

"In summing up the suggestions I would make for the improvement of the creamery," concluded Mr. Stonehouse, "the first and most important is a richer cream kept at a lower temperature while in the hands of the patron; second, gathered as often as necessary to insure against old flavors; third, pasteurizing to eliminate food and other injurious flavors; fourth, have canvas covers for all wagons that carry cream in cans; fifth, wash farm separators after each milking. Neglecting to wash separators after using is becoming a very common practice, and cannot be too strongly condemned. People who consider themselves very clean in other respects are falling into this error, along with the most careless."

Q.—Has there been any experiment to show that pasteurization of milk is of benefit in manufacture of cheese?

J. A. Ruddick—No experiments have been conducted to show that it would be of special benefit. This method is, however, practically impossible in the cheese factory.

SASKATCHEWAN DAIRYING.

Government control of creameries, as in vogue in Saskatchewan, was outlined by W. A. Wilson, of Regina, Superintendent of Dairying for the Province. A system of centralization had been adopted. No creamery can be built within 20 miles of an existing creamery. Plans must be approved by the Provincial Department of Agriculture, and the building must be on an approved site. Profiting by the experiences of Ontario, every possible effort was put forth to discourage the erection of a factory in districts where cows were so scarce that success was not guaranteed. In 1907 there were 37 applications, but only one was accepted. In 1908 eighteen had applied, and none were accepted.

The Government supplied makers and sold the product. Patrons were obliged to pay the actual cost of manufacture. The average cost was 4½ cents per pound of butter. The average return to the farmer was 22 cents per pound of butterfat. About a million dollars had been made in 1908, and an increase of 50 per cent. was promised for 1909. Travelling dairy schools, special dairy car, and cow-testing were features of the educational work.

PLEASURE IN FARM WORK.

That the man or the woman who did not enjoy farm work and prosper was not fond of work, was a point driven home by A. A. Ayer, of Montreal, who had remained on the farm until he was twenty-one years old, and who now had two sons tilling the soil. Physical exercise was good for the human race. The athlete to be a success must start when young—so was it with the farmer. A tendency to prepare ten acres for seed when labor only sufficient for five acres was available was, perhaps, the main defect with farming in Canada. Improvement in all lines of farm work could be made if those most closely concerned made up their minds to do everything more thoroughly. Delegates were urged to act as patterns and instructors to brother farmers who failed to attend the various sessions. Every cheese factory and every creamery should be a center of education to the surrounding district.

PARASITES ON THE FARMERS.

The local member for Grenville, Howard Ferguson, was introduced by President Dargavel as a man who always could be depended on to assist in legislation that would benefit the agricultural class. Mr. Ferguson stated that three-fourths of Ontario's population was made up of farmers. The other one-fourth were parasites, who depended on the farmers for a living. It was, therefore, important that this quarter should do what they could to see that the farmers progressed.

Great good was being done along educational lines to aid the farmer. There were, however, some who could not be induced to mend their ways by persuasion or education. Coercion was necessary. Particularly in the manufacture of food for human consumption, legislation must be on the statutes if desirable quality in the product was to be obtained.

WORK FOR THE HUMAN FAMILY.

Education for the improvement of rural conditions was the theme of a brilliant address by Principal Robertson, of Ste. Anne de Bellevue. The unity of stability was in the family, and the rural family was most important. When, by education, the country homes were made more attractive, and the land was made to produce crops that gave larger cash returns, the boys and girls would remain on the farm, where they should be, and where they would be if they could but see the true conditions.

Regard only for self or for the present, was referred to as being the chief characteristic of the human race in preventing maximum prosperity and maximum pleasure in life. Man should learn to look beyond his own home, and beyond his own brief lifetime. Present methods made the land less fertile, less productive, less fit for human habitation than it was a few decades ago. Man must be one of a family for the race.

Helplessness of body, ignorance of mind and selfishness of disposition were the ear-marks of

lack of education. That which removed these conditions and fitted a man for his life-work was true education. Schools were necessary, so that everyone might have a chance to grow up under such conditions that he could earn an honest living by honest labor. The present system in Canada was the best that had been in vogue in any part of the world, but it tended to develop a dislike, or at least an indifference to labor. By the introduction of school gardens, manual training and nature study, children could be trained to work and labor co-operatively rather than developing selfishness or tending to make man grasp the efforts of others and use them to his own end. Love of money and worldly things was truly the root of all evil, while the love of children was the supreme love that meant uplifting and true prosperity throughout the realms of the human race.

OLD DOCTRINE OF CLEANLINESS.

The necessity of controlling the series of fermentations and the need for strict cleanliness were dwelt on by Dr. W. T. Connell, Bacteriologist at Kingston Dairy School. In cheesemaking it was necessary to develop acid first in the milk and later in the curd by the fermentation of part of the milk sugar, and by the action of certain bacteria. The acidity resulting checked the development of most kinds of bacteria that had to do with decay or decomposition. Desirable conditions and methods were outlined most clearly.

In connection with household and dairy work, the common house fly and the water supply were referred to as deserving of special attention. Reliable data showed that flies caught in a kitchen were laden with an average of 300,000 bacteria, while those from hogpens, swill pails, etc., averaged as high as 1,500,000. In regard to wells, it was essential that they be removed from barnyard soakage or other pollution. Many wells were little better than cesspools, and very undesirable from a health standpoint.

OFFICIAL REFEREE REPORTS.

The report of Joseph Burgess, official referee, Montreal, showed that of the cheese he had been called on to examine 13 per cent. were firsts, 81 per cent. seconds, and 6 per cent. thirds and culls. The defects were referred to as being off flavors, open or loose texture, uneven color, acidity or mealy, too much moisture and careless boxing. Butter examined comprised 32 per cent. firsts, and 68 per cent. seconds. Samples were placed low for bad flavors, mottles, greasiness, and poor finish.

Makers were urged to arrange to have boxes, both of butter and cheese, stamped with the date of manufacture. There was every advantage in this practice with a product of high quality.

Ques.—Would you suggest having cheese numbered and dated on the box?

Ans.—It would be well to have the number placed on the box as well as on the cheese, so that there would be no danger of getting them mixed when removed from the boxes in the warehouse. If they were numbered only once, I would prefer to see it on the box, to save taking off the box in order to trace the cheese.

The necessity for marking every batch of cheese was urged by G. H. Barr. It was pointed out that the official referee could not be of as much value as he should be to the makers or to the dairy industry if makers would not attend to the marking.

Others pointed out that the numbering of cheese would assist the buyer greatly in examining cheese.

ANNUAL REPORTS.

The report of the Treasurer, J. R. Anderson, showed receipts of \$5,377.19, and expenditures of \$5,150.09, leaving a balance on hand of \$227.10. Auditors Kerr and Hyatt reported the books and vouchers correct in every detail.

Secretary Murphy complimented Canadians on the general high quality of the cheese and butter made and pointed out the benefits of educational work conducted through the association. Through special dairy meetings an attempt had been made to reach the careless and indifferent men who failed to attend the larger meeting, because it was found necessary to plan and labor, to agitate and educate and to continue to devise ways and means by which we might be able to maintain the proud position now held in supplying Great Britain with the largest share of her imported dairy products. The association also had done much by sending out annual reports and by working in unison with Kingston Dairy School.

ELECTION OF OFFICERS.

Directors were selected as follows: Renfrew district, J. H. Singleton, Smith's Falls; Prescott, Neil Fraser, Vankleek Hill; Carleton, Edward Kidd, North Gower; Russell, Napoleon Longtin, The Brook; Glengarry, John McGregor, Alexandria; Stormont, Peter McDermid, Avonmore; Dundas, C. F. Whittaker, North Williamsburg; Grenville, Jas. Sanderson, Kemptonville; Leeds, J. R. Dargavel, Elgin; Lanark, T. A. Thompson, Almonte; Frontenac, Joseph McGrath, Mount Chesney; Lennox and Addington, W. J. Paul, M.P.P., Tamworth; Hastings, Jas. Whitton, Wellman's

Corners; Northumberland, Alex. Hume, Menie; Peterboro, G. A. Gillespie, Peterboro; Ontario, Durham, Victoria and Haliburton, Henry Glendinning, Manilla; Prince Edward, Alex. White, Sidney Crossing; Eastern Ontario, G. G. Publow, Kingston. Senator Derbyshire was elected Honorary President for life. J. W. Hyatt, of West-lake, and J. A. Kerr, of Belleville, were appointed Auditors.

The directors met and re-elected J. R. Dargavel as President, Henry Glendinning as First Vice-President, and J. H. Singleton as Second Vice-President. R. G. Murphy was reappointed Secretary, J. R. Anderson, Treasurer, and Wm. Coe, of London, Stenographer.

IMPORTANT RESOLUTIONS.

Among the resolutions passed by the convention the one of greatest import read as follows:

"With a view to improving the position of cheese and butter makers in Ontario, and also to placing the owners and managers of factories and creameries in a position to secure well-qualified makers, this association, in convention assembled, respectfully request that legislation be enacted setting forth the qualifications of makers who may be allowed to take full charge of the manufacture of either cheese or butter."

A resolution, moved by J. H. Singleton, and seconded by E. Kidd, requested the Dairy Commissioner to see that the results of tests as to the importance of cooling milk, as discussed by G. H. Barr, be distributed among patrons in all parts of the Province, through the press and by bulletin, at as early date as possible.

Appreciation of the good work done by J. W. Mitchell, as Superintendent of the Kingston Dairy School, and regret at his departure from the Province, were expressed. Thanks were voted to the Canadian Salt Company, through their general manager, Mr. Henderson, for the handsome badges presented to the members.

Recognizing the value of the campaign in regular testing of cows, a rapid extension of the work of cow-testing associations was urged.

The Mayor and Council, the Board of Trade and the citizens of Prescott were thanked for kindnesses during the convention.

Woollen Industry Sufficiently Protected.

Ottawa press despatches last week gave it to be understood that Mr. Costello, of Customs Service, who had been named a commissioner to make a report on British and Canadian woollen industries, had reported that the Canadian woollen industry does not require more protection. It was further intimated that all the Canadian mills do require to enable them to hold their own with those of Yorkshire is modern equipment and improved methods, such as found in the English mills.

Pigpen Plans Wanted.

A subscriber in Hastings Co., Ont., asks us to publish some plans of pigpens, allowing for, say, from five to six pens. A large number of pigpen plans have, at one time and another, been published in "The Farmer's Advocate," but new plans are more acceptable to the majority of our readers than old ones. Will those who have satisfactory pigpens in use describe them for "The Farmer's Advocate," and submit, with pencil-sketch of ground-floor plan?

Corn Exhibition.

With the object of stimulating a greater interest in corn-growing, a corn-growers' convention and exhibition is being held at Essex, Ont., under the auspices of the Essex Branch of the Ontario Department of Agriculture and the Farmers' Institutes of Essex and Kent Counties, February 9—12. Hiram Walker & Sons have donated \$100. Prizes are offered in ten classes, and a judging competition will be held.

What They all Say.

Just a line to let you know that I have received the premium you sent for one subscriber. Am much pleased with same. New subscriber has received his Christmas number and his weekly paper as well, and is much pleased with it. Wishing you a prosperous and happy New Year.

Brant Co., Ont.

GEO. W. HAAS.

The Prince Edward Island Government have granted 40 Scholarships of \$10 each to farmers and farmers' sons who will attend the Short Course at the College of Agriculture, Truro, Nova Scotia. It is expected that His Honor, Lieutenant-Governor D. L. MacKinnon, the Hon. John Richards, the recently-appointed Commissioner of Agriculture, and the Honorable S. E. Reid, the late Commissioner of Agriculture, will also be present at some time during the Course, and address the students.