

Women's Institute Convention Programme.

We print below the programme of the annual convention of Ontario Women's Institutes, to be held in Massey Hall, Agricultural College, Guelph, Ont., December 9th and 10th, 1908. Superintendent Geo. A. Putnam feels satisfied that the programme is particularly good this year, and that those who attend the convention will be much interested. Special attention is drawn to the fact that Miss Van Rensselaer, of Cornell University, is to give addresses at the convention. Miss Van Rensselaer gave an address at the recent meeting of the American Association of Institutes and the Granges of New York State, and delighted all by her splendid effort. The details of the programme are as follows:

PROGRAMME.

Wednesday, December 9th.

Morning Session.—Hon. James S. Duff, Minister of Agriculture, presiding.

10.00—National Anthem. Invocation: Rev. R. J. M. Glassford, Guelph. Address of Welcome: Pres. G. C. Creelman, O. A. C., Guelph. 10.30—Reply to Address of Welcome: Mrs. W. J. Hunter, Brampton. 10.40—Review of Year's Work: Mr. Geo. A. Putnam, Superintendent. 11.00—Financing the Institutes: Grants; special means of raising funds; expenditure of funds, etc.

Afternoon Session.—Miss M. Yates, Guelph, presiding.

2.00—Three-minute reports from fifteen districts, followed by discussion and question drawer. 3.00—Vocal Solo: Miss Gardner, Kemble, Ont. 3.05—Address: "Problems of the People," Mr. C. C. James, Deputy Minister of Agriculture. 3.45—Address: "The Value of Farm Home Life," Miss Martha Van Rensselaer, Cornell University, Ithaca, N. Y.

Evening Session. 8.00—Public Meeting in City Hall: (Separate programme).

Thursday, December 10th.

Morning Session.—Mr. Geo. A. Putnam, presiding.

10.00—Address and Demonstration: "How to Conduct an Institute Meeting," Miss S. Campbell, Brampton. 10.30—Address: "Household Conveniences," Miss Martha Van Rensselaer, Cornell University, Ithaca, N. Y. 11.15 to 12.00—Question Drawer: Appointment of Representatives on Institute Committee.

Afternoon Session.—Mrs. Thos. Shaw, Hespeler, presiding.

2.00—Address: "How the Macdonald Institute May Help the Women's Institutes," Miss M. U. Watson, Macdonald Institute, Guelph. 2.20—Address: "House Plants," demonstration in potting; Mr. Wm. Hunt, O. A. C., Guelph, Ont. Music. 3.00—"The Milk Problem": Care of Milk, Prof. Dean; Bacteriological Contamination, Prof. S. F. Edwards; Dangers of Milk, Dr. MacMurphy; Milk and Children, Mr. Jas. Acton; Food Value, Prof. Harcourt.

The attention of delegates is drawn to the fact that on Tuesday evening, December 8th, at 8 o'clock, a special Poultry Session will be held in connection with the regular Winter Fair programme. Miss M. Yates, one of the regular Institute workers; Prof. W. R. Graham, of the Agricultural College, Guelph, and F. C. Elford, of the Macdonald School, St. Ann de Bellevue, Que., will take part in the programme. This should prove of much interest and value to the delegates. The admission to the Fair is 10 cents for ladies.

Prominent speakers have been secured for the public meeting on Wednesday evening, and Institute delegates will find much of interest and value in the addresses to be given.

NOTICE TO DELEGATES.

Passenger Rates.—From points in Ontario west of and from Kingston, Sharbot Lake and Renfrew, but not west of Azilda, single fare for the round trip, good going December 5th to 11th, good to return up to and including December 14th. Certificates not required within this territory.

From the territory east beyond Kingston and Sharbot Lake, and west beyond North Bay to Port Arthur, single fare, on Standard Convention Certificate plan. Tickets may be purchased between December 4th and 10th, good to return to Guelph 15th. Certificates to be used

and fee of 25 cents charged for each certificate used.

Accommodation. — Arrangements have been made for accommodation for lady delegates attending the convention, in private houses, at reasonable rates. On arrival at Guelph, delegates will please report at City Hall.

The delegates will have an opportunity of visiting the various departments of the Agricultural College, including the Macdonald Institute.

The names and addresses of delegates should be sent to the Superintendent. Badges and programmes will be mailed to all whose names and addresses are received up to and including December 3rd.

BOOK REVIEW.

A NEW BOOK ON BACTERIA.

The latest addition to the Rural Science Series, published by the Macmillan Company, bears the title, "Bacteria in Relation to Country Life." Its author, Dr. Lipman, is Bacteriologist at the New Jersey Experiment Station.

This is not intended as a text-book for students or specialists, but a treatise that within the compass of something less than 500 pages outlines in non-technical language for farmers, housekeepers, dairymen and members of boards of health, the history of bacterial investigation along several lines of importance to these classes of persons, and summarizes the results that have been reached up to the middle of the current year. The important part played by bacteria in the making and spoiling of dairy products is, in a more or less intelligible way, known to almost every reader, but of their relation to the processes of canning and preserving food, making pickles, sauerkraut, bread, beer, wine, vinegar, etc., few people have any knowledge.

Dr. Lipman deals, as might be expected, with the problems of contamination and purification of drinking water, and the treatment of sewage, but the topic which he discusses at greatest length is the relation of bacteria to the fertility of the soil. The most effective means of treating large volumes of sewage is shown to be in tanks specially constructed to favor the multiplication and activity of certain kinds of bacteria. The results in new tanks, or beds, are improved by inoculating them with sewage from old tanks in active operation. In the present state of knowledge, it would appear that in a field where barnyard manure or humus is nourishing a crop, there are at least three armies of different species of bacteria at work. One of these is converting the straw, humus, etc., into ammonia, another the ammonia into nitrite, and a third the nitrite into nitrate. The nitrate is readily soluble, and if plants are not growing in the soil to take up the nitrate as it is formed, this valuable plant food is liable to be drained away. A wheat field unprotected by a cover crop, may thus lose more nitrogen after the wheat ripens than the crop took from the soil.

After reviewing the history of soil and seed inoculation with pure cultures of bacteria, and the disappointment that has attended the use of "Nitragin," "Alinit," and the "Cotton-cultures" of the U. S. Department of Agriculture, Dr. Lipman concludes with the statement that while the future may yet see gratifying results from the use of cultures of nitrobacteria at present, the best promise lies in stimulating the bacteria in the soil by soil-improvement. Improved conditions of moisture, aeration and humus, and increased supply of suitable mineral food, will increase both the number and activity of the bacteria and thereby promote more nitrification and nitrogen-fixation. "The mere introduction of efficient bacteria, of whatever class, without previous soil improvement, will fail to yield the desired results, since the bacteria introduced will soon deteriorate under unfavorable soil conditions."

This book, in neat cloth binding, with gilt stamp, well illustrated, is sold at the net price of \$1.50, or \$1.66 postpaid. It will be given as a premium for three new subscriptions to "The Farmer's Advocate."

QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to "The Farmer's Advocate" are answered in this department free.

2nd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer.

3rd.—In Veterinary questions the symptoms, especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

4th.—When a reply by mail is required to urgent veterinary or legal enquiries, \$1.00 must be enclosed.

Miscellaneous.

MAMMOTH CLOVER.

I am writing to you to get some information about Mammoth clover. Have written to you before and have been greatly benefited by your prompt answers.

1. Will the second year's growth of Mammoth clover produce seed same as the first year's crop?

2. If so, how much does it produce, generally?

A SUBSCRIBER.

Ans.—There is no physiological reason why the second crop (third year of growth) of Mammoth or any other clover should not produce seed as well as the first crop (second year's growth), providing the growth were equally luxuriant. This, however, is scarcely likely to be the case. Mammoth clover is a biennial, with a degree of perennial tendency. In fact, it has been called a short perennial. In other words, it is like common red. Only that the perennial habit is a little more strongly developed. When not allowed to produce seed, Mammoth clover will often persist fairly well into the second year of cropping, but with this, as with red clover, seed production tends to shorten the life of the plant. On the other hand, the stand may be in a measure renewed by seed lost in harvesting. If our correspondent's field looks promising next spring, he might do well to leave it, otherwise he had better plow it up.

2. An ordinary yield of Mammoth clover seed would be from three to five bushels per acre, and in some cases less, though instances are on record where as much as 11 or 12 bushels per acre have been reaped.

TRADE TOPICS.

In this issue will be found the advertisement of the celebrated Dain all-steel pull-power hay press. Look it up if interested and write Messrs. Dain Mfg. Co., Preston, for particulars.

Lime-Sulphur Solution, a most effective and economical spray material for winter and summer use for the destruction of San Jose scale, oyster-shell bark-louse, and fungi, in orchards, is advertised for sale in these columns, in a prepared state, quantity and quality guaranteed, by the Niagara Sprayer Co., Middleport, N. Y. This should prove a great convenience to orchardists and farmers generally.

CEMENT BLOCK MACHINE.

Cement blocks are becoming increasingly popular as building material for dwelling houses as well as for basement walls and silos. The combination cement building-block machine, manufactured by Mr. Thos. McQuain, of Davisville, North Toronto, Ont., and advertised in this paper, has gained an excellent reputation for turning out blocks having a face which is a capital imitation of stone and quite as durable. By the use of this machine, building blocks can be readily made on the farm, or in town, just where they are needed to be used. Parties contemplating building, or undertaking to manufacture building material for sale, should write or visit Mr. McQuain, and secure the necessary information regarding the machines.

GOSSIP.

SALE DATES CLAIMED.

Jan. 1st, 1909—C. R. Gies, Heidelberg, Ont.; Shorthorns and Poland China Pigs.

Jan. 14th—C. D. Wagner, Enterprise, Ont.; Shorthorns.

Feb. 3rd, 1909—W. C. Pettit, Freeman, Ont.; and J. A. Watt, Salem, Ont.; Shorthorns. Sale at West Toronto Stockyards.

AYRSHIRES FOR ALBERTA.

Mr. A. H. Trimble, Red Deer, Alta., recently visited the Province of Quebec and selected from among prominent Ayrshire herds, 25 head of choice stock, ranging in ages from six months to mature cows. His largest purchase was from the "Isaleigh Grange" herd at Danville. At their dispersion sale, held on Nov. 12th, Mr. Trimble purchased eleven young heifers and one bull. Worthy of special mention among them is the two-year-old heifer, Isaleigh Gem—27090—, by Isaleigh Bloom o' the Heather—20523—. This is a most promising heifer, and is from a choice line of milkers. In the yearlings is Isaleigh Sandilands—27101—, by Glen of Montebello—20657—, dam Miss Sandilands—8934—, a splendid type of an Ayrshire, and has qualified in the Canadian Record of Performance test with a record of 8,380 lbs. of milk and 312 lbs. of butter-fat. The daughter is built along the same lines as her dam, and should be a grand milk and butter cow when she develops. Several of the younger heifers are sired by the noted stock bull, Netherhall Robin Hood—25782—, imported, recognized to be one of the best dairy bulls ever imported from Scotland. The bull calf, Isaleigh Major—27118—, by Glen of Montebello, is a likely chap, and with his good breeding behind him, should be a good stock-getter.

Two cows were also purchased from the herd of James Boden, who has rented the Isaleigh Grange Farm for a term of years. Mollie of Elm Shade—14020—, by Scotland's Glory—10774—, imported in dam, is of fine type, having good size, as has her mate, Lizzie of Ste. Anne—22298—, from the noted prizewinner, Howie's Fizzaway—16721—, (imp.).

From the herd of Mr. R. R. Ness, Howick, he selected the imported bull, Barcheskie Kingswaif, just a few months out of Scotland, bred by Andrew Mitchell, Barcheskie. Here was also selected a heifer of merit in Burnside Violet 4th—26576—, sired by the champion Ayrshire bull of Canada and the United States, Barcheskie King's Own—20726—, (imp.). Both the bull and heifer are prizewinners, he being first in his class at Toronto Exhibition this fall, and the heifer was first at Calgary, Winnipeg and Regina Exhibitions last summer.

From John Taylor, Kelso, was purchased a choice yearling bull, Dairy King of Kelso—26837—, also a prizewinner, as he was first in a large class at Huntingdon Fair this fall.

From one of the oldest-established herds in Quebec, that of the Secretary of the Canadian Ayrshire Breeders' Association, W. F. Stephen, Huntingdon, he selected six head, including the cow, Peace—11129—, sired by the celebrated Uncle Sam of Trout River—6974—, from the noted Nellie Osborne, the champion cow at the Columbian World's Fair in Chicago, 1893. This is a fine type of cow, large, of good form, and splendid quality, carrying a perfectly-balanced udder, with large, well-placed teats. She has a record of nearly 9,000 lbs. of milk and 400 lbs. of butter within a period of ten months. The yearling heifers, Springbrook Blossom—26109—, sired by Lessnessock Crown Prince—19508—, (imp.), a bull of great dairy qualities. Her dam, Delta Maid—11118—, has a record of over 8,500 lbs. of milk and 370 lbs. of butter. Springbrook Grace, with same sire, and as dam Irene 2nd—11132—, with a record of about 9,000 lbs. of milk and 430 lbs. of butter. These cows were also sired by Uncle Sam of Trout River. Uncle Sam, although from a sire and dam imported from Scotland, gets his Yankee name from being the first calf dropped from Canadian stock in Uncle Sam's territory, while his dam was being exhibited at the World's Columbian Exhibition, Chicago.

Also, from the herd of Messrs. Hyde Bros., Huntingdon, was selected a choice bull calf, which received first prize wherever exhibited this fall, Lorna's Choice of Willow Bank—27288—. He is from a sire and dam from the Stephen herd. In all there were six males and nineteen females, a choice lot, of good size, well-marked, and from the best milking strains. Such a lot of Ayrshires should lay a foundation of splendid dairy stock for that part of the West. Mr. Trimble believes there is a great future before the dairy industry of that country, and has confidence that the Ayrshire is bound to be the future dairy breed of America.