

It is doubtful if this type of bridge could be built with great advantage for spans much less than that of the bridge here described. On the other hand, the advantage in low cost of the suspension bridge with wooden floor over all other types becomes more marked as the clear span of the bridge becomes greater. For a single span of 300 feet, for instance, the suspension bridge would be much cheaper than the common steel truss bridge with wooden floor and joists, and, if the stiffening trusses were made deep and strong enough, it would be equally rigid and more permanent. The same is true for intermediate and greater spans. A suspension bridge with wooden floor of 300 feet span is now being constructed at Lillooet, British Columbia, as the cheapest and best bridge for the kind of traffic it will have to bear.

We have not far to seek for the reason why recourse has not been had before to the suspension bridge for comparatively short spans, and why more of them have not been built in Canada for short as well as for longer spans. It is because of the peculiar situation which has existed in regard to bridge engineering and bridge building in this country. Buyers of bridges in Canada have been in the habit of going directly to the bridge companies, not only for their bridges, but for designs of bridges, and even for engineering advice (for this is involved in the system of calling for tenders with competitive designs), and they naturally have bought the only things which the bridge companies have to sell, namely, steel truss or beam bridges.

Summarizing the advantages of the suspension bridge, we have already noted low cost and durability, although the latter involves renewals of the wooden parts, and to these should be added great ease of erection, as no false work is required. The difficulties to be overcome and the care required have to do with design and engineering rather than with construction.