

opportunity of becoming acquainted with its practical working, I would suggest that it should be commenced in making, under my direction, an accurate plan with level contour lines of Parliament Square, Major's Hill and Nepean Point, that is to say: a plan showing the precise boundaries and elevations of the ground of all our properties lying south of the Ottawa River as far back as Queen Street, and west of Sussex Street and the Rideau Canal up to Bank Street.

I may say in this connection:

1. That there is no such plan in existence, as far as I have been able to make out.

2. That aside from the great desirability and convenience of the Department having such a document at its command for its own particular uses, we have, on several occasions, been asked, in vain, for information that a contoured plan would readily have afforded.

3. That now a combined railway and highway bridge is being built, abutting on the Government lands of Nepean Point and railway companies are endeavouring to obtain access to the new Central Station by passing over the said lands and electric companies may also apply, in the near future, for the privilege of crossing them.

It therefore appears to me to be highly advisable that the survey in question be undertaken without delay, apart from any consideration such as that above put forward in reference to the desirability of testing the new tachometer and accompanying rods in the field, on a large scale.

I would furthermore suggest that the re-levelling with the tachometer and the new rods, of a 25 mile section or so of the continuous double rodded line of levels which I ran along the St. Lawrence with our U. S. C. & G. Survey geodesic level No. 1, be authorized, with the object of establishing a comparison between the results afforded by the two instruments and the two corresponding methods respectively; such levelling to be undertaken as soon as practicable without unduly interfering with more pressing work.

In conclusion, I may be permitted to point out to the Department:—

1°. That the information afforded by the precise levelling and gauging operations commenced under my direction in 1883-84, and carried on by me from year to year up to 1895-96, as regularly and expeditiously as more urgent official duties,