



trial, or on location, involves, when made in advance of the general knowledge of the country, a still more costly waste. 'Section' line surveys—at intervals of a mile apart—are hardly necessary for guiding the determination of the proper route of the Pacific Railway; for 'Township' line surveys—at intervals of six miles apart—will probably be found sufficient. The 'Township' lines having supplied the facts, agricultural and physical, somewhat generally, it might be found necessary, subsequently, to fill the intervals at some places with 'section' lines so as to obtain these facts in specification. But, be the details in which the work may be carried out whatever experience shall demand, every dollar spent on it would be spent on a result of permanence, on a very necessity which must be met sooner or later, as a basis agricultural settlement."

"The Canadian Pacific Railway should not cost, at first, a dollar more than necessary to make it passable by trains. Interest kept down thus, the opening should take place as soon as possible, so as to begin the process of developing business. Running through a country perfectly new, it will not require at the outset the class of works proper to great traffic. The bridge piers are, in truth, the only constructions that demand permanence. Its road bed high, well drained and well cross tied, it can dispense, as long as necessary, with ballast, fences, cattle guards, road crossings. Except at such places as the intersection of rivers, station buildings will not be necessary. A colonization road, whose object, at first, is that of simply opening up the country for settlement, it may resort freely to undulating grades, sharp curves, wooden bridges, and almost unbroken stretches of single track embankment. Rock work, deep cuts, high embankments, etc., being all avoided by, where unavoidable otherwise, substitutions of one sort, or another, the road and rolling stock ought not to cost for the purpose of opening for traffic, between Quebec and Peace River