

2ndly.—THE CAPACITY OF THE CANAL FOR TRANSPORTATION

Upon this subject, your committee have sought information from the most approved sources, and have amassed a vast fund of information. Being restricted however to the limits of a partial report, made under the most unfavorable circumstances, and in the midst of oppressive engagements, they ask leave to refer to the report of the general committee of the stockholders of the Chesapeake and Ohio Canal company, presented in the year 1839, which seems to have been prepared with great care and accuracy, for a comparative view of the capacities of the Erie and the Chesapeake and Ohio canals. It is a very great error to suppose that canals for the conveyance of other articles are more profitable than those for the transportation of minerals. On the contrary, coal canals both in England and in this country, have been pre-eminently profitable; while the Erie canal of the State of New York is almost the only canal known of its kind, which has yielded heavy profits. But this branch of the subject will be more fully examined within. We now quote from the report referred to: "What is the capacity of the Chesapeake and Ohio canal to transport the coal in the Allegany basin, and what amount of tolls may be anticipated to reimburse the large expenditures involved in its construction?— Upon this subject, the committee have spared no pains to acquire correct information, and a brief summary of the result will now be submitted.

"The subject naturally divides itself into two branches; the first relates to the capacity of the canal from the plan of construction which has been adopted, the second to the supply of water to pass the trade.

"1st. As to the capacity of the canal. Our canals of four feet depth, with locks fifteen feet wide and ninety feet long, it seems to be ascertained, that the most economical medium of navigation is a boat carrying fifty tons. The depth of the Chesapeake and Ohio canal being six feet, the dimensions of its locks being fifteen feet in width by one hundred in length, it is supposed that boats of eighty tons will be best adapted to its use. Much larger loads may be readily transported, but we have assumed that of eighty tons, as the most convenient and economical. The navigation on this canal, judging from actual experience and observation, will exceed, rather than fall short of three hundred days in the year. The longest season of navigation on the Erie canal for the fourteen years preceding 1837 inclusive, was