

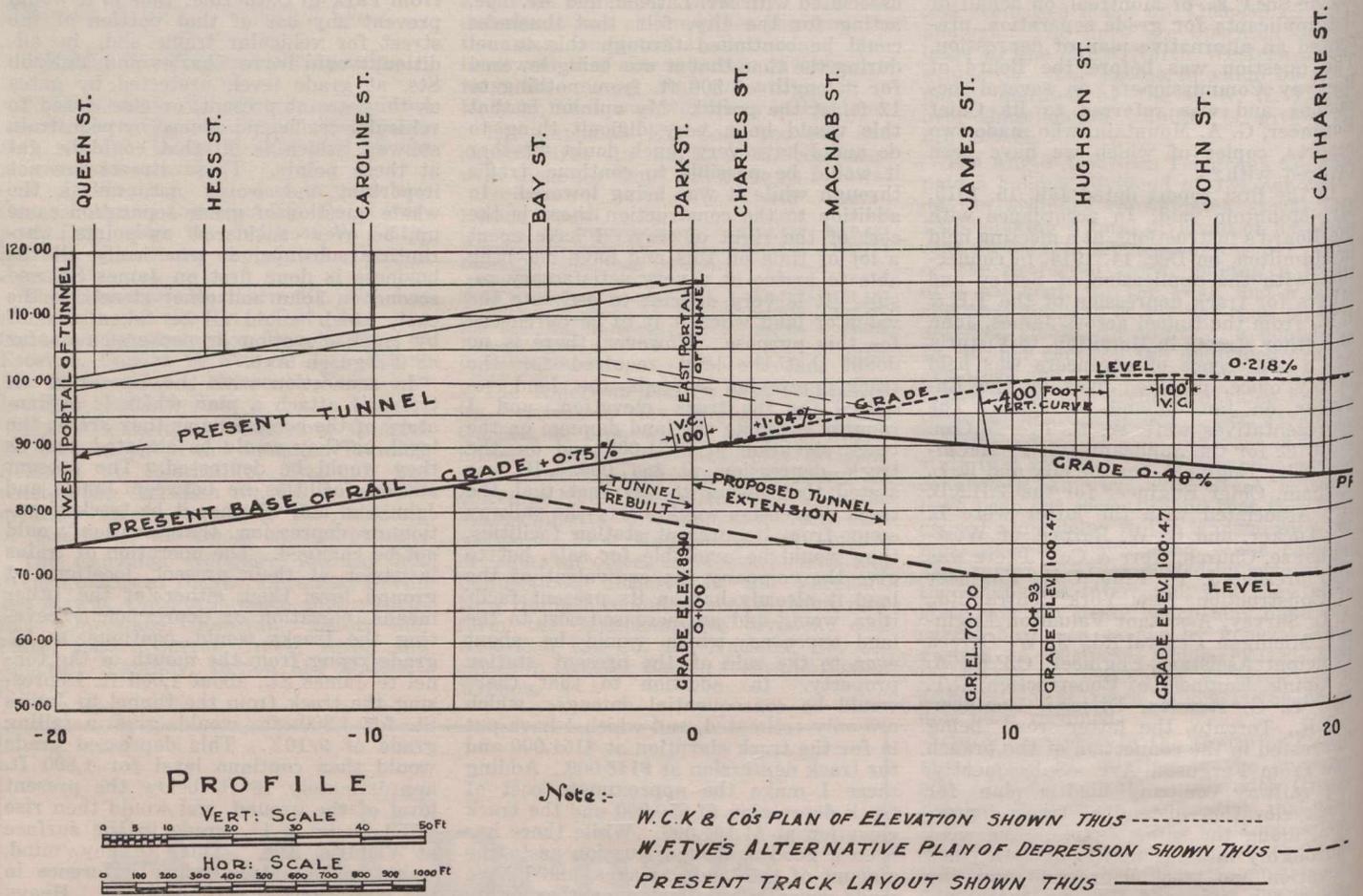
there is one of the big nuisances complained of in the application, and it would be greater in track depression than on elevation so long as steam power is used; and it does not seem to me that the density of the T.H.&B.R. traffic would warrant going to electric motors through this section at present. Taking everything into consideration that I can think of, I am of opinion that if grade separation is to be made at this point, then in the greater interest of all parties, track elevation is the proper method for economy of operation, business interests adjoining the railway and for relief from the smoke nuisance, but I do not think that the T.H.&B.R. business at present time through the City of Hamilton, with gates protecting practically all its level crossings and with half interlockers pro-

portal of the tunnel, but it has not advanced any suggestions officially. It is added that the question of eliminating the smoke is rather a difficult one, that the installation would be expensive and the operating cost extremely high.

The Railways of Venezuela.

H. K. Wicksteed, M.Can.Soc.C.E., Chief Engineer of Surveys, Mackenzie, Mann & Co., Ltd., Toronto, who spent some time in Venezuela last year in connection with a railway and coal mining proposition, wrote an interesting article on the country, which was published in Canadian Courier, from which the following is reproduced: "Of the railways, the longest is that from Caracas to Valencia,

an extraordinary descent along the mountain slopes of Las Tejeras. There are 86 tunnels and over 100 steel viaducts on this piece of line; or, roughly, two of each for each mile of road, and the scenery is magnificent. But in a tropical climate, windows must of necessity be open, and in the long tunnels the smoke and gases from the engine make one imagine himself in a Belgian trench, and are somewhat trying to lungs and throat. It is possibly in the operation of this railway that the Germans got their ideas of asphyxiation. At Las Tejeras, the railway reaches the bottom of the valley, in which is situated Valeacia, its lake and many smaller towns, and the construction is comparatively easy and cheap. As a financial venture, the railway is a failure."



Schemes for Track Elevation and Depression in Hamilton. Toronto, Hamilton & Buffalo Railway.

tecting the electric car system at crossings with the T.H.&B.R. warrants any change being made in the location of the tracks.

There is an objectionable feature in the way smoke comes out of the tunnel after trains have passed through, particularly at the portal next to James St. It can be noticed curling for some time after a train has passed through and is objectionable. I suggest that the company consider the advisability of putting a shaft near the upper end of the tunnel, which is the easterly portal, and fanning the smoke up into the air where it would disperse instead of coming out of the roof of the tunnel and flowing over Park St. This is merely a suggestion which might be looked into.

In reference to Mr. Mountain's suggestion as given above, we are advised that the T.H.&B.R. management has considered the question of providing ventilation to prevent smoke rolling out of the east

some 220 kilometers, or 130 miles, built and controlled by the Germans. The most lucrative is the English road from Caracas to its seaport, La Guayra, about 27 miles. The last is among the scenic and engineering curiosities of the world, climbing an elevation of 3,100 ft. in 25 miles, with grades of nearly 4%, and almost continuous curvature, as sharp as 140 ft. radius. In spite of these economic drawbacks, the traffic has been carried on continuously without accident for many years and pays good dividends on its stock. Considering that its passengers pay 10c. a mile, and freight in proportion, and that it connects a population of 150,000 or more people with the outside world, it should pay.

"The German railway is a much bolder conception, and cost over its mountain section of 40 or 50 miles a much larger sum of money. It winds up the canyons of the Guayra to its source, tunnels through the Andes and then commences

The Chicago Railway Terminal Problem is again to be taken up by the city with a view to the concentration of the present passenger terminal stations. Under ordinances passed some time ago the Illinois Central Rd., is required to build a new terminal station on a site adjacent to the present station, in order to make way for the extension of 12th St. to the lake front and for the improvement of Grant Park. The council committee on railway terminals has been directed to confer with the several railways entering from the south in order to determine upon the exact location of the new Illinois Central terminal and to provide for its use by other roads which now run beyond 12th St. and use the Dearborn, La Salle and Grand Central terminal stations.

V. J. Smith, heretofore at Windsor, Ont., has been appointed agent, Canadian Ex. Co., St. Thomas, Ont., vice C. W. Ward, resigned.