and 171 feet under the summit of the Grand Trunk Railway at Acton. Taking the level of the high land at Owen Sound at 360 feet above Lake Huron, the summit of the Central Line in Albion will be within a few feet of the same level. The descending grade from this height (360 feet) to the level of Lake Huron at Owen Sound is unavoidable under any circumstances, and considering the necessity of extending the Central Line to Southampton, 25 miles distant, or some other port on Lake Huron, at some future period, the question of a switch or a stationary engine with an incline, will remain open for discussion, as it cannot be decided until a thorough local examination has been made. The above information comprises what may be technically called the Engineering difficulties, which is certainly a misnomer as applied to the Central Line, compared with other Railway lines, the result of the comparison tends satisfactorily to show that the Humber route is the most eligible in many respects, and the difficulties less than have been ordinarily encountered on other Railway lines.

The advantage of low over high grades on Railways are self-evident to every person at all acquainted with their working, and may be enumerated as follows:—Economy in working; increased speed, and greater security. If time permitted, it was my intention to have made a few tabular comparisons, shewing the superiority of the proposed Central Route, over the Grand Trunk and intended North West Railways, as a means of communication with Owen Sound. It will be probably sufficient for the present to state, that a saving of at least two hours in running time would be in favour of the Central Line, calculating the ordinary speed at 25 miles per hour, and the distances as 108 and 140 miles respectively.

As a familiar illustration of the effect of high grades, on the effective power of the Locomotive with even an ordinary load, I would mention the following. "There are few persons in the habit of travelling on Railways, who have not been stopped on a heavy grade, in order, as it were, to give the Locomotive time to draw breath, like a corpulent man running up a hill, who must stop occasionally to take in a fresh supply of combustion air, whereas on a level, he might have run twice the distance."