

tion. I did not of course confine my attention to one line, but in several cases, when circumstances required it, I examined the country for a width of several miles. Although I desired to find the shortest and most direct practicable route between the proposed termini, my attention was rather more given to the selecting of a route on which I could feel sure, without a detailed instrumental survey, a railway could be constructed at the most moderate cost. With this object in view, the line which I have traced has very many sinuosities, which I fully believe a careful instrumental survey would, to a great extent, do away with, and so materially lessen the length of the line.

The only instruments I used were an aneroid, barometer, a compass, and a hand level. I had two barometers, but unfortunately one was found on trial to be worthless. That which I used has been often proved to be trustworthy, but on this survey it met with several petty accidents, which though they were of such a character as not at all to interfere with its giving correct information in observations made after any such accidents, prevented my being able to give satisfactorily a continuous series of heights from one end of the route to another.

All the country through which I walked has been surveyed, and I have been therefore able to trace, with tolerable accuracy, my route on the Government maps, and I have laid down on the accompanying map (traced from that of the Government) the route which I have selected.

On a survey such as I have made I consider it almost impossible to give reliable quantities for an estimate of the cost of construction; but, as walking over the ground, and examining it minutely with a view to construction, would give a tolerably correct idea of comparison between the work to be done on it and other known works that have been executed, I propose to refer you, for an approximate estimate of this railway to works with which you are well acquainted, and which you are aware I also know, namely, some sections on the Intercolonial Railway; and I propose to take as standards of reference Sections 1, 8, 17, 18 and 9. On the Huron and Ottawa Railway there will be very few large bridges, and none of the protection work such as there is along the Metapedia River, on sections 17 and 18 of the Intercolonial Railway. I have, therefore, in the following list, modified the estimates of the sections on the Intercolonial Railway, by deducting the masonry and superstructure of the large bridges, the cost of coffer dams and pumping foundations, the cost of level crossings, and the cost of protection works and special works. With the exception of Contract No. 9, the prices for which were ample, I have on the other hand increased the amount remaining after these deductions by from 20 to 25 per cent., partly because some of these sections were constructed at a low rate of wages for the workmen and horses, and others had scarcely remunerative prices, and partly because on the Huron and Ottawa Railway there may be some sections which may have unusual expense in importing men and provisions. Where large bridges or works of special difficulty may be required on the route, a special estimate will be given in addition to the general one for clearing, grading, culverts, and other such ordinary necessary work. The modified estimates which I have accordingly prepared are as follows:—

For Contract No. 1.....	\$9,100 per mile.
“ 8.....	6,250 “
“ 17.....	17,500 “
“ 18.....	25,000 “
“ 9.....	15,000 “

I do not pretend that the line I have selected is the best to be obtained in the country traversed, but I put it forward as one undoubtedly to be obtained with the characteristics and at the cost which I shall detail, and I fully believe that an instrumental survey will find many points for decided improvement.

The line commences by a junction with the railway from Ottawa to Renfrew, at a point west of the bridge carrying this railway over the Mississippi River, and its general bearing is almost due west. It passes through the townships of Ramsay,