

mile, and that in the event of the requisite funds being placed at the disposal of this company, the whole work might be completed and put into operation in five years.

From the extremely unfavourable surface over which the road was necessarily to pass for the first eight miles, in order to reach the valley of the Patapsco, it was early perceived that the expenses across that district would be very heavy, but it had been ascertained that in adopting this route, a line of road would be secured, which, by some extensive embankments and deep cuttings near to the city of Baltimore, could be located with but a single summit for a distance of 180 miles, and with only two summits requiring stationary power along the entire line to the Ohio river, a result which, it is believed, has not been attained on any line of rail road projected for the same extent, in any other country. The approach to the first of these summits is by an acclivity so gradual as not to exceed an average of about 18 feet to the mile, and as the amount of tonnage passing westward will not be as great as that passing eastward, this line will consequently be more advantageous than if it were a perfect level.

The inclined planes over the first summit, at Par Spring ridge, will be passed by an additional local power, and from the western side of that ridge to the coal mines near Cumberland, the route is so favorable as to be adapted along the whole distance to locomotive steam engines; taking, therefore, the entire line together, it will be decidedly superior to a level road, since, like that on the eastern side of the Par ridge, the acclivity for a very great portion of the distance is in the direction of the lesser tonnage which will pass upon the road.

From the eastern base of the Allegany mountain a series of inclined planes will be required to overcome a summit of about 1200 feet, from thence it has been ascertained that the road may be conducted to the Ohio river upon a line so nearly level as to be traversed without difficulty by locomotive steam power.

Although at the time of the commencement of this great national work, the individuals who embarked in the undertaking, had arrived at the conclusion that the system was capable of affording greater facilities for the transportation of both merchandize and passengers than could be attained, either by the best constructed turnpike roads or canals, yet the anticipations then formed of its capabilities have been vastly more than realized. The many important im-