

The Canadian Engineer

ESTABLISHED 1893.

WITH WHICH IS INCORPORATED

THE CANADIAN MACHINE SHOP.

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UP TO THE ENGINEERS.

There is a unique opportunity for engineers to find a road on which first-class civic management and business prosperity may travel in Toronto for all time. The opportunity is part of the eternal transportation problem, the solution of which calls for real municipal statesmanship; but which is often approached by pettifogging electioneers. The whole problem has not been submitted in concrete form to public judgment. Parts of it have, with the result that, perhaps without reasoning out details, tendencies and probabilities, the public has condemned a piecemeal dealing with a proposition that can only be successfully handled by men

of large outlook, strong grasp, and rare courage in administration.

Though the situation primarily is local, it is of much interest to engineers everywhere. Three railways use the Toronto Union Depot. The Canadian Northern is new, and handles very much less traffic than the Grand Trunk or the Canadian Pacific. But its business will rapidly increase. For all practical purposes it is as important a factor as the two senior lines. The roads coming from the East converge near the water-front, close to where the Don empties itself into Lake Ontario, and proceed in close contiguity to the shore, to the Union Station. The Grand Trunk continues to the city's western boundary in sight of the water. Over it the Canadian Pacific has running rights.

Immediately on each side the Union Station, pedestrian and vehicular traffic crosses the metals by overhead bridges. Including Yonge Street, none of the principal eastern thoroughfares have any other approach to the water than over the tracks, to the great impediment of business and constant danger to life. The in-coming and out-going trains cannot travel rapidly. The multiplicity of tracks helps to prevent the proper development of shipping. Altogether the situation is creditable to none of the parties affected by it.

Seventeen years ago, Mr. Wellington, an eminent New York engineer, reported to the Board of Trade, at a cost of about \$1,000, in favor of the construction of a four-track viaduct, which would carry all the passenger and through freight trains above the danger line, while leaving the switching of cars to and from the factories which abound along the shore, to be done, on the present level by horses, almost entirely between midnight and 6 o'clock in the morning. There was much agitation for overhead lines. It came to nothing, because the railroads were too poor and too powerful to be induced to spend money on something without which they could manage to get along.

It was predicted then that such a scheme would be necessary some time in the future, and would then be much more costly—a prophesy which it was quite safe to make; and which may now be regarded as fulfilled. Mr. Wellington's scheme involved the building of a new Union Depot at a cost of \$500,000, the purchase of land for a new passenger car storage yard for \$120,000. The elevated structure including a draw bridge at the Don River was to cost \$1,536,000. The total expenditure was estimated at \$2,654,300. He suggested that the city should raise the money for the work, rent the whole to the railways, for an amount equivalent to about three per cent. on the outlay, and so keep control in civic hands, so that additional railroads might obtain entrance to the city on advantageous terms.

The city, it was argued, could borrow the money at a little more than half the rate of interest the railroads would have to pay—a disparity greater than it would be now, because the railroads instead of only being poor and powerful, are powerful and opulent, too; and can obtain money much cheaper than they could in the penultimate decade of last century.