

Ontario Dairymen's Association.

The ninth annual meeting of this association was held at Ingersoll, beginning on Wednesday the 9th inst. Owing to the inclemency of the weather the attendance was not quite so large as on previous occasions; still, most of the dairy districts of the Province were fairly represented. Among the American gentlemen present were Hon. Harris Lewis, of Frankfort, Herkimer Co., N. Y.; Mr. L. B. Arnold, of Rochester; Prof. Wetherall, of Boston, and Mr. J. M. Peters, of New York city.

Prof. Bell, of Belleville, delivered the first address on "Conventions, their objects and effects." He dwelt at some length on the desirability and importance of these meetings, as witnessed by the marked improvement in Canadian dairying, both materially and financially, since their establishment in 1867. He advocated the holding of two annual conventions, instead of one as at present; one at Ingersoll and the other at Belleville, with a sufficient interval between the two to admit of travelling from the one place to the other. Thus the same addresses could be heard at both, and a larger number of people would be benefitted without incurring great expense. He eulogized scientific investigation in the dairy art; ascribed the recent decline in the cheese market to a general depression of trade; deprecated the manufacture of oleomargarine, observing that no matter how carefully manipulated, that article soon became sour and rancid. He also opposed strongly the manufacture of skim-milk cheese, warning all that the honest plan was not only the best, but the only one that would succeed in maintaining for Canadian cheese the high reputation it now held at home and abroad. Referring to a falling off in the taint and flavor of cheese during the season just past, he advanced the theory that it was due to some peculiar electric condition of the atmosphere, and urged scientific men to devote themselves zealously to an investigation of the subject. The Provincial cheese production for 1875, he stated as 744,299 boxes, or 48,580,368 pounds representing a cash value of \$4,858,038; this was an advance of 187 per cent. on the operations of 1874, and two and three-fourths times the production of 1872. Alluding next to the butter interest, he thought it a more profitable manufacture than cheese, the process being shorter and simpler, and the requisite utensils less expensive. He concluded by expressing his pleasure at the increased Government grant to the Association, and hoped a portion of the increase would be devoted to the establishment of an annual exhibition at each end of the Province.

The President stated that the Association was making arrangements to secure competent lectures on butter-making during the coming season; also, that while in Rome, N. Y., recently, samples of cheese shown him as first-class, were certainly not ahead of our Canadian manufacture.

Mr. W. H. Fraser, Secretary of the Ontario Advisory Board, Centennial Exhibition, urged the Association to make a suitable display of their manufactures at Philadelphia.

Mr. Lambert delivered an address on floating curds and other dairy matters, taking occasion to advocate strongly the study of chemistry in connection with the dairy interest. Floating curds he regarded as the result of chemical action, by which carbonic acid gas and ammonia gas are formed in the curd; and he believed charcoal would prove an effective preventive, through its property of absorbing these gases. The charcoal should be placed in the cans with the milk.

Mr. Arnold concurred in the use of charcoal as a filter, but thought that milk is generally tainted before it leaves the cow. Tainted milk produced more curds, or rather more albumen, than sound milk, but albumen would not coagulate until it was sour. An increase of rennet, added to tainted milk, only increased the whey. He attributed tainted milk to a feverish condition of the cow, and thought its surest preventive was to treat her well.

Continuing his address in the evening, Mr. Arnold took up the subject of "Gilt-edged Butter." Referring to the various animal and vegetable fats of milk, he observed that the former were enclosed in sacs, while the latter floated freely; that each of these sacs or pellicles contained from ten to eighteen per cent. of water, and that the per centage increased or decreased, in proportion to the quality of the food, the best butter coming from the fatter or larger globules, and vice versa. The effect of frightening

a cow, he said, would be a sudden stoppage of the milk supply, the better portion being always retained first, and many such stoppages, through fright, irregular milking, or otherwise, would eventuate in the globules being absorbed and ceasing to form. To make a fine quality of butter the milk should stand in pure vessels and pure air, and should not be agitated. The cream should be churned while sweet, unless quantity alone was wanted, when it should be allowed to sour. The great object of churning was to collect the globules as speedily as possible. Slow churning broke them and produced greasy butter. He approved of the dash churn, with a dasher about three-fourths the diameter of the churn and without perforations. Butter too should not be too much salted; half an ounce to the pound he regarded as quite sufficient. He would also add a small quantity of nitre; it was a good antiseptic, and did no harm. That feed which contained most fat and was most easily digested was the most favorable to the production of the best butter in the largest quantities. A mixture of linseed meal, oatmeal, and the refuse of flouring mills was probably the best butter producing food. June grass was very good, so was timothy, red grass, and orchard grass. Of the clovers, white was much the best, and red the worst. But no clover, white or red, made the best quality of either butter or cheese; many of the objections, however, were removed by drying.

Mr. Lewis expressed cordial concurrence in the opposition to oleomargarine in skim milk cheese.

Mr. Arnold, next morning, addressed the Convention on fancy cheese-making, summarizing the necessary conditions as follows: (1.) None but the milk of healthy and well-fed cows should be used. (2.) It should be free from all taints and impurities, either inherited or acquired. (3.) None but clean and healthy rennet should be used. (4.) The action of the rennet should take precedence of acidity by the early removal of the curd from the whey and the warm curd well before salting. (5.) The curd should be cured in an even atmosphere, not too dry.

Prof. Wetherall followed with a paper on stock, in which he compared in an interesting manner the relative merits of Short-horns, Alderneys, Holstein, Ayrshires, Guernseys and other breeds of cattle. He advocated the interbreeding of Short-horns, and recommended bulls of that breed as preferable to those of any other for crossing.

Hon. Harris Lewis delivered an address on dairy cows, their care and food. He said that it had been estimated that a cow required two per cent. of her weight in good hay or its equivalent per day to keep her in existence without increasing or falling off in weight, and as the amount of her food increased so did her productiveness. Grass was the natural food of the dairy cow, the perfection of cattle food. Sudden changes from dry to succulent food were dangerous to the cow. The best roots to feed the cow upon were the largest kinds of beets and mangold wurtzels.

Mr. Hartford Ashley opened a discussion upon Dairy Apparatus. The first thing to be considered was the factory itself. It should be built on level ground, where a free circulation of air could be obtained. He believed in making the floor perfectly close with Portland cement. He had given up the self-heater and adopted steam. He found that the difficulty of having the curd burned in the vats was obviated by placing boards across the steam jet so as to distribute it to a greater extent. He believed all cheese-makers would soon have to come down to 15 or 14 inch hoops. He strongly approved of the gang press, and found that they were continually increasing in favor among dairymen. They effected a great saving of labor.

The report of the Centennial Committee was then read by Mr. Fraser and adopted, recommending the appointment of Messrs. Nixon, Casswell, Ballantyne, Daley and Prof. Bell, as a Special Committee to determine what articles of butter and cheese should be forwarded to the Philadelphia Exhibition.

Mr. Farrington gave a verbal report of the Committee on Dairy Apparatus, saying that they cordially recommended the gang-press as the most valuable to manufacturers. They also strongly recommended to the attention of Canadian dairymen Mr. L. S. Hardin's method of making butter, as it seemed to them to be one which would prove of great value to butter-makers.

Mr. Chadwick addressed the Convention upon the importance of having effective means of collecting reliable statistics to show the material progress of the country, and moved a resolution to that effect, which was carried.

Prof. Bell briefly reviewed the proceedings of the Convention, saying that he considered its proceedings as more interesting, practical and valuable than those of any preceding Convention, paying high compliments to the addresses delivered by the American gentlemen present.

Prof. Bell supported the idea of having a cheese and butter factory in connection with the Model Farm, and a resolution moved by him to that effect was carried.

After the passage of a few more resolutions recommending the establishment of dairy clubs, and providing for the exchange of a number of copies of the proceedings of this Convention with those of the American Association, the proceedings terminated.

Correspondence.

THE AMERICAN *Bee Journal* is now published by T. G. Newman, at Chicago, instead of Des Moines, Iowa.

HYDE'S METHOD OF PLANTING POTATOES.—W. R. writes us regarding Mr. Hyde's new method of planting potatoes, as described in Mr. W. H. Yeoman's letter, page 1, of our present vol., that the method is not new. "It is," says the writer, "really a very old one, and used to be followed in Scotland when they first began to grow potatoes to any extent in the fields."

CIRENCESTER STUDENTS.—Do you know of any students of Cirencester College living in Canada? I should like to hear of them. I have not heard of one since I crossed the "swill pond." I like your paper very much, and only regret that it does not come semi-monthly. Your notice of Bow Park is splendid. I have been there.—READER.

If any of our readers can answer the query referring to Cirencester students, we shall be happy to hear from them.

RAT PROOF GRAIN BIN.—Can you give me any suggestions as to some kind of paint, or other method of keeping rats and mice out of my grain bin? M. N.

An illustrated plan of a rat-proof grain bin will be found on another page of our present number. If M. N.'s is already built, however, it may not pay to change it. In that case, coat it over with a mixture of finely powdered glass and tar or resin.

FROZEN PUMPS.—A correspondent from Norwich, complains mournfully of his iron pump, "a splendid article" he says, "in spring, summer and fall, but it will freeze in winter, no matter what I do." Our correspondent does not state his case clearly enough. Is any portion of the piping exposed, between the pump and well? If so, box or barrel that portion around, and stuff thoroughly with sawdust, observing to sink the box or barrel to a depth of ten or twelve inches into the soil, if the pipe leads through the soil into the well. Or, if this plan should prove too troublesome, let him wrap any quantity of old woollen rags, worn out horse blankets, &c., around the exposed part, after the pump has been thoroughly thawed out. If the rags are damped after wrapping, and frozen stiff, so much the better.

"JULIAN," OF WATERLOO, says he has read somewhere of very successful results from the application of mercury to fruit trees, to kill caterpillars. The plan recommended was to bore a hole in the stem of the tree, as far in as the heart, in a direction sloping downwards, and about a foot from the surface of the ground. Into this the mercury was poured, and the hole then closed with a nicely fitting peg, which in turn, was brushed over with a coat of tar. He says that, for some seasons back, the caterpillar pests have nearly ruined his orchard, and asks our opinion of the above. Well, we can answer him by a case in point which came under our own observation a few years ago. The experimenter was something of an enthusiast, and dosed all his trees. The result was a clean sweep of the caterpillars, sure enough; but to this day it is an unsolved problem to that man whether the grubs died from the direct effect of mercury on their system, or of starvation, from a lack of tree food; for the trees too, all died in the course of three months. We would therefore advise him not to try the experiment.

Seed Catalogues.

Vick's *Floral Guide* for 1876 is to hand, and fully up to the usual standard. Its lists and information are very complete.

Briggs & Bros.' catalogue is also before us. It is very full, nicely illustrated, neatly got up, and will well repay perusal.

Long Bros.' *Floricultural Stock Book*, in addition to the usual matter and illustrations, contains a supplement on the management of flowers, designed expressly for amateurs.

Root's *Garden Manual* and seed catalogue is also an excellent number, and cannot but prove of advantage to the horticulturist.

W. Rennie's *Descriptive Seed Catalogue* is fully up to any that have preceded it, and will prove an excellent and reliable compend to the agriculturist and gardener.