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## The Canadian Engineer

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CIVIL, MECHANICAL, STRUCTURAL, ELECTRICAL, MARINE AND MINING ENGINEER, THE SURVEYOR, THE MANUFACTURER, AND THE CONTRACTOR.

Editor-E. A. James, B.A. Sc. Business Manager-James J. Salmond

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Montreal Office: B<sub>33</sub>, Board of Trade Building, T. C. Allum, Editorial Representative, Phone M 1001.

Winnipeg Office: Room 315, Nanton Building. Phone 8142. G. W. Goodal Business and Editorial Representative.

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Copy and cuts for changes of advertisements must be in our hands by the Monday preceding date of issue. If proofs are to be submitted, changes should be in our hands at least ten days before date of issue. When advertisers fail to comply with these conditions, the publishers cannot guarantee that the changes will be made. 7661

#### TRACK ELEVATION.

We give elsewhere in this issue an abstract from a report on "Track Elevation in Chicago." The elimination of grade crossings in Canada has just commenced. As the population becomes more dense the demand for subways and viaducts will increase. As the time element becomes a greater factor in railway competition and as the volume of traffic increases the railroad companies will more willingly undertake this work.

In this country some care must be exercised in the demands we make on the railway in connection with such work. In the case of new roads and branches being built a certain amount of grade crossing elimination may be provided for. To require railways to spend millions to protect crossings that may be effectively protected more cheaply in other ways will always be a waste and misfortune.

Chicago has been fortunate in the track elevation work because the railways were as anxious as the municipality to undertake the work. The time saved, the fewer accidents and their costs, which include investigations, wreckage and damages paid, and the more certain connections lessen the strain and tend for efficient railway operation.

#### ENGINEERING EDUCATION AND COM-MERCIAL LIFE.

This week sees our colleges of Applied Science opening for another year of academic work. These colleges have achieved such splendid success in the balancing of their course of study, in the efficiency of their teaching, and their graduates have attained such prominence in the world of affairs and business that it is not to be wondered at a large number of young men desirous of securing a university training before entering business and commercial life should of their volition choose a training in a science college.

It is fortunate that at least one department of our universities has enough of the "practical" to attract and enough of the "theory" to train. Not that practical subjects do not train nor theory attract, but it requires a judicious combination of the two to interest the young man of to-day.

The closer the courses of study and the methods of teaching parallel the conditions found in actual affairs, the more popular will the course become.

#### FREE ENGINEERING ADVICE.

In our issue of September 3rd Mr. T. S. Scott, Assistant City Engineer of Toronto, had a most interesting letter on "Free Engineering Advice." In his communication Mr. Scott pointed out the fact, well known to many engineers, that members of the engineering staff of cities were frequently requested to give free much advice that should be paid for with a large fee.

Mr. Scott's letter drew forth many replies, but