

Assuming extra payments to be fairly payable under the contracts, one way of calculating the rates to be paid would be by reference to such prices as would make up the total amount of the contract. The agreement with the English Contractors, dated July 23rd, 1855, provided that in the event of the abandonment of the unfinished portion of the Quebec and Trois Pistoles Line, any additional works required should be paid for at rates equivalent to those of the suspended works, which, I believe, would be found to be remunerative.

By the agreement with the same parties, dated August, 1855, provision was made for certain shares being written up to them, in payment of additional works, at prices to be determined by arbitration in case of difference.

I understand that all payments made to the English Contractors for extra works are in securities at a considerable depreciation in nominal value; and there can be no doubt that any arbitrator, in fixing prices for work, would take into account the real value of the medium of payment.

The Canadian Contractors being paid in cash for extra work, would not be entitled to ask a similar mode of calculation; but they would perhaps urge that the rise of prices should form an element of consideration in the payment of any work beyond the contract.

In the examination of railway works in Canada, the peculiar inclemencies of climate must not be forgotten. Previously to the setting in of the winter, the ground is usually charged with wet; during the winter there are heavy falls of snow, and occasional thaws; and when the frost finally breaks up, the ground, which had been frozen to a depth of three or four feet, is so disturbed, where the material is of a pervious nature, that the whole surface is set in motion; and even where there may be no serious slips, the rapid thaw, and even the rains of summer, produce irregularities in almost all earthwork, such as are only seen in the worst soils in England.

This movement is diminished in extent after a few seasons, but it is so considerable for the first year or two, that it has not been usual to soil and sow the slopes of Canadian Railways when the lines are made, nor did I observe sown slopes on the Railways of the Northern States; and in places where it was tried, in the first formation of the Grand Trunk Line, I observed that most of the soiling had been washed away. With a predisposition, therefore, to regard such soiling and sowing as a necessary accompaniment of good work, I subsequently came to the conclusion that, for the most part, it would at first have been labor in vain; and while I observed in those parts of the Grand Trunk Line last completed that the slopes had evidently been finished off with care, I was obliged to recognize the unreasonableness of expecting in Canadian Railways that finished and regular appearance of earthwork, ballast and drainage, for which an English Engineer would look.

Besides the inclemencies of the Canadian climate, which must have frequently opposed most discouraging obstacles to the prosecution of works of art, the greater part of the work had to be carried out in a country which is as yet defective in its means of internal communication, and in those facilities for construction which are found in this country.

I have alluded to these considerations at some length, because I feel that those at a distance should understand some of the difficulties which have been encountered, and that without a knowledge of all the circumstances of the case it would be impossible fairly to appreciate what has been accomplished.

For the information of the Board, and for future reference, I thought it desirable to request the Engineer-in-Chief to prepare Plans and Sections of the