

manner, and as it appears to us for no very sufficient reason,—he says in his Report :

“In all that has been said respecting the comparative merits of the different systems of roadway, you will perceive that a *complete wooden structure* has not been alluded to, because, in the first place, when the design for the Victoria bridge was at first being considered, *wood* was deemed not sufficiently permanent; in the second place, the structures alluded to in the report, as being inferior to that now in progress, are proposed to be constructed of stone and iron work; and as a third reason, the construction of the tubular roadway is already so far advanced that any alteration, to the extent of abandoning *iron* and adopting *wood*, must involve monetary questions of so serious a nature as to render the subject beyond discussion, or even being thought of in this report.

From this it would appear that the construction of the tubes has been so far advanced as to preclude all thought of any other description of superstructure now; while wood was discarded in the previous consideration of the subject as not being “*sufficiently permanent*” an assumption perfectly true where it desirable to emulate the builders of the Pyramids, but not entitled to implicit faith when measured by a commercial standard suited to these provinces. Mr. Stephenson has probably omitted to draw the needful distinction between England, where iron and capital are abundant and wood scarce, and Canada, where precisely the reverse of these conditions exists; in fact he appears to have adopted the same reasoning in relation to the Victoria bridge as he did with reference to the Britannia, forgetful of the innumerable opportunities afforded in this country for the employment of capital in a much more productive manner, and more beneficially not only for the railway but for the country at large.

In dealing with questions of stone and iron, however, Mr. Stephenson has shewn himself quite at home; and in comparing the various methods of construction with those materials both he and Mr. Ross leave nothing to be desired. We entirely adhere to the views expressed by them. “The approaches” says, Mr. Stephenson :

“Extending in length to 700 feet on the south, or St. Lambert side, and 1300 feet on the Point St. Charles side,—consist of solid embankments, formed of large masses of stone, heaped up and faced on the sloping sides with rubble masonry. The up-stream side of these embankments is formed into a hollow shelving slope, the upper portion of which is a circular curve of 60 feet radius, and the lower portion, or foot of the slope, has a straight incline of three to one, while the down-stream side, which is not exposed to the direct action of the floating ice, has a slope of one to one. These embankments are being constructed in a very solid and durable manner, and from their extending along that portion of the river only, where the depth at summer level is not more than two feet, six inches; the navigation is not interrupted, and a great protection is, by their means afforded to the city from the effect of the “shoves” of ice which are known to be so detrimental to its frontage.