

By C. R. Young.*

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This reinforcement was for the purpose of tying the "towers" rigidly together and to ensure the arch carrying without danger the ends of the stringers from the temporary trestle across the river, which were supported on a cradle resting on the arch.

The design was that of Mr. James McDougall, Assoc. M. Inst. C. E., Chief Engineer of the railway. The

on their journey westward and arrived in Vancouver, B. C., on Saturday morning. A number of prominent local members of the civil engineering profession met the visitors on the arrival of their train. Among those who extended welcome were Mr. H. J. Cambie, consulting engineer of the C.P.R.; Mr. James Forde Garden, M.L.A.; Mr. George H. Webster, president of the British Columbia Contract Company; Col. Tracy and Mr. W. A. Clement, City Engineer.

In the afternoon the visiting engineers left at 2 o'clock on the steamer Joan for the works of the Vancouver Power Company on the North Arm of the Inlet. After an inspection of the hydro-electric plant at that point the party returned to the city. During the morning, the tourists in small parties visited the sawmills and other points of interest about the city.

On Sunday evening they left for Victoria and spent Monday there, being taken about the city in trolley-buses, while a large party went by launch to visit the dry dock and the marine railway at Esquimalt in charge of Mr. Devereux. In the afternoon under the guidance of Mr. Mohun the parliament buildings, including the museum, were visited.

In the evening a number of the visitors attended the reception to Their Excellencies, Lord and Lady Grey, in the parliament buildings and left by the steamer Charming about midnight for Vancouver. On Tuesday morning at 10 o'clock their special train left and the trip eastward began. They proceeded by the Crow's Nest Pass route visiting Rossland, Grand Forks, Phoenix, Greenwood, Nelson, Kootenay, Moyle and Coleman. From there the party proceeded to Fort William thence to Montreal.

Riddell & Thomas, builders, Dauphin, Man., have dissolved partnership.

Sidney A. McDonald, contractor, Montreal, has registered his business under the firm name of W. McDonald & Co.

JOHN S. FIELDING

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CONSULTING ENGINEER

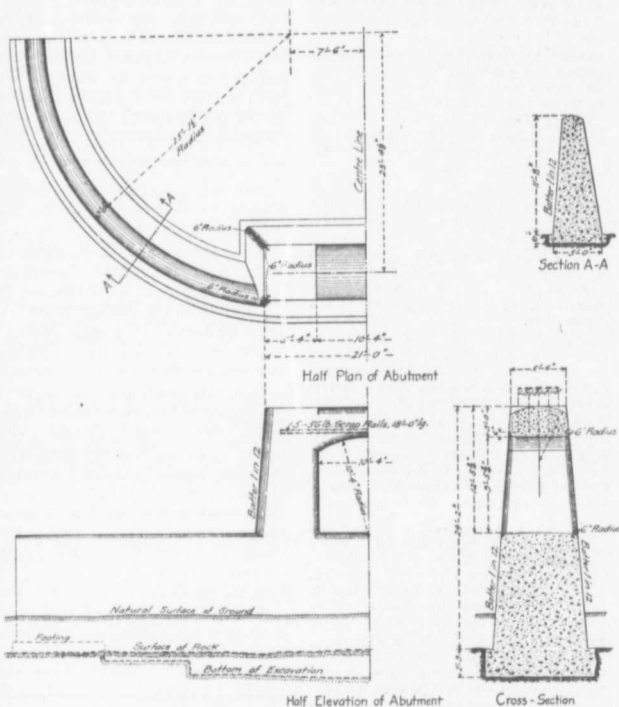
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CONCRETE ABUTMENT, TORONTO AND YORK RAILWAY.

river valley by 600 ft. of wooden trestle, a 140-ft. through truss steel span and 800 ft. of fill, averaging 18 ft. deep, commencing immediately to the west of the 140-ft. span, thus necessitating an abutment at this point.

Saving in concrete was effected in two ways. First, the fill was stopped 30 ft. from the center of the abutment and allowed to slope down all around on a slope of $1\frac{1}{2}$ to 1 to the circular wing walls, the tops of which are slightly above high water mark. A short wooden trestle, put in before filling commenced, carries the traffic from the bridge on to the fill. Second, a saving of some 24 cu. yds. of concrete was effected by leaving an arched opening in the center of the abutment where the material is ineffective.

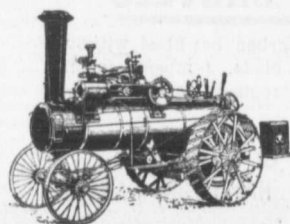
Details of the structure are shown by the accompanying illustration. The arch between the truss-seats was reinforced by five 56-lb. scrap rails, placed 1 ft. apart as shown.

*Assistant Engineer, Toronto & York Radial Railway, Toronto, Ont.

concrete work was done by Mr. O. Hicks, Humber Bay, Ont.

CIVIL ENGINEERS' EXCURSION.

The party of Civil Engineers touring through western Canada, arrived at the Mountain View Hotel, Shepard, Alta., Wednesday morning, where they disembarked and were met by Mr. J. S. Dennis, superintendent of irrigation, and the local irrigation officials and engineers, who escorted them to the scene of inspection. Lunch was served in a tent at the engineers' camp. Afterward they proceeded



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