## The Canadian Engineer

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## THE NEW EASTERN ENTRANCE TO THE CANADIAN NATIONAL EXHIBITION

DETAILED ACCOUNT OF METHODS EMPLOYED TO CARRY OUT THIS WORK WITHOUT INTERFERENCE WITH TRAFFIC.

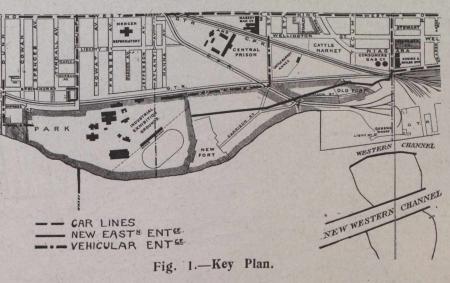
## By E. M. PROCTOR, B.A.Sc.,

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HE Canadian National Exhibition at Toronto is perhaps the best-known yearly event in Canada. Founded in 1879, it has grown by leaps and bounds. In 1883 the attendance had grown to 171,765, and in 1913, the biggest year on record, the attendance was 1,009,000, while the attendance on one single day in 1913 nearly equalled the total attendance of 1883, being 153,000.

A review of the traffic facilities of this great Fair will be of special interest at this time. In 1879, when the fair

fair was opened, people could go to the exhibition in three different ways -by boat, by steam railway, and by horse-car to King Street and Strachan Avenue, thence by foot to the eastern gate, known, as Strachan Avenue entrance. In 1884 the exhibition built an electric street railway line from the foot of Strachan Avenue into the grounds; this shortened the long walk from King Street



to say, many people either did not go to the exhibition or else walked home to avoid the crush.

> The aim of this article will be to describe shortly some of the engineering features of the construction of this new eastern entrance. A glance at the map (Fig. 1) will show the different entrances as they exist to date, i.e., the main entrance at the foot of Dufferin Street, the vehicular entrances down Dunn and Strachan Avenues, the wharf

and Strachan Avenue. It is interesting to note that this electric line was the first electric car line in America and the second in the world. This line easily paid for itself; at the time it was considered one of the "big" features. The form The ferries did not run much after 1884, the weather being so uncertain it did not pay. In 1892 the Toronto Street Railway electrified its lines and extended the King Street to line out to Dufferin Street and down Dufferin Street to the Dufferin Street and down Dunern Street and entrance. The exhibition discontinued its line at this time. entrance. Up to 1911, when the Grand Trunk Railway eliminated the grade crossing at the Dufferin Street gate, this entrance was used for both vehicles and pedestrians, but of but after 1911 only pedestrians were admitted at Dufferin Street and Peter Avenue Street, the vehicles being admitted at Strachan Avenue or but the vehicles being admitted at Strachan Avenue or by way of Dunn Avenue and Dominion Avenue. Away back in 1904, on account of the poor facilities for handling the crowds at the Dufferin Street entrance, an agitation was was started to procure another street railway entrance, and this year the dream of the exhibition authorities will

where the ferries used to land, the steam railways, who have a fine loading platform for out-of-town excursions, and the new eastern entrance from Bathurst and Front Streets.

be realized. To anyone who has had to fight his way to

a car after the evening entertainment no argument is necessary as to the need of another street railway terminus. It may be interesting to mention the fact that

between 25,000 and 75,000 people have to be handled

inside of an hour any evening of exhibition. The only

facility for handling this traffic was a double-track line

on Dufferin Street with a loop at the end. Needless

The eastern entrance to the exhibition, starting at the corner of Front and Bathurst Streets, is carried over a 202-ft. 6-in. through truss span, then down a 195-ft. timber trestle, then along the north side of the north embankment of the Old Fort on a 256-ft. sidehill timber trestle, then cutting through the parapet of the Old Fort is carried on the Old Fort grounds behind the barracks for a distance of 400 ft., then, cutting through the parapet again, it runs about 950 ft. over the Garrison Commons to a 344-ft. timber trestle over the Canadian Pacific Railway Queen's Wharf line, and from here it runs over the Common for about 1,900 ft. to the terminal loop at the exhibition grounds. The steel bridge and the 195-ft. timber trestle are designed to carry both street railway and vehicular traffic, and the rest of the line for street railway traffic only. The vehicular traffic, when it leaves