

# The Canadian Engineer

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## The Canadian Engineer

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### PRECISE LEVELLING.

The Department of Public Works, Ottawa, have just distributed a report on Precise Levelling. This report covers the years 1904 to 1907, and gives a description, the location and elevation of the most important permanent bench marks established by this department when running a line of levels from the United States Coast Survey bench mark at Rouse's Point, N.Y., to the mouth of the French River.

The officials of the department are to be commended for the enterprise and accuracy displayed in carrying out the survey and for the publicity they have given and detailed description furnished of this work.

With this survey as a nucleus lines of levels should be carried throughout Ontario and Quebec, so that all elevations could be referred to the same datum, i.e., mean sea level of the Atlantic ocean at New York.

Surveys of property, no matter by whom made, have a common base line, and the plans of different men, representing different interests can be readily compared and read.

But the reading of profiles is a different matter. Each man assumes a different elevation. 'Tis true we have, theoretically, a common plan of reference in the sea level, but in Canada the levels have not before been carried far enough inland to be of any value.

If the chief engineers of our railways and the city and county engineers throughout the Provinces become interested in this work it will not be long before the anomaly, of three railways and a municipality filing profiles, each of which has assumed different elevations for the datum plain, has passed.

Our city and county engineers along these lines of precise levels should be the first to adjust their B.M. to the new elevations. The Government party were generous in their distribution of permanent marks, and it would be a comparatively small matter for nearly all municipalities to adopt their elevations.

With the large railways it would be a difficult matter—but it will come in time.

### INDEPENDENT TELEPHONE CONVENTION.

Conventions follow one another so quickly that one wonders what new interest can lay claim to public attention.

On September the 9th the Canadian Independent Telephone Association will hold in Toronto their third annual Convention. Matters of special interest to Independent lines will be discussed, as well as methods of organization, construction, and operation.

This convention will be a good place for directors, managers and superintendents to gather, forget their own little world, exchange bright ideas and grow. Such a convention should be a good place for a man to go to get out of a rut. It should help him to a more thorough mastery of his own system.

At the same time as the convention there will be an exhibition of telephone apparatus and equipment, improvements and new inventions, as well as the standard supplies—an exhibit of these will instruct the manager how he can run an exchange smoothly and get business.