

The amount of this latter item would perhaps be about 5000 dollars per mile, to which must also be further added the proportional expense per mile for the requisite lockage.

3. On the whole therefore, whether we take the estimates as already stated, or with such additions as will make them of the most permanent character, still the ratio of the probable expense of their construction will on the ground here estimated, be about as 2 for the canal to 1 for the rail road.

4. I have not seen the last estimates for the canal on the intermediate grounds, and therefore cannot institute so strict a comparison with regard to them. My opinion is, that in the most favourable ground along the river bottom lands, the expense of the canal would exceed that of the rail road from 25 to 50 per cent

In relation to other routes. Until we have definitive calculations for a greater variety of instances in this country than we are yet able to lay before the public in relation to this question, we can only offer our opinions upon the limited data within our reach.

In the report of the U.S. board of Internal Improvements, the cost of constructing the Chesapeake and Ohio Canal from Georgetown to Cumberland, was estimated at about \$8,000,000. It is true, other estimates have since been made reducing the amount perhaps to about \$5,000,000. But it is understood that, so far as the construction of that work has been prosecuted, the latter estimate has been found to be wholly inadequate, and I am of the opinion that, unless the dimensions shall be contracted, or the work be made less permanent in its character, the estimate first mentioned will not be far from the amount which that work will have actually cost should it be completed to Cumberland.

5. It is confidently believed that the cost of the rail road to Cumberland inclusive of the extraordinary expense of that portion of it between Baltimore and Ellicott's Mills will not exceed \$5,000,000

The estimate made by the same board for the entire canal from Georgetown to Pittsburg, amounted to about \$12,000,000. It is conceived that the cost of the rail road would not be one half of this amount and it might not exceed one third of it.

The stupendous reservoirs and tunnel and the numerous locks which have been considered necessary in crossing the mountains on the middle division of the canal would be dispensed with in case of a rail road, and the comparatively insignificant expense of inclined planes and stationary steam power substituted.

It is believed that the expense of constructing a canal from Baltimore to the Point of Rocks would be double what the rail road between the same points will cost.

The estimate, reported by Dr. Howard for a canal from Georgetown, D. C. to Baltimore, the length being 44½ miles,