

Q. Will you indicate on the map the position of the old Wellington street bridge and of the new one?—A. The spot where it was before is indicated by the dotted line over which is written the words, "centre line of old bridge," and the new location is indicated by the dotted line over which is written, "centre line of new bridge."

Q. What is the distance between the present Wellington street bridge and the G. T. R. bridge?—A. I would have to use the scale to ascertain that.

Q. Is it 100 yards or 500 yards; give it roughly?—A. (After measuring with scale) it is 256 feet from the centre line of the one bridge to the centre line of the other.

Q. Now, Mr. Casgrain, inasmuch as the supports of the old bridges were entirely removed, explain to the committee what supports the new bridges have. You say the old bridges rested on those intermediate piers. You explained that the old bridges rested upon them and the new ones rest upon the walls of the canal. Explain what was built there for them to rest on?—A. Four abutment were built on the walls of the canal and they are shown here as the north abutment of the Grand Trunk bridge and the south abutment of the Grand Trunk bridge; also the north abutment of the Wellington bridge and the south abutment of the Wellington bridge, as shown clearly upon the plan and painted in pink.

Q. So that the new bridges, of course, would be longer than the old ones?—A. Much longer.

Q. Now, did that map which you had placed in your hands and which you made a copy of, enable you to ascertain the quantities in these different works?—A. Yes; by the plans furnished to us we made out the quantities, and we found some differences with the government measurement, but we assumed those measurements to be correct in all our estimates.

Q. Will you take them a little more in detail and tell me whether you made up the estimate of the quantity and the cost of these different works?—A. Yes; we made a tabulated statement of the quantity and the cost of the different works.

Q. When you say "we made," who do you mean?—A. Myself and Mr. Roy.

Q. He is a civil engineer also?—A. Yes.

Q. Will you give the committee a statement in detail showing how your estimates were made up, taking each article by itself?—A. We first began with "ice removed," of which we found, according to the figures and according to the plans, 18,900 cubic yards, made up as follows:—Starting from a point at the east end of the plan and going to the west end of the plan, the full width of the canal, that would give us an area of 127,675 square feet.

Q. That would embrace the entire part of the canal covered by any part of the works?—A. And more too. Allowing the ice to be four feet thick, which is a very great thickness for the ice, it would make 510,700 cubic feet, which means 18,915 cubic yards. Allowing 50 cents a yard for the removal of the ice, we came to the amount of \$9,450.

Q. As regards the quantities?—A. These quantities we both considered excessive for thickness and the area of ice removed.

Q. As regards agreeing with the government quantities, had you any means of ascertaining what quantity they estimated it?—A. I told you we found these quantities excessive comparing our own quantities. Those were the actual government figures handed to us.

Q. The commissioners' figures?—A. The commissioners' figures handed to us when we took communications of the plans and documents.

Q. As far as the removal of the ice was concerned you took the figures of the commissioners?—A. Before this statement we made out our own figures. We adopted in every case the government figures so there could be no discussion as to quantities.

Q. When you made up your own figures did you differ materially from those supplied you by the commission?—A. Only the depreciation which might occur, the other different engineers doing work in a different way.

Q. I am asking you of the fact about the quantity of ice removed. Did you make the quantity less than the quantities given you by the commissioners?—A.