

*account for this excess."* But as a due allowance for curvature doubtless entered into Major Robinson's carefully prepared plans and calculations, we can confidently rely on the correctness of his figures.

If, however, we take Major Robinson's line "pure and simple," from Quebec to Halifax, as 635 miles and place it in juxtaposition with the Central line, which, by Mr. Fleming's own showing, is 572 miles from River du Loup to Halifax, to which must be added 118 miles to Quebec, making 690 miles, we then have a Northern line that is actually 55 miles shorter than Mr. F.'s favorite one.

It does not, however, follow in all cases, that the mere *saving of distance* is the object to be attained in laying out a railroad. There are other considerations, which often make it preferable to adopt a longer line, and that one on which the greatest amount of traffic is to be had, is preferable to a shorter one, which will not afford this to the same extent. The line which affords the easiest slopes and the most level surface is preferable, even if longer, to one on which the grades are heavy and the surface rough and uneven. The cost of levelling declivities should always be avoided, even at the expense of distance, for steep ascents and descents always occasion delays, and necessitate a lower rate of speed and greater expense. By the table of gradients which we give, and which even Mr. Fleming admits is largely in favor of Major Robinson's line, it will be seen that the advantages in this respect are greatly in favor of the Northern Central.

But, if *shortness is the great desideratum*, and must be had at any sacrifice, we are now prepared to assert and show that a *still shorter line* can be had, and that, too, *by a Northern route*. By leaving the Major Robinson line at the point where it crosses the Restigouche, and instead of running along the Bay Chaleurs to Bathurst, we ascend the Valley of the Upsalquitch, and then, by one of the tributaries of the North West Miramichi, proceed to Indiantown we shall still further shorten the distance by 40 miles, making a line 95 miles shorter than the Central; but this will be at the expense of all Gloucester and the most populous portion of Restigouche, and while we do not consider it advisable, we mention it for the purpose of showing how much the advocates of *short*