

Charlottetown it was suggested by Sir George Cartier. I asked him: "How are we going to do this? It is all very well to say that it is to be done." What was the answer? "There is nothing impossible to the Privy Council of Canada." Hon. gentlemen may laugh; it is a very easy matter to laugh, but if the laugh had taken place before the Union the Island might not have so easily come into the Confederation. Then the hon. member from Marshfield spoke of the Severn tunnel, and told us that the difficulty in building that was the water. Let me explain, in the first place, the difference between a tunnel and a subway. The term "tunnel" is usually applied to a structure that is built of stone, the same as the old Thames tunnel. The subway is a tube which is put together in concentric rings or pieces until it forms a whole built under a shield. No matter what the conditions may be, some gentlemen are so constituted that no matter what you propose to them there is some fault to be found with it. The hon. member for Marshfield tells us that the difficulty in this case is likely to be that water might be met in crossing the Straits of Northumberland. But there is a difference between the structure under the Severn and the one that I propose. The latter is to be built by the use of Walker's shield; the former was constructed of bricks, and 75,000,000 of bricks were used in the work. The Severn estuary has a deep channel fed by springs, and the tide resembles that of the Bay of Fundy. The tide came in with such force that it swamped everything that was made for eleven years to keep the water from the work. What a difference there is in building a structure brick by brick, and constructing a work like this within a shield! It was to overcome the difficulty of water that the shield was invented. It is to cheapen tunnels and place them within the reach of corporations and communities throughout the world that this mode of construction has been adopted. I do not set myself up as an authority on the subject. I give my authorities and mention the tunnels that have been built, and I can assure my hon. friend, from the best information I can obtain, that the difficulties which were met in the construction of the Severn tunnel are not likely to be met in building the subway across the Straits of Northumberland.

But there are some gentlemen who consider their ideas are better than Mr. Walter Shanly's or General McAlpine's, or of any other engineer in the world. The opinions of those engineers are good for nothing, and these gentlemen have an idea that what does not strike their minds as feasible cannot be done. Walter Shanly, who built five miles of tunnel through the Hoosac Mountains, when the best American engineers gave it up, says that this subway can be built. Certainly his words are more worthy of consideration than the words of those who have not the necessary information to base an opinion on. The model of the steamer "Stanley" was referred to. This model was obtained through the Norwegian Consul at Quebec, in my capacity as Norwegian and Swedish Consul at Prince Edward Island; he sent it to me, and I took it to the Department to show them that the steam ferry "Gottenburg" was crossing the Cattegat regularly and successfully. I went to the Department with it, and I was met with a statement that no such thing was ever known as an iron or steel steamer contending with ice. "Why," I said "here is the report that it has been done, and this is the model of the boat which does it." Finally, we prevailed upon the Government to send Captain McElhinney to Norway to go on board that steamer and see it for himself. He went on board the vessel, got her model and satisfied himself. From his experience on board an ice steamer for three years in the Gulf he was satisfied that no boat could possibly do that work. He caused the model to be lengthened 60 feet, so as to make the "Stanley" serviceable for other purposes. I have the greatest respect for the "Stanley," that she can do anything that can be done by a steel steamer, but I am bound to say, in this House, that it would not surprise me to hear any day, that in facing the ice of the Straits of Northumberland in the winter season she had gone to the bottom. We were referred to the steamer at the Straits of Mackinaw, and I would be glad to find that a steamer could do this work. I went to the Straits of Mackinaw myself, and saw the state of affairs that existed there. I found a current of 5 knots an hour running continually, and the ice from the upper lakes forming a bridge to open water. The steamer "St. Ignace" could mount on top of the ice and break the