

charge. In the plan for its structure, which they finally adopted, if they have erred, their error is on the side of public utility. For reasons which they deem it unnecessary here to detail, as they would be but a repetition of reports of Committees of the Chesapeake and Ohio Canal Convention, of the House of Representatives, and of the Engineers, both military and civil, in the service of the United States, they have given to the structure of a great public work, a character as national and as perfect as they could render it in reference to the resources actually provided, or to be rationally anticipated for its execution.

The breadth of the canal, where practicable, without a very enlarged expenditure, they have fixed at sixty feet, for the surface of the water; its depth, for the present, at never less than five, but ultimately at six feet. Its narrowest breadth at the surface (and this will but seldom occur) will be fifty feet. Its breadth at bottom (generally forty five feet) will depend upon the quality of the earth through which the canal passes, and the facilities afforded for the inner pavement of its slopes, as it progresses. All abrupt curvatures in its direction, calculated to change suddenly the line of motion, will be avoided where practicable, and so far, not one occurs. The inner lining of the canal banks with stone, to save future repairs, will be resorted to wherever the excavation furnishes abundant materials for the purpose, and they can be employed on economical terms.

Its locks will be, throughout, of stone, with chambers 100 feet by fifteen feet, in the clear. The lock gates will be of locust frames; six paddle gates opening from the lateral culverts, and four in the upper lock gates, extending to the bottom of the chamber, will facilitate their filling, while every possible facility will be provided to empty them in the shortest possible time. For this reason it is in contemplation, by double proposals for the construction, to consider and decide upon the comparative expediency of doubling them, as far at least up the line as to the mouth of the Shenandoah, or throughout the first sixty miles of the canal.

The last feeder in descending, will be taken from the river, just above the Little Falls, and is ordered to be constructed of the width of eighty, and depth of six feet, with a view not only to obviate all future doubt of a sufficiency of water for the several canals in contemplation, to the Navy Yard, to Alexandria, to Annapolis, and Baltimore, but to the application, if it shall hereafter be