

Is Canada to Enjoy Bogus Butter and Butterine Frauds?

A few weeks ago a bill was introduced into the Canadian House of Commons imposing an import duty of 10 cents a pound and 8 cents a pound excise duty on a kind of stuff dignified by the name of butterine, but also enjoys many other high-toned names. It was the purpose of our paternal Government to license its manufacture in the Dominion; but we are pleased to find that the pressure brought upon the Government was so great that it recently passed a bill prohibiting its manufacture and importation.

On behalf of our farmers and dairymen, it was our intention, and that of the Middlesex Agricultural Council, to assist in the pressure, and we accordingly prepared the following illustrations, but there is now no further use for our services. Nobody can read the times without seeing the folly of licensing an evil; it should be annihilated in its very incipiency. The bogus butter manufacturers of the United States have amassed millions of dollars, and they have expressed their determination to expend half a million to send lobbyists to Washington to prevent legislation detrimental to their interests. These millions come out of the pockets of the farmers, as the sale for cows and butter becomes materially reduced, and the consumers lose every cent which they invest in the enjoyment of this luxury. It is hard to distinguish it from the genuine article, and it has been known to be sold in Montreal for 22 cents a pound, being imported as genuine butter. The more restrictions imposed on the manufacture, the more filthy the stuff becomes, and Canada may yet be over-run with the polluted filth.

Some of the leading American papers, notably the "Western Rural," has been showing it up in its true light. Prof. Nachtrieb has been examining various samples with the microscope, and the following is taken from his report to the dairy commission of Minnesota:

"The examination of these samples was by no means exhaustive, and they would probably yield much more than the accompanying figures indicate. The best and cleanest looking sample had a butter odor and taste, and would readily pass for butter. It had a very small variety of living organisms, but a great many spores which, under favorable conditions, I have no doubt would have germinated. It also contained masses of dead mould, bits of cellulose wood, various colored particles, shreds of hair, bristles, etc. The other two samples teemed with life and yielded microscopic preparations of the moulds and bacteria that would have gladdened the heart of the student of biology. The microscope revealed the fact that the greatest variety of life existed in the inner portion of these samples, and that the outer portions contained the greatest quantity of active bacteria. The animals found in the butterine belong to the type of protozoa. Doubtful portions of worms were also noticed. Many of the protozoa, under favorable conditions, pass into an encysted stage or develop spores within protected capsules, and in these conditions lie dormant till the environment is again favorable, and it can hardly be doubted that some of the many spores found in these butterines were merely in a dormant state. The great number and variety of organisms found in the samples

indicate the use of foul water and a criminally filthy process in making it. There cannot be the slightest doubt that the person who eats so promiscuous and so lively a mixture as the butterine examined is running great risk morally as well as physically. The peace and happiness of future generations are greatly involved in the life of the present generation. By indulging in our home articles of food filled with spores and seeds of the various classes of the lower organisms, we are increasing the dangers of parasitism. Spores that now are harmless, may, by gradual adaption through more or less circuitous routes, become inimical to the health and happiness of countless millions."

Figure 1 represents a small portion of a network of moulds that were in good growing condition; figure 2 represents a portion of mould



FIG. 1.—A very small portion of a fungus slightly magnified. *aa*—Stems and branches of the plant. *b*—Spore capsules of the fungus. *c*—Bursting spore capsules. *d*—Budding spores; one sending off 3 branches and another 2. *e*—Spore capsules slightly magnified.



FIG. 3.—A case of an animal related to Balantidium. *b*—Some low animals. *c*—Crystallized lard. *d*—Pigment cells from the skins of some animal. *e*—Broken capsules and spores. *ff*—A few of the other various foreign bodies.

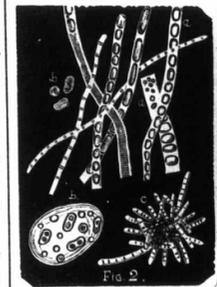


FIG. 2.—Crenothrix. *a*—Portion of a vegetative and spore forming mass. *b*—Spores imbedded in protective gelatinous mass. *c*—Small colony of filaments budded from a collection of spores. Natural habitat, foul water.



FIG. 4.—Forms of the bacillus always found in hay infusions. *b*—Spores forming. *c*—Spores budding into bacilli. *d*—Cladotrix, slightly magnified. *e*—Portion of a highly magnified isolated form. *f*—Micrococcus imbedded in a gelatinous mass. *h*—Balantidium coli, back and side view; *le* shows mouth, natural habitat, rectum of swine.

whose natural place of growth is foul water; figure 3 illustrates some of the various things found in greater or less abundance in the butterine; figure 4 illustrates two of the bacilli, one of which (*a b c*) is found in all hay infusions, and the other (*d e*) in pond water containing decomposing organisms. *F G* represents micrococci. Micrococci occur wherever there is decomposition of organic matter. Some of those intimately related to specific diseases are the micrococci of smallpox, erysipelas and diphtheria. *H* is a small animal, balantidium coli, of which a tolerably good specimen was found. This animal was found nearly thirty years ago in the fecal evacuation of two hospital patients suffering from chronic diarrhoea. Whether *B coli* was the cause or the accompaniment of the disease could not be decided by the limited number of observations. Later they were discovered in great abundance in the rectum of the hog. *H* represents the mouth.

Meeting of the Ontario Creameries Association.

The first annual convention of the Ontario Creameries Association was held in the Walker House, Toronto, on the 5th and 6th ult.

The following officers were elected:—

President, John Hannah, Seaforth.
Vice-President, M. Moyer, Georgetown.
Directors: No. 1 Division (Stormont, Dundas, Glengarry, Prescott and Cornwall), A. Broder, M.P.P.; No. 2 (Lanark, Renfrew, Carleton, Ottawa, Russell, R. J. Graham, Belleville; No. 3 (Frontenac, Grenville, Leeds, Kingston and Brockville), D. Derbyshire, Brockville; No. 4 (Hastings, Addington, Lenox and Prince Edward), John Sprague, Ameliasburg; No. 5 (Durham, Northumberland, Peterborough and Victoria, including Haliburton), J. Garret, Bethany; No. 6 (York, Ontario, Peel, Cardwell and Toronto), Thos. Johnston, Toronto; No. 7 (Hamilton, Wentworth, Wellington, Waterloo, Halton and Dufferin), V. E. Fuller, Hamilton; No. 8 (Lincoln, Niagara, Welland, Haldimand and Monck), William Rolston, Caledonia; No. 9 (Elgin, Brant, Oxford and Norfolk), M. Pusey, Selkirk; No. 10 (Huron, Grey and Bruce), George Browning, Formosa; No. 11 (Perth, Middlesex and London), E. Miller, Parkhill; No. 12 (Essex, Kent and Lambton), Peter Graham, Lambton; No. 13 (Algoma, Simcoe, Muskoka and Parry Sound), J. T. Brill, Guelph.
Auditors: P. A. Carpenter, Collingwood, and James E. Ballie, Toronto.
The Directors will appoint a Secretary-Treasurer.

THE PRESIDENT, in his opening address, explained the circumstances which led to their incorporation by Act of the last Ontario Legislature. He stated that the creamery men had failed to receive a hearing at the meetings of the Dairymen's Association, and that it was necessary for them to have an association of their own. The dairymen being supported by legislative grants, the creamery men applied for Government aid; a sum of \$500 was granted in the bill of incorporation, and they received in addition a private grant of \$50 from Mr. Valancey E. Fuller, Hamilton.

JAS. CHEESEMAN, Montreal, read a paper on Economical Dairying. He said the average quantity of milk per cow per season in Great Britain was 4,500 lbs., while Eastern Ontario only produced 2,700 lbs., and Western Ontario 3,000 lbs. He insisted upon the necessity of increasing these figures; also the per acre per annum capacity of our pastures. He recommended the continuation of tests at exhibitions, somewhat similar to those conducted at London and Toronto last year. He presented tables showing how these tests could be improved on with regard to accuracy.

R. J. GRAHAM, Belleville, said it cost him \$1.20 per 100 lbs. to produce milk. His cows were Shorthorn and Ayrshire Grades, and Natives. In his experience, all the other cows were far behind our Natives in the production of milk. He based his calculations on the following prices: Hay, \$8 per ton; pea-meal, \$20; bran, \$12; middlings, \$14; sugar beets, 8 cts. per bushel. He calculated the manure as balancing the cost of attendance. It took two acres of good clover to keep one cow during the summer months. The average quantity of milk per cow was 10 quarts per day. He said one man could attend 50 cows, winter or summer. He allowed 10 cows for one milker, milking at the rate of 10 cows per hour.

P. A. CARPENTER, Collingwood, who kept accurate accounts with two cows, a Native and a Shorthorn Grade, paying \$10 a ton for hay, \$12 for bran, and 2½ cents a pound for linseed meal, said he produced 10 quarts of milk per head per day on an outlay of 15 cents on each cow daily. His ration was 18 lbs. hay, 8 lbs. bran, and ½ a pound of linseed meal, being a cost of 1½ cents per quart—an equivalent of