

painted every few years, and the timber floor is subject to inevitable decay. But in the case of a well consolidated embankment, no future expenditure is needed; and the exposed faces of the culvert which passes under it bear no comparison with the superficial area of a lofty bridge, with its abutments and wing-walls and piers, and its iron or wooden superstructure.

I observed several instances in which you have, at a largely increased cost, built a solid embankment and culvert, where, by a slight change of location and grade, you might have greatly reduced the amount of excavation, and have crossed the ravine by a series of spans, which would have not only saved you a large sum of money, but would have produced a very pleasing structure which an unprofessional man might suppose to be both more costly and more durable than a solid embankment with its accompanying culvert. Few persons besides the Engineer and the contractor know how much costly masonry is buried out of sight underneath one of those heavy embankments to which I refer, and fewer still know how much care and skill are required in their construction, and how much is saved by them in future years, in the general maintenance and repairs of the road.

I have already stated that in this particular feature the Truro and Pictou Railway is far superior to any Railway in the British Provinces or in the Northern States of America.*

I have only at hand the necessary information to enable me to make a comparison in this respect with the Nova Scotian Railways now open, which I find to be as follows:

	Total Length.	Lineal feet of openings of every description, inclusive of cattle guards and small open culverts.
Halifax to Truro. . . . }	93 miles.	4858 lineal feet of track.
Junction to Windsor. . . }		
Truro to Pictou. }	52 "	1072 " "

Of course there are cases in the construction of almost all railways where from the insecurity of the foundation a culvert and high embankment are impracticable, and I do not intend it to be

* The Engineer of the European and North American Railway from St. John to Shediac, in New Brunswick, states that there are on this line, which is 106 miles long, 4740 lineal feet of openings of every description, and of this—exclusive of cattle guards and small open culverts—there are in the aggregate 2650 lineal feet, or over half a mile of timber bridges and bridges with wooden superstructure. A comparison of the three lines will therefore stand thus:

RAILWAY.	Length in Miles.	Openings of every description, including Iron and other bridges, cattle guards, and small open culverts	Wooden Bridging, not including cattle guards and small open culverts.
European and North American	106	4740 lineal feet of track.	2650 lineal feet of track.
Halifax to Truro and Windsor.	93	4855 " "	2999 " "
Pictou Extension.....	52	1072 " "	None.