Springford (Town Hall)	S. Oxford ..	Feb. 15th
12 Tilsonburg (Town Hall)	S. Oxford ..	Feb. 17th
13 Brownsville (Methodist S. Room)	S. Oxford ..	Feb. 18th
14 Fairground (Town Hall)	S. Norfolk ..	Feb. 19th
15 Walsingham Centre (Town Hall)	S. Norfolk ..	Feb. 20th
16 Simcoe (Library Hall)	N. & S. Norfolk	Feb. 21st & 22nd
17 Port Dover (Town Hall)	S. Norfolk ..	Feb. 24th
18 Nanticoke (Town Hall)	Haldimand ..	Feb. 25th
19 Caledonia (Association Hall)	Haldimand ..	Feb. 26th
20 Canfield (Grange Hall)	Haldimand ..	Feb. 27th
21 South Cayuga (Drake's Hall)	Haldimand ..	Feb. 28th
22 Dunnville (Town Hall)	Monck ..	Mar. 1st
23 Wellandport (Misener's Hall)	Monck ..	Mar. 3rd
24 Pelham Centre (Town Hall)	Monck ..	Mar. 4th
25 Smithville (Agricultural Hall)	Monck ..	Mar. 5th
26 Caistorville (Hall)	Monck ..	Mar. 6th

DIVISION 4 B.

Duncan Anderson, Rugby; Robt. Thompson, St. Catharines.

1 Norval (Orange Hall)	Halton ..	Feb. 4th
2 Drumquin (Township Hall)	Halton ..	Feb. 5th
3 Postville (Township Hall)	Halton ..	Feb. 6th
4 Appleby (Town Hall)	Halton ..	Feb. 7th
5 Waterdown (Township Hall)	N. Wentworth ..	Feb. 8th
6 Millgrove (Town Hall)	N. Wentworth ..	Feb. 10th
7 Carlisle (Town Hall)	N. Wentworth ..	Feb. 11th

vantages," "The Days and Ways of our Grandmothers," "Economy in the Home," "Food and Diet," "Woman's Life and Work on the Farm," "Helpful Hints to Young Housekeepers."

SMITH, J. H., Ridgetown.—"Farm Mechanics," "The Sun at Work on a Hundred-acre Farm," "Relation of Soil and Plant," "Scientific Agriculture or the Relation of Science to Farming," "Farmers' Education," "Farm Bookkeeping," "Canada for Canadians," "The Choice of a Profession."

STEVENSON, R. S., Ancaster.—"Breeding and Selection of Dairy Cows," "Feeding the Dairy Cow Economically," "Corn Growing and Ensilage," "The Cream Separator," "The Breeding and Feeding of Beef Cattle," "Farmers and Farm Life."

THOMPSON, R., St. Catharines.—"Poultry for Profit," "Swine Breeding and the Export Bacon Trade," "Pointers in Growing Corn for Grain and the Silo," "Small Fruits and Fruit Trees," "Gathering and Marketing Fruit," "Cold Storage for the Farmer," "Under-draining," "The San Jose Scale and Other Orchard Pests," "The Future Farmer and his Education."

TORRANCE, MRS. ELIZABETH M., Chateauguy Basin, Que.—"A Talk on Apples, Tree and Fruit," "Housekeeping as a Business," "Vegetables, and the Place They Should Hold on Our Table," "Our Summer Fruits," "Eggs, Their Use and Abuse," "The Object of a True Education."

TWISS, R., Woodburn.—"Raising Pigs for Profit," "The Dairy Cow and How to Care for Her," "Corn Growing and the Silo," "Why I am a Member of the Farmers' Institute," "Life is as you Make it," "Young Man Stick to the Farm."

ZAVITZ, C. A., B.S.A., Guelph.—1. A Half-dozen Five-minute talks on Subjects relating to Field Agriculture. (The subjects to be suggested by the members at the meeting.) 2. Results and Conclusions from Agricultural Experiments conducted throughout Ontario in 1901. 3. Pasture Crops. 4. The Selection of Seed in its Relation to Good Farming. 5. Results of Several Years' Experience in Growing the Following Crops: Grass Peas, Egyptian Peas, Cow Peas, Soy Beans, Hairy Vetches, Crimson Clover, Lucerne and Dwarf Essex Rape. 6. The Leading Varieties of Grain Crops for the Farmers of Ontario. 7. Important Results of Practical Experiments in Growing Potatoes.

Evening Subject.—The Ontario Agricultural College in its Relation to the Agriculture of the Province.

Farmer Stackpole: "How many steps has that new organ that ye bought for your daughter got?"

Farmer Hawbuck (grimly): "Three—breakfast, dinner, and supper."—Puck.

8 Westover (Town Hall)	N. Wentworth	Feb. 12th
9 Kirkwall (School House)	N. Wentworth	Feb. 13th
10 Sheffield (Town Hall)	N. Wentworth	Feb. 14th
11 Jerseyville (Palmer Hall)	S. Wentworth	Feb. 15th
12 Carluke (School House)	S. Wentworth	Feb. 17th
13 Glanford (Temperance Hall)	S. Wentworth	Feb. 18th
14 Bartonville (Parish Hall)	S. Wentworth	Feb. 19th
15 Bimbrook (Temperance Hall)	S. Wentworth	Feb. 20th
16 Tapleystown (Old Church)	S. Wentworth	Feb. 21st
17 Grimsby (Town Hall)	Lincoln	Feb. 22nd
18 Beamsville (Town Hall)	Lincoln	Feb. 24th
19 Jordan (Zimmerman's Hall)	Lincoln	Feb. 25th
20 Grantham Township (Orange Hall)	Lincoln	Feb. 26th
21 Niagara (Court House)	Lincoln	Feb. 27th
22 Niagara Falls South (Town Hall)	Welland	Feb. 28th
23 Winghamby (Town Hall)	Welland	Mar. 1st
24 Allanburg (Town Hall)	Welland	Mar. 3rd
25 Hamberstone (Town Hall)	Welland	Mar. 4th

DIVISION 5.

G. C. Caston, Craykehurst; F. E. Elford, Holmesville.

1 Onondaga (Township Hall)	N. Brant	Feb. 4th
2 Moxie's School House	N. Brant	Feb. 5th
3 Glenmorris (Township Hall)	N. Brant	Feb. 6th
4 Branchton (Foresters' Hall)	N. Waterloo	Feb. 7th
5 Ayr (McGeorge's Hall)	N. Waterloo	Feb. 8th
6 New Dundee (Myer's Hall)	N. Waterloo	Feb. 10th
7 Breslau (Old Church)	N. Waterloo	Feb. 11th
8 Baden (Village Hall)	N. Waterloo	Feb. 12th
9 Phillipsburg (Village Hall)	N. Waterloo	Feb. 13th
10 Wellesley (Town Hall)	N. Waterloo	Feb. 14th
11 St. Clements (Schneider's Hall)	N. Waterloo	Feb. 15th
12 Waterloo (Town Hall)	N. Waterloo	Feb. 17th
13 Winterbourne (Lecture Room)	N. Waterloo	Feb. 18th
14 Elora (Village Hall)	C. Wellington	Feb. 19th
15 Metz (Orange Hall)	C. Wellington	Feb. 20th
16 Hillsburg (Village Hall)	C. Wellington	Feb. 21st
17 Grand Valley (Chattfield Hall)	E. Wellington	Feb. 22nd
18 Arthur (Town Hall)	E. Wellington	Feb. 24th
19 Kenilworth (Township Hall)	E. Wellington	Feb. 25th
20 Mount Forest (Town Hall)	E. Wellington	Feb. 26th
21 Palmerston (Town Hall)	W. Wellington	Feb. 27th
22 Rothsay (Temperance Hall)	W. Wellington	Feb. 28th
23 Glenallen (Coot's Hall)	W. Wellington	Mar. 1st
24 Georgetown (Town Hall)	Halton	Mar. 3rd
25 Burlington (Town Hall)	Halton	Mar. 4th

DIVISION 6.

R. McCulloch, Sudgrove; F. M. Lewis, Burnord; Miss Alice Holmgrowth, Beattie.

1 Desboro (Township Hall)	N. Grey	Feb. 4th
2 Kilsyth (Township Hall)	N. Grey	Feb. 5th
3 Annan (Grange Hall)	N. Grey (alt)	Feb. 6th
4 Leith (Public Hall)	N. Grey (eve)	Feb. 6th
5 Bogno	N. Grey	Feb. 7th
6 Walter's Falls (Oddfellows' Hall)	C. Grey	Feb. 8th
7 Kimberley (Union Hall)	C. Grey	Feb. 10th
8 Ravenna (Township Hall)	C. Grey	Feb. 11th
9 Maxwell (Orange Hall)	C. Grey	Feb. 12th
10 Relesy (Orange Hall)	Dufferin	Feb. 13th
11 Laurel (Township Hall)	Dufferin	Feb. 14th
12 Horning's Mills (Workmen's Hall)	Dufferin	Feb. 15th
13 Perm (Orange Hall)	Dufferin	Feb. 17th
14 Collingwood (Court House)	W. Simcoe	Feb. 18th
15 Duntroon (S. S. Hall)	W. Simcoe	Feb. 19th
16 Singhampton	W. Simcoe	Feb. 20th
17 Creemore (Leonard's Hall)	W. Simcoe	Feb. 21st
18 Alliston (Town Hall)	S. Simcoe	Feb. 22nd
19 Bond Head (Orange Hall)	S. Simcoe	Feb. 24th
20 Aurora (Town Hall)	N. York	Feb. 25th
21 Queensville (Presbyterian Church)	N. York	Feb. 26th
22 Mount Albert (Town Hall)	N. York	Feb. 27th
23 Stouffville (Spofford's Hall)	N. York	Feb. 28th

DIVISION 7 A.

J. E. Orr, Fruitland; A. J. Reynolds, Scarboro J.C.T.; Miss Agnes Smith, Hamilton.

1 Bolton (Town Hall)	Peel	Jan. 7th
2 Palgrave (Shore's Hall)	Peel	Jan. 8th
3 Sandhill (Methodist Hall)	Peel	Jan. 9th
4 Charleston (Township Hall)	Peel	Jan. 10th

When the Harvest Days are Over.

When the harvest days are over an' the fodder's in the barn,
An' the punkins big an' veller are all stacked within the sheds,
An' the apples an' the 'taters
An' the pickle green termaters
An' the luscious beets and turnips are within their winter beds;
When the harvest days are over an' the cider's runnin' free
Down the brown and luscious chees-es out beneath the ol' stum mill;
When the autumn winds come sighin',
An' the loosened leaves go flyin',
An' the partridge starts a drum min' on the distant wooded hill;

When the harvest days are over an' the frost is white an' thick,
An' the sheds are fixed for winter an' the stock is snug an' warm;
When the kittle's singin' nightly,
An' the fire's burnin' brightly,
An' the hens an' turkeys sheltered from the winter's cold an' storm;
Then a feelin' of contentment passes thro' my rustic soul,
An' I settle by the fireplace in the kitchen's cozy cheer,
An' a happiness steals o'er me
With the dreams that dance before me,
When the harvest days are over an' the winter time is near.
—Joe Cone, in New York Herald.

5	Alton (Science Hall)	Peel	Jan. 11th
6	Belfountain (Public Library)	Peel	Jan. 13th
7	Churchville (Templars' Hall)	Peel	Jan. 14th
8	Brampton (Concert Hall)	Peel	Jan. 15th
9	Malton (Templars' Hall)	Peel	Jan. 16th
10	Islington (Town Hall)	W. York	Jan. 17th
11	Thistleton (Rowntree's Hall)	W. York	Jan. 18th
12	Kleinburg (Temperance Hall)	W. York	Jan. 20th
13	Maple (Masonic Hall)	W. York	Jan. 21st
14	Thornhill (Hughes' Hall)	E. York	Jan. 22nd
15	Unionville (Victoria Hall)	E. York	Jan. 23rd
16	Boxgrove (Foster's Hall)	E. York	Jan. 24th
17	Ellesmere (Curlers' Club)	E. York	Jan. 25th
18	Goodwood (Town Hall)	N. Ontario	Jan. 27th
19	Uxbridge (Town Hall)	N. Ontario	Jan. 28th
20	Udora (Orange Hall)	N. Ontario	Jan. 29th
21	Beaverton (Alexandra Hall)	N. Ontario	Jan. 30th
22	Brechin (McGrath's Hall)	N. Ontario	Jan. 31st
23	Woodville (Woodville Hall)	W. Victoria	Feb. 1st
24	Little Britain (Little Britain Hall)	W. Victoria	Feb. 3rd

DIVISION 7 B.

Henry Glendenning, Manilla, Miss Laura Linton, Guelph.

1	Blackstock (Township Hall)	W. Durham	Jan. 7th
2	Solina (Sons of Temperance Hall)	W. Durham (aft)	Jan. 8th
3	Tyrone (Sons of Temperance Hall)	W. Durham (eve)	Jan. 8th
4	Kendal (Temperance Hall)	W. Durham (aft)	Jan. 9th
5	Orono (Town Hall)	W. Durham (eve)	Jan. 9th
6	Welcome (Temperance Hall)	E. Durham	Jan. 10th
7	Garden Hill (Orange Hall)	E. Durham	Jan. 11th
8	South Monaghan (Town Hall)	E. Durham	Jan. 13th
9	Lifford (Temperance Hall)	E. Durham	Jan. 14th
10	Omenece (Bradburn's Hall)	E. Victoria	Jan. 15th
11	Dunsford (Old Church)	E. Victoria	Jan. 16th
12	Cambray (Tomlin's Hall)	E. Victoria	Jan. 17th
13	Burnt River (Orange Hall)	E. Victoria	Jan. 18th
14	Seagrave (Town Hall)	S. Ontario	Jan. 20th
15	Columbus (Town Hall)	S. Ontario	Jan. 21st
16	Whitby (Town Hall)	S. Ontario	Jan. 22nd
17	Whitevale (Town Hall)	S. Ontario	Jan. 23rd

A Word to Farmers...

THE opportune time to secure subscriptions to THE FARMING WORLD is right now. We have to thank many of our friends for the interest they have manifested in making up clubs and securing for themselves one or other of the valuable premiums we offer. Our list of books useful to farmers specially commend themselves to readers. Those who have not started, start now, and let those who know what it is to earn a valuable premium get going on a second or third club and earn others. Subscribers who are renewing direct can secure any of the books named at very special prices.

Soiling Crops and Silo

An invaluable book by Thos. Shaw, Professor of Animal Husbandry at the University of Minnesota, and known to every Canadian farmer. This book is recognized as by far the most original and comprehensive on the subject of which it treats. Publishers' price is \$1.50.

Will be sent free to any present subscriber sending three new yearly subscriptions at \$1.00 each, or to any present subscriber, not in arrears, for \$1.50.

Forage Crops

Invaluable book by Thos. Shaw. It has a practical ring about it from beginning to end that begets confidence in the reader as to the value of its contents. It is illustrated, substantially bound in cloth, and consists of about 300 pages. Publishers' price is \$1.00.

Will be sent free to any present subscriber sending two new yearly subscriptions at \$1.00 each, or to any present subscriber, not in arrears, for \$1.00.

The Farmer His Own Lawyer

A new premium of the closing month of the old year is a valuable book entitled "Be your own Lawyer." This gives in condensed form the business laws of Canada—forming a practical and ready reference for Magistrates, Land Owners, Tenants, Builders, Contractors, Farmers, etc. The legal forms are all filled out in detail, signed and even sealed, thus serving as a model which any person can follow.

A copy of "Be Your Own Lawyer" will be furnished free to any reader of THE FARMING WORLD who will send 2 new yearly subscriptions.

Address all letters and make cheques, money orders and drafts payable to

THE FARMING WORLD,

Confederation Life Building, TORONTO.

The Expansive Tree Protector

A MERITORIOUS DEVICE FOR THE DESTRUCTION OF THE CANKER WORM, TENT CATERPIL-LAR, TUSSOCK MOTH, ARMY WORM, CODLING MOTH, AND ALL SIMILAR ENEMIES OF FRUIT AND ORNAMENTAL TREES.

Space does not permit us to minutely describe the Expansive Tree Protector. We simply wish to bring it to the notice of the public, in order to keep them informed on new and useful inventions of value to fruit men and farmers in particular, and the public in general.



This Photograph shows the "Protector" on a tree, and also illustrates the effective work done by same.

A most complete set of illustrated circulars on this device may be had free of cost, by addressing The Expansive Tree Protector Co., (L't'd.,) Toronto, Ont., and it is well worth the time of any of our readers, to send for particulars.

The necessity of banding our fruit and ornamental trees has become so apparent that our Legislature has taken up the subject, with a view to legislating in this direction. "What shall we use?" is the natural question. Tar paper, sacking, saturated cotton, a band of pitch—all these are susceptible to the elements. A good rain storm washes off such protectors, a hot sun dries the tar, a dust storm hardens the surface of any and all of the devices above referred to, practically preparing a paved roadway, over which the destroyers of our trees may travel.

In the Expansive Tree Protector, we find the device consists of a felt band, especially prepared, and saturated with a substance which is absolutely noxious, and even repellant to insects, worms and bugs of every description. This pad is attached to a wire expansive spring, by means of which it is fastened around trees, and is adjustable to any and all trees, permitting the tree to grow without injuring the bark. To the pad and spring is attached an apron, made of galvanized iron or other metal, the under side of which is covered with a sticky substance, inoculated with an insecticide that is sure death to all creeping things which infest a

tree, so that if for any reason any insect, worm or bug should attempt to pass the band, a dead line is formed, and it is absolutely impossible for anything to pass it, and reach the fruit and foliage.

The Expansive Tree Protector has been tested, and found to do what is claimed for it. It will retain its potency for months, without resaturation or any attention whatever. It is very durable, and sold at so small an expense, as to make any excuse for not using it nothing less than parsimony, by those who are interested in the fruit industry, or in the protection of shade and ornamental trees, as it is as valuable in protecting the last named as the first, and Superintendents of Parks, as well as private individuals interested in the protection of such trees, are urged to test its value.

In looking over the letters testifying to the efficacy of the Expansive Tree Protector, we find one from Mr. Gifford Pinchot, Chief Forester of the United States Department of Agriculture, at Washington.

Another from the New Jersey Agricultural College, in which they say: "The idea of expansion, which enables the device to be used for several years in succession, without in any way interfering with the development of the trees, is in itself especially useful."

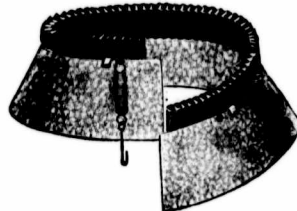
One is from Mr. J. H. Hale, President of the Connecticut Pomological Society, who speaks in high terms of it.

From the Entomologist's Office for the State of Illinois, comes a very flattering testimonial, and from the Entomologist Division of the University of Vermont, another.

The Georgia State Board of Entomology also endorses it, and is loud in praising its value as a protection against peach tree borers and the canker worm, which devastates our apple trees.

The Michigan Agricultural College also recommends it.

One testimonial of special value is from Mr. J. W. Thorn of Philadelphia. Among other things he says: "I have bought thousands of



Expansive Tree Protector.

barrels of apples this fall, and among others I bought the orchard of Mr. Eugene Van Voorhis of Irondequoit, New York. His apples were of the best quality of any

fruit bought by me this season, and as free from worm spots and the attacks of insects as any I have seen. I attribute the fine condition of this fruit to the fact that Mr. Van Voorhis' orchard was protected by the Expansive Tree Protector, manufactured by your company—a device which I believe to be the best on the market to-day."

This is of exceptional interest to all who read this article, because the photo we show in another column is an exact representation of one of Mr. Van Voorhis' trees, wearing the Expansive Tree Protector.

Many other good things are said about it.

The Canadian Company has for its officers: President, Mr. W. E. Wellington (the well known nurseryman), Mr. S. E. Briggs (of the Steel-Briggs Seed Co.) is vice-president, Mr. R. S. Hudson (prominent in financial circles, owing to the fact that he is assistant manager of the Canada Permanent & Western Mortgage Co.), is secretary-treasurer.

This, to our mind, is sufficient guarantee of the reliability of the device, to do all that is claimed for it.

It is the intention of the company to put the Expansive Tree Protector on the market through agents. Many who are interested in selling nursery stock, have already taken it up as a side line, while others are devoting their entire time to introducing it.

The Stockman's Opportunity.

The announcement made by the Ontario Agricultural College a short time ago that a course in live stock judging will be provided this winter should meet with ready response from farmers and stockmen all over the country. No subject is of more importance in Canada to-day, and we look for a large attendance when this special course begins on January 8th next. The course will last two weeks and there is no farmer or farmer's son but can afford to spend this short time in perfecting himself in live stock judging. Parties desiring to attend should apply at once to Dr. Mills, President, Ontario Agricultural College, Guelph.

An Irish clergyman has a parishioner, who is addicted to drink. Meeting the man, the priest insisted that he should take the pledge, saying it was the only protection against the temptations of the public house. "You've never seen a teetotaler drunk, Tom," said the priest. "Ah, your riverence," replied Tom, "I've seen many a man drunk, but I couldn't tell for the life o' me whether they wor teetotalers or not!"

Casey—"Doolan offered to prove to me in black an' white that Oi was a fool." Clancy—"Phwat happened thin?" Casey—"Oi proved to him in black an' blue that he was a liar."

The Farm Home

Noddin' by the Fire.

BY PAUL LAURENCE DUNBAR, IN THE CENTURY MAGAZINE.

Some folks t'inks hit 's right an' p'opah,

Soon 'z lezitime come etroun',
Fu' to scramble to de kiver,
Lak dey'd h'yeah'd de tr'otepet
soun'.

But dese people 'ey a' misses
Whut I mos'tly does desah;
Dat's de settin' roun' an' 'dozin',
An' a-noddin' by de fiah.

W'en de ol' pine-knot 's a-blazin',
An' de hick'ry 's crackin' free,
Den's de happy time fu' noozin',
It's de noddin' houah an' naze.
Den I gits my pipe a-goin'.

While I pokes de flames up
h'ighah,
An' I 'tends lak I 's a-tinkin',
When I 's noddin' by de fiah.

Mebbe some one comes to jine you;
Well, dat's good, but not de best,
Less'n dat you 's kind o' lonesome,
Er ain't honin' fu' de res.
Den you wants to tell a story,
Er you wants to h'yeah de news
Kind o' half tol', while you 's
stealin'
Ev'v now an' den a snooze.

W'en you 's t'iahed out a-hoain',
Er a-followin' de plow,
Whut's de use of des a-fallin'
On yo' pallet lak a cow?
W'y de fun is all in waitin'
In de face of all de tiah.
An' a-dozin' an' a-drowsin'
By a good ol' hick'ry fiah.

Oh, you grunts an' groans an'
mumbles
'Ca'se yo' bones is full o' col',
Dough you feels de joy a-tricklin'
Roun' de co'nahs of yo' soul.
An' yo' 'low anothah minute
'S sho to git yo' wa'm an' dryah
W'en yo' set up pas' yo' bedtime,
'Ca'se yo hates to leave de fiah.

Whut's de use o' downright sleepin'?
You can't feel it while it las',
An' ya' git up feelin' sorry
W'en de time fu' it is pas'.
Seem to me dat time's too precious,
An de houahs too short entiah,
Fu' to sleep w'en yo' could spen'
'em
Des a-noddin' by de fiah.

A Chance for Everybody.

Mrs. M. E. Graham, Ailsa Craig, Ont., one of our regular contributors to this department, sends the following question, which she would like to have any boy or girl, man or woman, who reads it, answer: "What education should the girl receive who expects to become a successful helpmate for the up-to-date farmer?"

All replies should contain not more than one hundred words, should be written on one side of the paper only and should be sent to Mrs. Graham within two weeks

from the date of this issue. As an inducement to the readers of this department to give their views on this important question, the publisher of The Farming World will offer prizes for the best answers as follows:

To the senders of the two best replies a copy each of Nuttall's Encyclopaedia of Universal Information will be given, and to the senders of the two second best replies a copy each of the Ideal Cook Book will be given.

The Mecca of the East and Its Industry.

BY LAURA ROSE.

One of the pleasant things about being away is the getting home once more. It does you good to have people seem really glad to see you again and to tell you how well you are looking, etc.

When my friends hear I spent the summer on Cape Breton Island the first question they ask is "Were you in Sydney?" and the next, "Did you see the great Iron and Steel Works there, which are so much read and talked of these days?"

Yes, I spent several days in Sydney, and through the kindness of Mr. C. W. Hill, secretary of the Agricultural Society, I was taken over the works. It is rather difficult to get a pass, owing to the fact that hardly a week goes by without some one being killed or hurt. The place is a net work of railroads and one has to be ever on the watch or an engine may be at your heels.

The works are a little out of the town of Sydney and are situated on a small creek that runs into the harbor. In establishing works of this kind often a very serious problem is where to dispose of the enormous waste. The company have bought a large tract of low, marshy land bordering on the creek and it is their intention to fill it in with the slag. I watched the water boil and sizzle while the last lot of red hot slag had been dumped.

The works give Sydney a distinction above other towns. Distance or darkness cannot hide its location. I remember one evening when driving in from Mira Gutt—the way was long and the road strange—how welcome was the bright red reflection on the far off sky from the coke ovens. But the light was very alluring. It was a case of "Thou art so near and yet so far," for we had to travel many a mile before reaching our desired goal.

To me the works presented the appearance of a family living and working in a house in which the builders and carpenters still held sway. Workmen swarmed everywhere, here making roads; there doing mason work, farther n putting in immense iron machinery,

and going still farther, men were employed in the actual business of melting the iron ore and making pig iron. Such piles of pig iron as I saw. It looked like a great wood yard, only in this case the wood was iron.

The plant comprises coke ovens, blast furnaces, blooming mills, rolling mills, &c., some only in process of construction.

When the works are completed, the iron melted from the ore will not be allowed to become cold until it comes forth in the form of shining steel rails. The company have a capital of twenty-five million dollars and over ten million dollars have already been expended on the works. This gives one a little idea of their immensity.

As I viewed the plant and thought of the expenditure, I wondered how long it would be before the money invested would show a profit.

Three things are necessary to produce iron—the iron ore, coke, and a particular kind of soft marble. Nowhere can all three be obtained more cheaply and in such abundance than in or near Cape Breton.

The ore is brought from Newfoundland. Unlimited quantities of splendid coal are right at hand, while Marble Mountain, on the western shore of Big Bras D'Or Lake furnishes the ideal greenish white marble, which helps to liberate the iron from the ore. The coke, ore, and marble are put in layers in the furnaces and subjected to intense heat.

We went to see the coke ovens, where coal is converted into that light, porous, gray substance called coke. Hundreds upon hundreds of tons of coal are used for this purpose each day. The gas from the coke ovens is used in the furnaces, while the coal tar runs through large tiles and is stored in huge tanks. Shortly before my visit one of these tanks took fire and thousands of gallons of tar were burnt. I imagine it would be a hot blaze. I suppose in the course of time on the grounds will be made from the coal tar, the two hundred and forty-two different articles of commerce that are said can be manufactured from the black, sticky stuff—perfumes without flowers, candy without sugar, flavorings without fruit, and the dear knows what not.

It is not two years since the works were first begun and in that time Sydney has grown from a town of less than four thousand to one of twelve thousand. They have wonderfully helped the whole island, bringing in thousands of people and giving employment to thousands already there. A splendid market for farm produce has been opened up and there is an atmosphere of cheerfulness and prosperity about the country and its people.

I was most sorry to hear of the disastrous fire Sydney lately had,

but let us hope that from its ashes will rise up larger and handsomer buildings, and that the present calamity may turn out in the end to the city's good.

A Suggestion to Women InSTITUTE Secretaries

It seems as if Canadians are a trifle slow in following a good example. We see what a good thing the Americans have in their Reading Course for farmers and farmers' wives, but we do not do likewise. Even Mrs. Graham's efforts to start discussion in the Farm Home Department have met with little response.

I would like to hear from the secretaries of Women's Institutes, not only of what they are doing but their method of work, being myself the secretary of a newly organized Institute. We held our first regular meeting last week, the members assembling from a radius of ten miles. After the business was despatched an essay was read on "Fish as an Article of Diet," telling why fish killed immediately after catching make more wholesome food than fish allowed to die slowly; why canned fish become poisonous if allowed to remain in the can after being opened; the different methods of preparing fish for market; the danger of eating fish that have been frozen and then allowed to stand for some time after thawing. It was a surprise to many to learn that fish possess no special merit as a brain food as we have always supposed, but make an excellent food for students or anyone leading a sedentary life, being equally nitrogenous and more easily digested than the stronger meats, which are only adapted for those who exercise freely.

Another excellent essay was given on "The Principles of Bread-making," showing that with the evolution of the human race, bread has gradually been developed from a very crude article to its present state of perfection. The speaker then described the process of making wheat into flour; the action of the yeast; the alcoholic fermentation and production of carbon dioxide gas, which causes the expansion of the dough. This was followed by an impromptu address on "How I make bread," by a lady who laid particular stress on the desirability of brushing all dust, dandruff and loose hairs from the clothes and cleaning the finger nails before mixing the dough. Her method of making yeast appeared to be the one most in vogue. It was unanimously agreed that soft home-made yeast is more economical, and gives a better flavored bread than yeast cake. There was a lively discussion on the virtues of brown bread and the various ways of making it. Another address was given on "Women as Nation Builders," the speaker giving statistics and data of all the industries in which Canadian women are employed; their position in the professions, arts and sciences; what

they have accomplished as social reformers and what reforms require their immediate attention.

"These are the development of more home life in the towns, more social life on the farms and more outdoor life for everybody. Most pressing of all is the need to dignify our labor and respect ourselves as housekeepers; to uphold the sacredness of the home and by all possible means to wipe out the abominable fallacy that house work is degrading, that a soft, white hand is more commendable than a useful hand.

"I think that any woman who is a good housekeeper and makes her husband and children comfortable should feel very proud of it," said one lady, and her opinion was endorsed by all present, who dispersed well pleased with the pleasant and profitable meeting.

Alice Hollingworth,
Secretary of S. Muskoka Women's
Institute.

Hints by May Manton.

WOMAN'S BOX ETON, NO. 3884.

The box Eton makes the very latest form of the popular jacket and is much liked both for entire costumes and separate wraps. Taffeta, tucked and plain, black and white, is much used for the latter purpose, but etamine is somewhat newer and more durable, and is attaining great vogue. The original, from which the model was made, is of the open mesh lightweight tucked material in black, with revers and applique of cream Cluny



lace over white, but cream makes a charming warm weather wrap and is peculiarly effective over the much worn white gowns; and entire costumes are made from linen and duck as well as suitable silks and wools.

The jacket is simplicity itself. The back fits smoothly and the fronts hang from the shoulders, without darts, in box style, the upper edges being extended and rolled back to form revers. The sleeves are cut in coat style, but flare becomingly at the wrists.

FALL TERM

New Open in all Departments
of the
Central Business College

TORONTO

Young men and women are coming in from all parts of the Dominion to attend our school, because they find with us very superior advantages. Our catalogue explains them. Write for it.

ENTER ANY TIME.

W. H. SHAW, Principal
Yonge and Gerrard Sts., Toronto.

To cut this Eton for a woman of medium size, $3\frac{1}{2}$ yards of material 21 inches wide, $3\frac{1}{4}$ yards 27 inches wide, $2\frac{3}{4}$ yards 32 inches wide, or 2 yards 44 inches wide, will be required, with $\frac{1}{8}$ yard of all-over lace and $2\frac{1}{2}$ yards of applique to trim as illustrated.

The pattern 3884 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."

To Solve the Servant Problem.

It has long been evident to the thoughtful housekeeper that the only way to supplant the unskilled, wasteful and high priced servant of this generation is to establish manual training schools for domestic science, where young girls, after a thorough course in one or all branches of household work, shall receive diplomas entitling them to certain situations at a fixed scale of wages. Perhaps no class of women workers is so well paid as that of domestic servants, and certainly there is no other class about which we hear such constant complaint. Special preparation for special work is demanded in most trades and every profession, but the haphazard training of a domestic servant, or her lack of even that, does not debar her from a good home and money to spare. Not without much training of mistresses in the noble art of good housekeeping, and certainly not without the cooperation of housekeepers to keep up the standard and quantity of work demanded for a given wage in any community, can the training school fulfill its mission in hastening the millennium.—November Ladies' Home Journal.

"Any idiot knows," said Rex the Riddler, "that the real reason the Boers sleep with their boots on, is that they want to keep De Wet from defeat. But can you tell me this: Why cannot a deaf and dumb man tickle nine women? You'll never guess it. Give it up? Well, a deaf and dumb man can't tickle nine women because he can only gesticulate. See! — Exchange.

The Farming World.

A PAPER FOR FARMERS AND STOCKMEN.

Publisher, D. T. McARISSE.
Editor, J. W. WHEATON, B.A.

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.

Postage is prepaid by the publisher for all subscriptions in Canada and the United States. For all other countries in the Postal Union add fifty cents for postage.

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Advertising Rates on application.

Letters should be addressed to:

THE FARMING WORLD,
CONFECTIONERY LIFE BUILDING,
TORONTO.

QUESTIONS AND ANSWERS

LOOSE OR TIED CATTLE FOR FEEDING.

Subscriber, York Co., writes: "I would like to know through your valuable paper as to loose versus tied cattle for feeding, and how many two-year-old steers could be accommodated in a space 30 x 40? The ceiling is nine feet high. Would it be better to make several pens or turn them all together?"

Answered by Prof. G. E. Day, Ontario Agricultural College, Guelph.

In reply to the inquiry of "Subscriber," York Co., I beg to say that I have had very little experience in feeding steers loose. Experiments conducted so far have not been conclusive as to which is the more economical plan—feeding loose or tied. I would prefer, if possible, feeding comparatively small groups of steers together, that is to say, dividing up the pen into smaller parts, with not more than 5 or 6 steers together. In this way the steers could be classified better re-

garding size. Perhaps some other reader of your valuable paper could give fuller information regarding the number of steers that could be accommodated in the building described. I should think, however, that it should accommodate 25 steers conveniently.

Note—The question raised by "Subscriber" is an important one and we would be very glad to have the experience of some cattle feeders on the points raised.—Editor.

Wentworth Plowing Match.

The 54th annual match of the Wentworth Pioneer Plowing Club took place on Nov. 6. There was a large crowd of spectators present. The number of competitions was not as large as usual, and on account of the dry weather the conditions for plowing were not the best. There were eight regular classes in which competition was kept, besides thirteen special prizes. This made the match very interesting throughout.

Shropshire Meetings

The annual meeting of the American Shropshire Registry Association will be held at the Board of Trade rooms, Union Stock Yards, Chicago, Tuesday, December 3rd, at 10:30 a. m. This will be during the great International live stock meeting, and that will be the largest exhibit of live stock, and the largest number of representative breeders ever brought together at any show in the world.

Live Stock Judging at Chicago.

Prof. W. J. Kennedy, Ames, Iowa, sends us the following particulars regarding the prizes to be competed for at the Intercollegiate live stock judging contest to be held at the International Exposition in Chicago, November 30th to December 7th, 1901.

The J. A. Spoor trophy, value \$700, to be awarded to the Institution making the highest aggregate standing on three men entered in all classes.

The Breeders' Gazette, grand sweepstakes prize of \$150 to be divided into seven prizes of \$40, \$30, \$25, \$20, \$15, \$12 and \$8 to be awarded to the students ranking highest in judging all classes of live stock.

The Drovers' Journal special prize of \$150 to be divided into seven prizes of \$40, \$30, \$25, \$20, \$15, \$12 and \$8 to be awarded to the students taking the highest standing in judging the various classes of market and breeding cattle.

The American Hereford Breeders' Association special prize of \$100 to be divided into five prizes of \$30, \$25, \$20, \$15 and \$10, to be awarded to the students taking the highest standing in judging Hereford cattle.

The Twentieth Century Farmer special prize of \$25 to be divided into four prizes of \$10, \$7, \$5 and \$3 to be awarded to the students taking the highest standing in judging all classes of horses.

The American Clydesdale Association special prizes of \$25 to be divided into four prizes of \$10, \$7, \$5 and \$3 to be awarded to the students taking the highest standing in judging the various classes of Clydesdale horses.

The American Shropshire Registry Association, \$25 special prize to be divided into four prizes of \$10, \$7, \$5 and \$3 to be awarded to the students taking the highest standing in judging Shropshire sheep.

The George Harding & Son \$10 prize to be awarded to the student taking the highest standing in judging Cotswolds.

The American Poland China Breeders' Association special prize of \$25 to be divided into four prizes of \$10, \$7, \$5 and \$3 to be awarded to the students taking the highest standing in judging the various classes of Poland China swine.

It is expected that several other associations will contribute to our premium list between now and Exposition time, as they have the matter under consideration and will decide at their annual meetings which will be held during the month of November.

Ontario's Crops

The final estimates of the crops in Ontario this year, based on actual threshing results, are contained in the November crop report.

AN IMPOSSIBLE thing to find in a plaster equalled to "The D. & L." Menthol, which is being imitated. Get the genuine. For side aches, and back-aches, stitches, nothing equals it. Made by Davis & Lawrence Co., Ltd.



I know of some excellent wooded lands in the Province of Ontario, not far from the line of the Canadian Pacific Railway, at nominal prices. There is plenty of work and good future for settlers.

Reduced rates are given to bona fide intending settlers—only by

Colonization Agent

GENERAL OFFICES, C.P.R.

MONTREAL

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issued by the Ontario Bureau of Industries. The results are as follows: Fall wheat, 16,017,029 bushels, or 17.4 per acre; spring wheat, 5,498,751 bushels, or 15.4 per acre; barley, 16,761,076 bushels, or 26.3 per acre; oats, 78,334,490 bushels, or 32.5 per acre; rye, 2,547,313 bushels, or 16.1 per acre; peas, 10,089,173 bushels, or 16.7 per acre; buckwheat, 1,757,071 bushels, or 19.9 per acre; beans, 824,122 bushels, or 15.4 per acre; potatoes, 18,116,637 bushels or 118 per acre; corn for husking in the ear, 24,838,105 bushels, or 77 per acre; corn for silo and fodder, green, 2,350,814 tons, or 11.93 per acre; hay and clover, 4,632,317 tons, or 1.31 per acre.

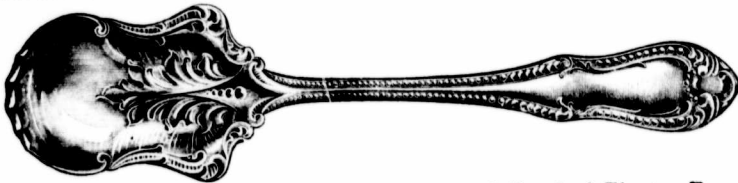
Watering Horses

Horses should be watered before receiving their oats. If they are watered after feeding, the water washes the undigested food out of the stomach, and thereby may cause trouble. Water drunk by a horse does not stay in the stomach like food, but passes rapidly through it, going directly to the large intestines. Horses should always have plenty of good, pure water to drink, and at frequent intervals. A horse coming in hot from work will very seldom suffer from getting a drink of water at once. He is apt to chill if cold water be given after he has partially

cooled. If the water be given at once in moderate quantity, the heat in the system warms it at once, and no harm results. If the horse be left till he be partially cooled, the water withdrawing more heat when the system has begun to flag, may cause a chill. A horse should never be given a large quantity of cold water just before doing fast work. It may hurt both his going and staying powers and induce scouring. A horse going out for fast work should be watered at least two hours before leaving the stable, and then, even if offered at starting, will seldom take more than a mouthful. During a long journey a horse should be watered whenever there is an opportunity.

DEAR MADAM

Send us your name and address on the below request, and we will take pleasure in sending you *free of any charge* this **SOLID OREGON SILVER SUGAR SHELL**. You don't have to buy anything. The gift is unconditional. It is a bid for your everlasting friendship and good will, and if you do not read this advertisement through and answer it at once, it will be a loss to yourself and a disappointment to us.



With the Sugar Shell we will send you 6 packages of Standard Electine Remedies, which we wish you to sell, if you can, at 25 cents each. Then return our money, and we will give you *absolutely free* a Butter Knife and Pickle Fork, same pattern as your Sugar Shell, and also a Set of 6 Full-Size Solid Oregon Silver Teaspoons. If you fail to sell our Medicines, return them to us and retain the Sugar Shell as a gift, it being *free* in any event. Our Solid Oregon Silver Premiums are fast superseding Sterling Silver for Tableware. They always look as well, and wear better; they are the same beautiful metal all the way through and are guaranteed for 50 years. There is nothing else like them except Sterling Silver, and nothing "just as good." Now, please don't throw this paper down and say to yourself, "I'll write to those Electine people to-morrow."

This is not an opportunity to put off and forget. Just sign and return the attached request *to-day*, that is all you have to do. The Sugar Shell and Medicines will then be promptly mailed, post-paid. Remember, even if you fail to sell our Goods, you at least have an *Elegant Sugar Shell, worth 75 cents, for simply making the effort.*
Sincerely yours,

REQUEST FOR SUGAR SHELL AND MEDICINES.

Electine Medicine Co., Limited, Toronto, Ont.

Ship immediately, by mail, 1 Solid Oregon Silver Sugar Shell and Six 25-cent Packages of Electine Remedies. I agree to make an earnest effort to sell the Medicines, and return you the money, with the understanding that I am to receive for this service a Butter Knife and Pickle Fork, same pattern as Sugar Shell, and also Six Full-Size Solid Oregon Silver Teaspoons. If I fail to sell the Medicine, I will return it to you within 30 days, and retain the Sugar Shell as a gift from you.

NAME
(Write Name Plainly, "Mrs." or "Miss")

ADDRESS

DEPT. 2.
PLEASE WRITE VERY "VERY" PLAINLY

ELECTINE MEDICINE CO., Limited, TORONTO, Ontario

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

Messrs. I. Devitt & Son, Freeman, Ont., writes:

Our Clydesdale horses are in good condition for going into their winter quarters, they are in stable at night but have the run of the pasture during the day.

Grandeur II. is in fine condition, and has let us an exceptionally good lot of foals this year, the best we have ever had. He is a getter of the right sort for the present day. They are strong-limbed, drafty fellows, such as our export buyers are looking for. Nickel Steel, as his name indicates, is a horse that will stand a lot of wear. He has excellent feet and pasterns, good broad legs, well-formed looks, is remarkably well muscled. He resembles his great grand sire, Boydston Boy II. very much. Has excellent action. He is a horse that will get good ones. The two-year olds will make good big handsome horses, one a full brother to Nickel Steel. The other two are by Grandeur II., and out of good big mares.

The mares are a good strong lot, good breeders and good workers. There are two three-year old fillies which are in foal. One has been a prize winner, being shown at five fairs and winning five first prizes. We have an excellent Shorthorn bull call out of a good milking cow and sired by imp. Pure Gold, a bull that was sold to go to South America at a large figure.

Cattle.

Mr. Arthur Johnston, Greenwood, Ont., recently sold to a large breeder in Ohio thirteen head of Aberdeenshire Shorthorns, including five calves, for the sum of \$7,100, or over \$546 a head. These are among the finest Mr. Johnston has imported and were described in these columns a few weeks ago. The cattle were sold in quarantine and therefore, were shipped direct to their destination without having to undergo the tuberculin test.

A lot of 42 half-bred Galloway calves sold the last week of October at the Kansas City stock yards for \$6 for 100 lbs., the highest price of the year for calves of any breed.

The range yearlings, winners at Chicago last year, were also Galloway grades, and were well-formed, good beet specimens without any artificial feeding.

Dr. J. A. Couture, D.V.S., Quebec, secretary of the French-Canadian Cattle Breeders' Association, gives the history of the breed and the claims made for it as follows:

"The French settlers who first came to Canada were natives of Brittany and Normandy, France. The first cattle in Quebec, in 1620 or thereabouts, were brought, no doubt from those two districts. No importations or other breeds worth mentioning are reported in the history of the Province until about 1800 or a little before. Between 1776 and 1850 a few herds of English cattle, mostly Ayrshires and Shorthorns, were brought into the

ONE FACT IS BETTER THAN TEN HEARSAYS. Ask Doctor Burgess, Supt. Hospital for Insane, Montreal, where they have used it for years, for his opinion of "The D. & L." Menthol Plaster. Get the genuine made by Davis & Lawrence Co., Ltd.

HORSEMEN! THE ONLY GENUINE IS

GOMBAULT'S CAUSTIC ELSAM.

See genuine without the signature of Dr. Lawrence Williams Co. Sole Agents for the U.S. & CANADA. CLEVELAND, O.

The Safest, Best HISTETI ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and CATTLE. SURFEITS ALL CAUTERIES or FURING. Impossible to produce scurf or blains. Every bottle is warranted to give satisfaction. Price \$1.00 per bottle. Sold by Druggists, or sent by Express, charges paid, with full directions for its use. Send for free descriptive circulars. THE LAWRENCE-WILLIAMS CO., Toronto, Ont.

NO SPAVINS

The worst possible Spavin can be cured in 45 minutes. Curbs, Splints and Ringbones just as quick. Not painful and never has failed. Detailed information about this new method sent free to horse owners.

Write to-day. Ask for Pamphlet No. 1. FLEMING BROS., 58 Bay St., Toronto, Ont.

Honey Wanted

Let us have your price. State how put up. Check sent as soon as we receive the honey. SAMUEL L. LEWIS & CO., Commission Merchant, London, Ont.

WYANDOTTES

Buff, White and Golden. The people's favorites. Splendid breeders. Cheap. A. W. GRAHAM, Nurseryman and Fruit-grower, St. Thomas, Ont.

FOR SALE

S.C. White Leghorn Cockerels. Cheap, if taken soon. H. D. NORTON, Alliston, Ont.

"VIGILANT" NEST

SLIDING-ADJUSTABLE (Patented Can. & U.S.)
The only nest in the World which positively prevents hens from eating their eggs.
Simple—Effective—Durable
No springs—Eggs cannot break. The inclined nest gathers them safely in lower section. Prevents fleas, or parasites, etc. Everlasting, never failing, comfortable. Thousands now in use. Ask your dealer for it or write to L. P. MORRIS, Inventor, Mir, 15 Antoine St., St. Hyacinthe, Que.
Price 45c. each. AGENTS WANTED.



Spooner's "PHENYLE" Powder

"Phenyle" GERMICIDE DISINFECTANT...

KILLS CHICKEN LICE and Lice on Horses and Cattle, and Ticks on Sheep. Keeps them Healthy. Easily applied; no dip required.

60lb. boxes, 1lb. packages.....25c. lb.
70lb. pails.....15c. lb.
400lb. barrels.....10c. b

If your Druggist does not sell it, send direct to ALONZO W. SPOONER, Laboratory, PORT HOPE, Ont. *It will cure and prevent hog cholera.*

ONTARIO

PROVINCIAL WINTER FAIR

A Combined Exhibition of Fat Stock, Dairy Cattle and Dressed Poultry, will be held at

Guelph, Ont.

DECEMBER 10th to 13th, 1901

Every provision made for the convenience and comfort of Exhibitors and their Exhibits.
Entries should be made before Nov. 23. After that date an extra fee will be charged. Positively no entries will be received after Dec. 1.
Single Passenger and Freight rates.
All applications should be made to the Secretary,

A. P. WESTERVELT,
Parliament Buildings, TORONTO

A. W. SMITH, President,
Maple Lodge, Ont.

PRIZE LIST NOW READY

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Province, but they were bought by wealthy Englishmen living near Montreal and Quebec, where they are still to be found. They found but little favor with the French inhabitants in the poorer region and in the remote parts along the Laurentides and the lower part of the St. Lawrence, both north and south, as they were loth to cross their hardy little cows with the larger breeds, fearing, with good reason, that they could not feed sufficiently to keep the larger animals alive, to say nothing of profit during the seven months of the winter. Thus they have been kept nearly distinct for over 250 years, and in-and-in breeding has been resorted to to fix in a sure manner the characteristics of the breed. Thus they have much of the appearance of the Brittany cattle of the day. It may be noted here that the French-Canadian, the Jersey, Guernsey, Kerry and Brittany cows are all supposed to come from the same origin, and the Brittany is usually allowed to be the oldest stock, the different breeds being modified by climate, care, and perhaps individual characteristics of animals bred from, until they vary from the 500-pound Kerry to the Guernsey almost as large as the Shorthorn.

"The three qualities claimed for the French-Canadian are hardness, frugality and richness of milk. As they are small, the cows averaging 700 pounds each, they do not require large amounts of food. In form they are something like the Jersey, but in color most frequently a solid black, or black with brown stripe on the back and around the muzzle, or brown with black points, brown brindle, or even yellowish."

Mr. John Young, Tilbouries, has recently disposed of some capitally-bred Shorthorns from his herd in the north. To Messrs. Edwards & Co., Rockland, Ont., he has sold four excellently-bred females, including the three-year-old cow Rosetta 10th, after Clan Gwynne, together with her heifer calf, Lady of Pinegrove, by the Duthie bull Scottish Prince. Another of Messrs. Edwards' purchases is the one-year-old heifer Scottish Fancy, descended from the Jilt tribe, and by Scottish Prince; and the fourth is a heifer calf by Scottish Prince out of the prize heifer, Rosetta 11th, which was first in her class this year at the Kincardine County Show at Stonehaven. Rosetta 11th it may be mentioned, is by Remus, the sire of Mr. Merson's 500-guinea bull Choice Goods. Mr. Young has sold all these animals at substantial figures after they had passed the test. Mr. Morrison, Netherlea Mains, has sold to the same buyer Pinegrove Butterfly, a heifer calf, from his fine cow Beatrice 13th, bought at Kingcausie. Mr. W. R. Crawford, The Priory, Tullyhogue, Co. Tyrone, has bought three well-

bred bull calves from Mr. Young for exhibition purposes. One of them is from a Rosie dam, and the other two are from the Tilbouries Rosetta tribe, while they are all sired by Scottish Prince. Mr. Young was fortunate in securing at the recent Uppermill Sale a very good Emma bull. Though he has since been offered a long figure to pass him, he has decided to keep him at the head of the herd. —North British Agriculturist.

Thornton's circular Vol. 17, No. 133, gives the following account of exportations of Shorthorns from Britain, for the three months, April 1st to June 30th, 1901: To South Africa, two; to South America, twenty-six; to Canada, nine; to Australia, one; to New Zealand, one, and to Russia, forty-three. The chief point in this is the large number of importations made by Russia. She may be a factor in Britain's meat trade later on.

Oxford Fat Stock Club.

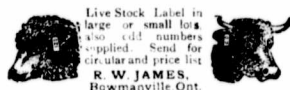
The Oxford Fat Stock Club will hold their next annual exhibition on Dec. 16th next at Woodstock. As a local show this exhibition is doing a good work in improving the quality of the live stock in Oxford County.

A BUILDER—ARE YOU LOSING WEIGHT?—The "D. & L." Emulsion will always help and build you up. Restores proper digestion and brings back health. Manufactured by the Davis & Lawrence Co., Ltd.

AGENTS WANTED

To handle our Aluminum-Mahogany Stereoscope and original Stereographs of the South African War, the Chinese War, and thousands of other standard subjects. Farmers can make \$10 to \$25 per week working during spare hours. Write for particulars to

UNDERWOOD & UNDERWOOD,
Toronto, Ont.



Live Stock Label in large or small lots also odd numbers supplied. Send for circular and price list.

R. W. JAMES,
Bowmanville Ont.



ROCK SALT for horses and cattle, in ton and car lots. **Toronto Salt Works, Toronto**

The Up-to-date Herd Tamworths

Bred from sweepstakes herd. Young stock of both sexes for Sale.

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Two Young Bulls, by imp. "Precious Stone" and imp. "Blue Ribbon" for sale. Can spare a few more Oxford females.

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Reinforced by a recent importation of 29 cows, 3 bulls, and a number of calves, selected from noted Scotch herds, and including the male and female champions at leaving Scottish shows this year. Representatives of this herd won the first herd prize at the exhibitions at Toronto, London and Ottawa.

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Manager for W. W. Ogilvie Co.,

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ALWAYS MENTION THE FARMING WORLD WHEN WRITING ADVERTISERS.

Market Review and Forecast

Office of the Farming World.
Confederation Life Building.
Toronto, November 11, 1901.

Trade continues satisfactory and prospects seem encouraging for wholesale men. Farmers are getting fair prices for their products, and this helps things in the country. Conditions of trade are sound and healthy. There is a good demand for money for manufacturing and mercantile purposes, and there is a good enquiry for call and time loans at about 5 per cent. Discounts keep steady at 6 to 7 per cent.

Wheat.

Wheat shows some advances during the week, the Chicago market having advanced over two cents during the week. The receipts of wheat in the Northwest continue to increase, and the export shipments are not as great as expected. The growing wheat crop in the States is maintaining a good condition. The Price Current, of last week, says: "The wheat markets have been firm and moderately active during the week, with advances ranging from 1 to 2½ cents per bushel. Minneapolis cash wheat gaining 2½ cents, Chicago about 1½ cents, St. Louis 1½ cents, Toledo 1½ cents, Baltimore 2 cents, New York 1½ cents per bushel, and Liverpool gained 1½d per 100 pounds. Closing prices were slightly below the high prices of the week. Cash wheat was somewhat firmer than the longer deferred options. Several factors operated to increase the firmness in the situation. The car scarcity made it somewhat difficult to get sufficient immediate supplies; the visible stocks made a smaller increase than expected; Argentine reports were of a strengthening nature, Broomhall estimating the wheat surplus from that country the coming season at 16,000,000 bushels. Export demand was reported improved. At one time there was rumors of a corner in December wheat, but it was not given much weight."

The demand for Ontario wheat has been more active and prices have advanced considerably, in sympathy with higher prices elsewhere. Red and white are quoted here at 67c to 68c; goose at 64c. east and 63c. middle freight, and spring at 67c. to 68c. east. Manitoba is firm at 84½c to 85c for No. 1 hard; 82½c. to 83c. for No. 1 Northern, and 78½c. to 79c. for No. 2 Northern. On Toronto farmers' market red and white bring 70c to 70½c, goose 65c to 66c, and spring fife 68c per bushel.

Oats and Barley.

There is a big demand for oats, and so great has been the competition at some country points that buyers have been paying the farmers 43c. to 44c. per bushel for

them. The ruling prices, however, for car lots at country points is 40c. to 41c. per bushel. On Toronto farmers' market oats bring 44c to 44½c per bushel.

The barley market keeps firm. Prices here rule from 45c. for feed, to 55c for malting barley. On the farmers' market malt barley brings 54c. to 59c., and feed barley 51c. to 54c. per bushel.

Peas and Corn.

The pea market keeps quiet but steady. Shippers complain that new Ontario peas are very dirty. Peas are firm here at 74c. east, 73c. middle freights and 72c. north and west. On Toronto farmers' market small peas bring from 71c. to 72c. per bushel.

The American corn market advanced 2 cents during the week, owing to light receipts and much speculative buying. American No. 3 yellow is quoted at 67c., Toronto, in car lots. New Canadian yellow is quoted at 50c., west.

Bran and Shorts.

Ontario bran in car lots sells at Montreal at \$17 to \$17.50, and shorts at \$19 to \$20 per ton. City mills here sell bran at \$15, and shorts at \$17 in car lots, l. o. b., Toronto.

Potatoes and Beans.

Potatoes are easier at Montreal, and car lots are selling there at from 62c. to 65c. per bag. Car lots are more plentiful here, and sell at 48c. to 50c. on track. On Toronto farmers' market potatoes bring from 45c to 55c per bag.

There is a steadier feeling in beans. Car lots at Montreal are quoted at \$1.50 and broken lots at \$1.55 to \$1.60 per bushel. Beans on the local farmers' market here bring \$1.25 to \$1.40 per bushel.

Hay and Straw.

The hay trade continues active. Strange to say, the American National Hay Association is complaining that the railways are discriminating in favor of the Canadian interests in the hay trade. There is a good demand for baled hay east at \$8.50 for No. 1; \$7.50 to \$8 for No. 2; and \$6.50 to \$7 for clover at country points. Montreal quotations are \$9.50 to \$10 for No. 1 timothy, \$8 to \$9 for No. 2, and \$7 to \$8 for clover in car lots. Offerings are more plentiful here and the market has an

easier tendency. Quotations are \$8.50 to \$9 for car lots on track, and \$5.50 to \$6 for baled straw. On Toronto farmers' market timothy brings \$10.50 to \$12, clover \$6.50 to \$8.50, loose straw \$6 to \$7.50, and sheaf straw \$10 to \$11 per ton.

Eggs and Poultry.

The egg market keeps firm. There is a good export demand, and the chances are that all Canadian surplus pickled stock will be wanted on the other side. At Montreal select candled fresh stock sells at 20c. to 22c. in case lots. The demand here for new laid stock is firm. Prices are steady at 17c. for best selected new laid, and 15c. to 16c. for held fresh to the trade. On Toronto farmers' market strictly new laid bring 20c. to 25c. per dozen.

Dressed poultry is becoming more plentiful, though fine quality is scarce. Dry picked turkeys sell at 9½c. to 10c. Chickens, 6c. to 7c.; Ducks, 8c. to 8½c., and geese at 6c. to 6½c. per lb., in job lots at Montreal. Scalded fowls, which are not wanted, bring about 25 per cent. less than these figures. The market here is strong and active, and offerings have fallen off somewhat. In a jobbing way, the best young turkeys bring 8½c. to 9c. and geese 5½c. to 6c. per lb. and ducks 50c. to 75c., and chickens 45c. to 50c. for dressed and 30c. to 40c. per pair for live. Scalded stock brings about 20 per cent. less than these figures. On Toronto farmers' market, chickens bring 40c. to 80c., and ducks 50c. to 90c per pair, and geese 6c to 7c., and turkeys 8c. to 11c. per lb.

The Canadian Produce Co., 36 and 38 Esplanade East, Toronto, will pay up to Nov. 23, for spring chickens, 6c. per lb. For hens (including last year's birds) 3c. per lb. For ducklings 5c. per lb. Crates supplied free and express paid up to 50c. per 100 lbs. of birds. These prices are for live weight.

Fruit

The apple market keeps firm under light supplies. The high prices seem to be checking business somewhat. At Montreal round lots of No. 1 stock sell at \$4.50 per barrel. On Toronto market, apples bring \$2.50 to \$4 per bbl.

OUR PRICE FOR CHICKENS HAS GONE UP

Our demand has doubled. Deal with a reliable firm; be careful of strangers. See our prices on this page.

THE CANADIAN PRODUCE CO., TORONTO

Beeds

The seed market keeps firm, especially that for timothy. At Montreal timothy is quoted at \$5.50 to \$5.75; red clover \$7.50 to \$9, and alsike at \$10 to \$12 per cwt. f.o.b., at country points. On Toronto farmers' market alsike brings \$6.50 to \$7.20, red clover \$4.50 to \$5.00, and timothy \$2 to \$2.75 per bushel.

Cheese.

The cheese market continues dull. English dealers seem more indifferent in regard to placing orders. There is really no change of a very encouraging nature to report. At Montreal finest Westerns are quoted at 9¢ to 9½¢, finest Easterns at 8½¢ to 8¾¢, and milder grades at 8¢ to 8¼¢.

Shipments from Canada and the United States for the present season to date are 355,000 boxes less than during the same period last year; the September and October months estimated at only 100,000 boxes less than that of last year, and now that production is virtually over for the season, holders say they can await with confidence later events.

There has been no activity on the local markets, factorymen seemingly being content to await developments. From 8½¢ to 9¢ were the offers, with more under 8½¢ than over, a rather small figure for gilt edge fall cheese.

Butter

The English demand, though not so brisk as a few weeks ago, is still good and at the recent decline more business is doing. Holders on the other side are not inclined to make any concession which is a good sign. Choice Canadian creamery is quoted at 110s to 114s and fine to finest at 104s to 108s. The market is steadier at Montreal and there is more disposition to buy. Several lots of fancy Eastern townships creamery sold at 21½ to 21¾. Other fine grades sold at 20½ to 20¾. Western dairy is hard to dispose of. Fine selected lots sell at 17½ to 17¾ to the trade. Creamery prints are quoted here at 19c to 21c and solids at 18c to 20c. The market for dairy butter is strong and firm and good dairy sells better here than creamery. Dairy pound rolls sell at 19c to 17c, large rolls at 18c to 16c, and tubs at 16c to the trade. On Toronto farmers' market lb. rolls bring 17c to 16c and crocks 15c to 17c per lb.

Cattle

Cattle improved somewhat during the week and exporters are a shade higher. There was not a large run of live stock on Toronto cattle market on Friday. The lot comprised 542 cattle, 1,200 hogs, 1,144 sheep and lambs and 30 calves. Generally speaking, the quality of the fat cattle was not good. Only some exporters held over from Thursday were offered. It is hard to get really first class quality, and this scarcity is affecting other places than Toronto as the following extract from Erick Bros.' East Buffalo circular of Thursday last will show:

"There hasn't been a load of choice cattle in the yards for so long that it is almost impossible to tell what they look like. Notwithstanding that there is a good demand here for them and that they will bring as much here as at any market in the country, we don't get any. You will notice that our prices on prime cattle are from \$6.25 to \$6.50—we guarantee to obtain these prices for anybody that has anything in that line."

At Toronto better cattle would bring higher prices than the quotations given below. The highest price paid for loads of exporters on Friday was \$4.40, while a few picked cattle brought \$4.50. Good to choice butchers' cattle are scarce while the common and inferior stuff is too plentiful. Feeders and stockers are in good demand. Though all kinds of these excepting choice are reported slow and dull at Buffalo. All really good milch cows offered are readily picked up. It is reported that one very choice cow sold at \$70.

Export Cattle. Choice loads of these are worth from \$4.40 to \$4.50 per cwt., and light ones \$4.00 to \$4.40 per cwt. Heavy export bulls sold at \$4.00 to \$4.25 and light ones at \$3.60 to \$3.75 per cwt., choice export cows sold at \$3.00 to \$3.50 per cwt.

Butchers' Cattle. Choice picked lots of these, equal in quality to the best exporters, weighing 1,075 to 1,150 lbs. each, sold at \$4.25 to \$4.40 per cwt., good cattle at \$3.75 to \$3.90, medium at \$3.15 to \$3.50, and inferior to common at \$2.50 to \$3.00 per cwt.

Feeders. Heavy, well-bred steers from 1,100 to 1,200 lbs. each, sold at \$3.50 to \$3.75, and other quality at \$3.25 to \$3.50 per cwt. Light steers, 900 to 1,000 lbs. each, sold at \$3.00 to \$3.50 per cwt. Feeding bulls for the byres, 1,000 to 1,200 lbs. each, sold at \$2.75 to \$3.25 per cwt.

Stockers. Yearling steers weighing 500 to 800 lbs. each sold at \$3.50 to \$3.75 and of colors, and those of inferior quality at \$3.75 to \$2.00 per cwt. Light stock bulls 500 to 800 lbs. each sold at \$1.75 to \$2.50 per cwt.

Calves. These are steadier at Buffalo. Good to choice veal brings \$7.00 to \$7.25 per cwt. At Toronto market ordinary calves bring \$2 to \$8 each.

Milch Cows. Milch cows and springers sold at from \$40 to \$50 each.

Sheep and Lambs

There was a fair demand for sheep and lambs, and prices advanced from 5c to 10c per cwt. Sheep sold at \$3.15 to \$3.35 for ewes and \$2.50 to \$2.75 per cwt. for bucks. Spring lambs sold at \$2.50 to \$3.00 each and \$3.15 to \$3.35 per cwt. Erick Bros.' circular re Canadian lambs reads thus:

"The offerings to-day were not very heavy—about six loads, with holdovers—the market ruled steady at yesterday's prices. All ewe and wether lambs selling at \$4.65 to \$4.75 according to weights, with cults and buck lambs and throw-outs at \$2.25 to \$4.35. The mar-

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Windsor Salt**MEN WANTED**

To introduce, distribute advertising matter, and take orders for the

**Expansive
Tree Protector**

It forms a good side line for agents engaged in selling other goods. We would like to have some good farmers interest themselves in this during the winter.

Agents also wanted to sell high-grade NURSERY STOCK on most liberal terms.

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Limited**

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FARMING WORLD**

Confederation Life Building,
Toronto

ket is steady on the good handy-weights weighing here in the market 90 lbs. and under—those heavier than that are very dull, selling as low as \$4.50 to \$4.60 and with but little enquiry at that figure."

Hogs

Prices dropped on hogs during the week to \$5.62½ for select bacon hogs and \$5.37½ for lights and fats. Unculled lots sold at about \$5.50 per cwt. Prospects seem to point to a further drop this week. This is the season when hogs reach their lowest point in the year and as farmers have had extra high prices so far they cannot raise any serious objection to the drop. Imports of Canadian hams and bacon into Britain show a big falling off for the first nine months of the year, so that the market there is not overloaded and as soon as the poultry season is over we may look for things to right themselves.

The Wm. Davies Co., Toronto, for the week ending Nov. 16th will pay \$5.50 per cwt. for select bacon hogs, and \$5.37½ for heavy hogs, and \$5.12½ for lights.

The Trade Bulletin's London cable of Nov. 7th, re Canadian bacon, reads thus:

"The market is weak and demoralized and 4s lower, making a drop of 6s 6d per cwt. within the last three weeks."

Horses

Horses at Montreal continue quiet, though there is some export demand for army horses. Prices are as follows:

Carriage horses	...	\$175--\$350
Heavy draughts	...	125--225
Light roadsters, drivers and saddles	...	100--250
Remounts	...	110--145

Over thirty speed horses were sold at Grand's last week. These were well bred and contained several animals of real merit. Prices ranged from \$95 to \$235 as to quality and conformation. Several sold to farmers for breeding purposes. Nearly all sold went out of the city and were well distributed over the province. On Friday a number of second-hand horses sold at low prices.

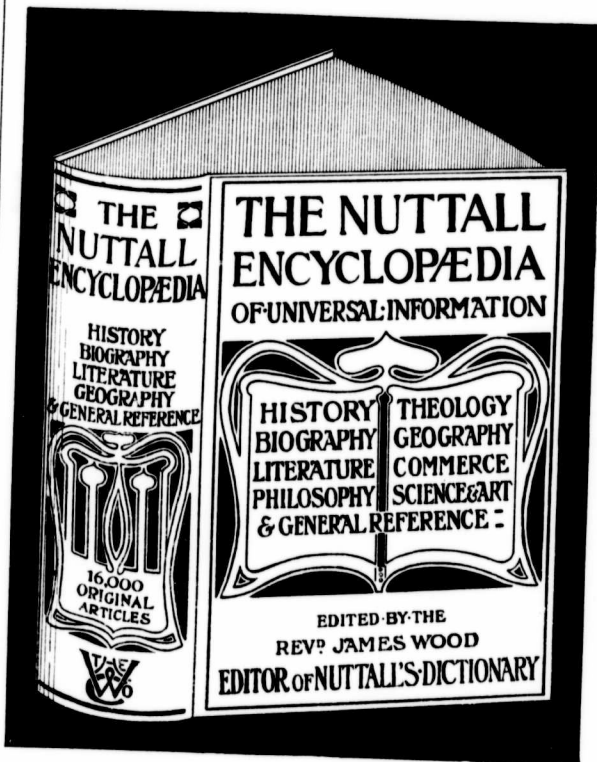
Big Prices for Shorthorns.

(Continued from page 512.)

Asphodel, Ryder, Ia.	.....	680
Lustre 18, E. S. Donahay, Ia.	.....	700
Gravel 8th, T. Douglas & Son, Ont.	.....	700
Vain Queen, Fletcher Haines	.....	775
Gelder Rose, Messrs. Baker	.....	680
Dalmey Princess 9th, H. Cowan, Ia.	.....	900
Dalmey Regina 5th, G. Moody, Ia.	.....	780
.....	.....	670
.....	.....	670
Lord Banfi, George Ward	.....	\$5,100
Knight Errant, Harding & Son	.....	415
Nestor of Dalmey, Swarthouse, Ia.	.....	805
Valiant, Messrs. Baker	.....	1,000
Britannia Duke, W. E. Gorman	.....	425
Averages.		
40 cows sold for \$42,115, average	.....	\$1,082
5 bulls sold for \$8,420, average	\$1,684
45 animals sold for \$50,537, average	\$1,123

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