

girders. The principal iron bridges are those over the Calvary River and over the East River, near New Glasgow. The first consists of 3 spans of 40 feet each of solid iron girders, and the second consists of four spans of 80 feet clear each, composed of lattice girders, known as Warren's patent. The masonry of both bridges is of the best quality of first class ashlar work. The masonry of all the arched culverts, which range from 4 feet to 12 feet spans, is of a very superior quality of ashlar, a great part of which is laid in English cement. I made a minute inspection of nearly every culvert, and having examined the plans from which they were built, I have no hesitation in saying that no better examples of railway culverts are anywhere to be found.

A considerable number of box culverts, of small openings, are laid with dry ashlar masonry of excellent quality; and all the cattle-guards are of an equally good quality of masonry, laid in mortar. Your culverts and cattle-guards are greatly superior to the same class of structures which I have inspected on the line between Halifax and Windsor and Truro, where there are 26 cattle guards wholly of timber.

The total length of openings of every description on the 93 miles between Halifax and Truro and Windsor, including 70 cattle-guards, is 4,858 lineal feet, of which 3,528 lineal feet of track is wholly of timber. If cattle-guards and small open culverts of 12 feet span and under, be excluded from the comparison, we find that whereas on the Pictou Railway there is not a single opening which is not spanned by iron girders, on the line between Halifax and Truro and Windsor, there are no less than 36 different openings, ranging in length from 15 feet to 600 feet, all spanned by a superstructure of timber, and amounting in the aggregate to 2,999 lineal feet of Railway.

With reference to the quality of your masonry, I found that with the exception of a few coping stones of one or two culverts about six miles east of Truro, which were not perfectly sound, all the stones in the walls or arches to which I had access had been carefully selected, and consisted of either a hard compact limestone or a very fine grained sand-stone of close texture. The rock excavated from the Railway cuttings being unsuitable for ashlar, had only been used in one or two instances, to a very limited extent, in the backing of some small cattle-guards.