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REINFORCED CONCRETE BRIDGES BUILT OVER CURRENT RIVER, IN THE CITY OF PORT ARTHUR, ONTARIO.

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The city of Port Arthur is beautifully situated on a hilly slope rising from the waters of Thunder Bay, Lake Superior. Almost through the centre of the city winds a little stream known as McVicar's Creek, while towards the northerly end of the city Current River finds its way to the lake. The banks of these two streams, as well as the surroundings, abound in the beauty of Nature, and present a pleasing view to any who have spent some time in the neighborhood.

at this time was to give street car facilities to the employees of the Western Dry Dock and Shipbuilding Company's plant, which is located north of the river and near the lake shore.

Before commencing work there was considerable discussion as to where the bridges should be located, the Board of Park Commissioners being anxious to have the bridges built alongside the Canadian Pacific Railway Co.'s bridge, owing to the fact that they were of the opinion that the extension

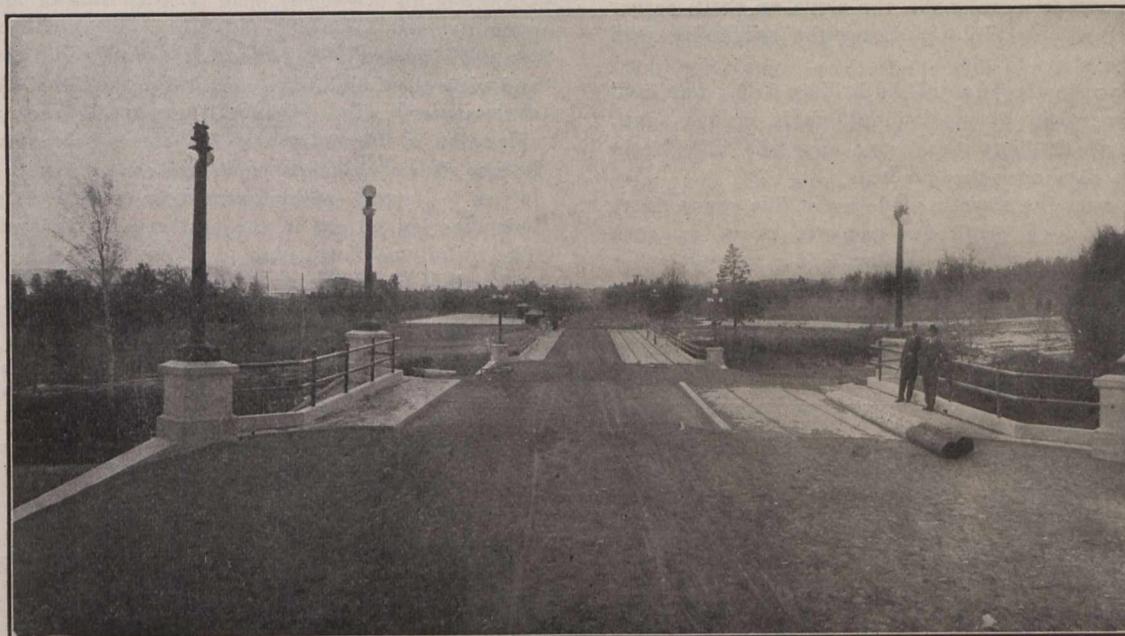


Fig. 1.—View Showing Deck of Both Bridges, with Swimming Pool in Distance.

The spanning of these streams with traffic bridges, both for vehicles and electric railways, has given the city engineer's department an opportunity of designing bridges to suit the required conditions in each case.

In General.—The bridges to be herein described were completed in the year 1911, and are constructed within the city park system, the one spanning Current River, the other carrying traffic over the penstocks immediately north of the river. These bridges are on the line of Cumberland Street (the main street of the city) and upon which the lines of the Port Arthur and Fort William Electric Street Railway are constructed. The chief object of constructing the bridges

of the street railway would tend to divide the park into two portions. While this was somewhat true, the difficulties of construction, and the ultimate appearance of the bridges being considered, it was decided to build the bridge on the line of Cumberland Street.

The foundations at the location decided upon were solid rock, and as the work was done at the season of the year when the water was low, no difficulty was experienced in getting in the footings. For this location the type of construction selected was the reinforced girder and slab type, supported with concrete posts resting on the footings, with retaining walls to support the embankments. As there is a dam about 1,000 feet up stream from this location, it was decided that the placing of the posts in the river-bed would be

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