

THE CANADA SOUTHERN RAILWAY.

The financial condition of this company has for some time been about as unsatisfactory as possible. At one time, the employes were paid a composition, and at another certain creditors found themselves obliged to take bonds in payment. It was time that some new financial basis should be found; and a bill before the Dominion Legislature is intended to supply this want. It authorizes the issue of \$14,000,000 of new bonds to replace the first and second bonds now outstanding; also, with the consent of the holders, if it can be obtained, the bonds of the Erie and Niagara Co., and of certain American railways which form the Western connections of the Canada Southern. The exchange of the Canada Southern bonds is to be effected on the consent of three-fourths of the present holders, more than which has been already obtained. It is believed the holders of the bonds of the other roads will also give their consent. The issue of bonds, to bear interest from the 1st of January, 1878, is to be guaranteed by the New York Central and the Hudson River Railway Co., at the rate of three per cent. for the first three years and five per cent. for the succeeding seventeen years. The rate of interest on the original bonds was seven per cent.; but arrears were allowed to accumulate to between three and four million dollars which the bondholders now consent to forego. The vitality of the measure is to depend on this guarantee of the new bonds being obtained; for the Act will not go into effect till this agreement has been legally ratified by the shareholders interested. Besides the proportion necessary for effecting the proposed exchange, there will be a balance of new bonds which will be applied to equipment. No doubt in view of what has happened before, an amendment to the original draft of the bill has been made in the Legislature, providing that certain floating debts of the Canada Southern be paid out of the contemplated new issue; but excluding others in the form of interest on bonds.

—It gratifies us to learn that the subject of butter analysis, to which we devoted some space in our last issue, has been taken up by several produce firms in Montreal, who recognise the importance of the matter, and acknowledge that we have rendered a service to the trade in explaining the awkward-looking results of the Montreal examination. The attention of the Commissioner of Inland Revenue at Ottawa has been called to the subject; and the request is made that the samples of butter hereafter submitted to the Montreal analyst

shall be taken from the stocks of the heavy dealers and exporters, instead of from the stalls of vendors on the Bonsecours Market only. We have no doubt that Mr. Brunel, perceiving the reasonableness of this request, will give instructions in accordance with it.

WHAT WE EAT AND DRINK.

Of late years, since the appointment of the *Lancet* commission in England to examine articles of food, the application of chemical analysis has effected a great deal in the way of detecting adulterations of food, so clever and previously so unsuspected that their publication was decidedly startling to the average householder. In England, the duties of the public analyst have extended to a great variety of articles of both food and drink; and the discoveries of fraudulent and even poisonous admixtures was thus hit off by *Punch* several years ago:

O! bring my breakfast—give to me
Bread that is snowy and light of weight,
Of alum and bone-dust let it be,
Chalk, and ammonia's carbonate.

Give me butter to eat with the bread—
Colored with saffron and turmeric,
Or orpiment, richer in tint, 'tis said;
Let lard and sheepsbrains make it thick.

Maybe coffee will clear my head
Better than willow-leaf, Prussian-blue tea,
Coffee of ochre, Venetian red
And the potent chicory.

Supplement III. to the last report of the Minister of Inland Revenue contains a table of articles of food or drink which have been analyzed by the authorities; and it is scarcely reassuring to find from it that out of 438 articles of daily consumption, 217 or nearly half were found to be adulterated, thus:

NAME OF ARTICLE.	No. Samples Analyzed.	No. Samples Adulterated.	No. Samples Unadulterated.
Allspice	13	7	6
Bitters (Quinine Wine)	5	4	1
Butter	49	23	26
Cloves	6	5	1
Cinnamon	6	6	..
Coffee	44	34	10
Ginger	21	17	4
Milk	90	53	37
Mustard	19	18	1
Pepper	36	30	6
Preserved vegetables	22	1	21
Spirits	1	..	1
Sugar	34	4	30
Tea	59	15	44
Other articles	33	..	33
	418	217	221
Paris Green	50	30	20
Total	488	247	241

Twenty samples of sweets were found to be all pure, also two samples each of cocoa and chocolate. But condiments and spices make a very unsatisfactory showing, only cassia, and

some minor spices being found without admixture. Indeed it is an open secret that ground ginger and pepper, cloves, allspice and mustard contain ground rice, wheat flour, and the refuse of flour mills. The Halifax analyst found the milk there genuine, and the ground spices submitted all pure, but the mustard was mixed with lime and flour.

One-fourth of the teas examined were found to be adulterated, Prussian blue entering into the coloring of Young Hysons. Of one sample the Montreal analyst says "it consists of decayed and broken leaves and stalks of tea plant and other foreign leaves. It contains almost no theine, is valueless as tea, and unfit for human food." It is a little remarkable that the Quebec analyst finds no tea adulterated, and he examined fourteen samples. Of "coffees," three-fourths were made up in part of chicory, roasted beans, peas, corn, and even wheat. We know that the public taste is peculiar in the matter of coffee, many people preferring the addition of chicory to the pure bean; but probably the average purchaser would prefer his peas and corn in the shape of brose or Johnny cake, to paying 25c per lb. for it under the guise of ground coffee. For our own part we should, if pure coffee could not be had, choose rather the dandelion coffee, which Mrs. Moodie recommended so highly whilst roughing it in the bush. But twelve per cent. of the sugars analyzed were found other than pure. Some muscovado was found to contain a little salt, and the crushed as much as ten per cent; some of the samples contained four to seven per cent. of glucose. We do not hear of the customary "sand," which we presume, is in this case spelled salt, nor of the iron and sugar of lead, which has been found, we believe, in samples of sugar in Britain.

Potted meats are found to be pure, which is important, as they are largely used amongst us. And among preserved vegetables, while twenty samples were unobjectionable, the twenty-first, a tin of French peas, was found to contain copper in large proportion. But one sample of spirits is mentioned, and that was found to be pure. A result, this, that could not be repeated if the number of samples was much increased; for, as the *St. Catharines Journal* points out, the man to-day who quaffs his grog or his cup of tea or coffee without asking questions as to the component parts of his beverages, is wise even though he be phlegmatic. The dilution of milk, in 53 samples out of 90, and the consequent lessening of its nutritive power, is a serious matter. It was stated the other day at the Belleville cheese convention that but one city in the whole United States was supplied with pure milk; what a cruelty is here implied to the many babes it is used to nourish! The instructions of our authorities as to examining this article are stringent, and properly so. The appearance of Paris green in the table is because of the request of the Secretary for Agriculture that this substance, largely used by our farmers to kill the potato-bug, should be analyzed to see if it were genuine. The test proved that sixty