

examined in Montreal and the two above mentioned in Quebec were free from glucose or grape sugar. The sample supplied by Tobin & Co., Esson & Co., and Bauld & Gibson of Halifax contained no adulteration. That furnished by J. S. MacLenn, also one of the two samples from R. B. Macintosh, contained a slight admixture of glucose sugar.

In our issue of the 10th inst., we gave the results of the analysis of coffee samples furnished in Toronto. We regret to say that the results in Montreal are not as satisfactory as might be desired. Special mention should be made of S. & E. Ewing, whose samples were all genuine coffee. Murray, Heron & Co. and A. Wills & Co. also furnished samples of genuine coffee, but a very poor sample was also furnished by the former firm, being, in the words of the report, "adulterated with pea-meal and chicory about 50 per cent." The two samples furnished by J. Langlands were both adulterated with chicory and pea-meal. Eight samples were examined in Quebec, all apparently procured from retailers. The officer in Quebec may do unintentional injury to respectable firms of same name with those whose surnames only, in six cases out of eight, are given. The sample furnished by P. Maranda consisted "of one-eighth coffee, the rest a mixture of chicory, roasted peas and beans." Griffin & Pelletier furnished samples of similar character to Maranda's. Onelle's sample contained "little or no coffee; nearly all chicory, peas or beans roasted." The samples furnished by Taylor and by J. O. Labbé contained one half coffee; the rest a mixture similar to that above noted. No wonder that in Quebec the sound of the family coffee-mill is heard in the land. In Halifax the sample obtained from W. M. Harrington was "pure coffee." Of the other samples, those supplied by Lordly & Stimpson, Peaks & Eaton, C. & W. Anderson and Geo. Schwartz, were also of fair to good character. Rye is used to a small extent in connection with peas and chicory in Nova Scotia, but there is a large percentage of pure coffee in all save two out of the eleven samples examined.

It is in the adulteration of milk that the greatest difficulty is to be met with, and it may be supposed that the greater proportion of infant mortality in our large cities is due in no inconsiderable degree to this most mischievous fraud. It is unfair to the mercantile community to institute comparisons between them and the milkman as regards the adulteration of their respective articles of trade. The wholesale dealer, the jobber and retailer, in

tea, coffee, spices, colors, etc., do not perform the adulteration themselves; this is done by the foreign exporter, the grinder, etc., and a lower price is usually charged for the article. This is especially the case in coffee and spices. Doubtless the best place to examine teas is at the custom house, and a similar law to that passed in England in 1875 would be the surest remedy. It is perhaps to this law that we are indebted for the poorer qualities of teas in the United States and Canada during the last two years, as by its provisions the Customs authorities in England have the power to refuse entry to teas which have been adulterated, which consequently must find a market elsewhere. In tea there is occasional mixing done by jobbers, but this can scarcely come under the term "adulterated," as even some of the most fastidious consumers prefer their tea mixed black and green in various proportions according to taste. The admixtures on the part of the broker or jobber are generally for the purpose of permitting a "shave" in price to the retailer, to maintain anything like a profit in these days of cutting down prices. On the other hand the price of milk is never reduced because the quality is. We pay our 5 to 6 cents a quart in summer and 7 to 8 cents in winter, whether the article be good genuine milk such as that procured by the inspectors from J. Irvine, A. Lacombe, J. O'Connor, L. Fletcher and others of this city, (including the Dominion dairy in 1876), or consist of 20 to 25 per cent. water, and cream removed, such as supplied by A. Norman and others, and by the Dominion Dairy, in 1877. The samples supplied in Halifax were all pure and unadulterated. The Quebec dealers also appear to vend good milk with very few exceptions. Of the 24 samples examined in Toronto, but two appear to be genuine first-class articles; viz., those of Geo. Henderson and Thomas Williams. The others were deficient in various ways, by removal of cream, addition of water, &c. Of the 33 samples examined in Montreal, only nine were up to the standard; the others were "doctored" as above, and with the addition in several cases of from one to two per cent. of common salt. We would suggest to the department that the same parties who furnished samples in 1876 be called upon again, to ascertain whether any benefit proportionate to the cost to the country has been derived from the publication of the results in the Blue Book; whether the dealers supply a better article now than they did two years ago, whether as yet in our midst "the spirit of murder works

in the very means of life." The results of the previous analyzation appear unchanged, tabulated in both issues of the report.

It is a matter for some comfort that, with the exception of the produce of the "iron-tailed cow," none of the popularly supposed defilements, such as formerly used in London, Eng., are found in Canadian milk. In that city it was common, in order to soften the sky-blue tint and bring the diluted goods up to a delicate cream color, to swing round a ball of annatto in the can. Other careful observers and writers detected flour, starch and treacle in London milk. As a nation, yet in our infancy, we are enabled to profit by the experience of our forefathers, and the sooner we wisely apply it the sooner will prosperity be our portion. The bone and sinew of the country are dependent for their strength on the character of our food, and it is to be hoped the department of Inland Revenue will be successful in the reform it has undertaken.

#### GILT-EDGED BUTTER.

The present article is devoted to a description of the 'submersion, or "cooler" or deep-setting system, which we trust to make clear to our readers with the aid of the illustration below. This method has one great advantage over all others, inasmuch as it can be used for any number of cows, for the small dairy as well as the largest creamery. It is exceedingly simple, the machinery costs less than any other for butter-making and will enable any farmer to make an article which will command the highest price in the market, besides allowing him the use of the skimmed milk and buttermilk to feed his young stock.



The illustration shows four tin tanks or cans, 8½ inches in diameter by 20 inches in depth, two submerged in water, and two on top, the better to show the construction. The box, or "cooler" as it is