THE CANAL.

The Chesapeake and Ohio Canal, with the terminus at present contemplated, extends from Georgetown, in the District of Columbia to the town of Cumberland, in Allegany county, Maryland, a distance of $184\frac{1}{2}$ miles. About five miles of the canal is within the District; the entire residue of the line is within the State of Maryland. Of the entire line, 134½ miles, extending from Georgetown to Dam No. 6, are finished and navigable, and the trade thereon is steadily increasing. Thirty-one and seven-tenths miles of the work on the remaining fifty miles have already been executed, at a cost of \$2,892,000, and there only remain eighteen and three-tenths miles of the work to be done to complete the canal and open a through navigation from the tide water of the Potomac The amount required to finish these eighteen and three-tenths miles, according to a detailed estimate made by the Chief Engineer in 1842, was \$1,545,000. That estimate was made in reference to the cost of the work which had been done at a time when provisions were high and labor scarce. Now, however, provisions are low, and labor is abundant, and these advantages must necessarily enure to the benefit of the company.

DIMENSIONS AND COST.

The depth of the Chesapeake and Ohio Canal is six feet throughout, but its transverse section varies. From Georgetown to Harpersferry, a distance of sixty miles, it is sixty feet wide at the top, and forty-two feet at the bottom. From Harpersferry to Dam No. 5, (forty-seven miles,) the top width is fifty feet, and bottom width thirty-two feet. From Dam No. 5 to Cumberland, (seventy-seven and a half miles,) the top width is fifty-four feet, bottom width thirty feet. The basin of the canal at Cumberland is six hundred and nine feet above the level of tide water at Georgetown. This ascent is overcome by one tide and seventy-five lift locks, averaging about eight feet lift. The locks, so far as the work has been finished, are constructed in the most durable manner, of solid masonry, and each has a chamber of one hundred feet long and fifteen feet wide in the clear. They are constructed with a view to a double lockage, whenever the exigencies of the company may require it; but, as we shall presently show, the capacity of the canal, with single locks, as at present, is fully equal to the accommodation of a trade sufficient to gratify the most extravagant desires of its supporters. The sheer cost of the canal up to this time is as follows:-

For the acquisition of lands,	-		\$402,913 94358,951 04
For the engineer department, For construction,	-		- 9,013,837 56
Total, -	-	•	\$9,775,702 54

CAPACITY.

When the canal shall be finished and filled to its capacity, boats carrying 100 tons of tonnage may navigate its entire length with