

experimental lines, the extent of wood and cleared land, and the proprietors' names as far as they have been ascertained.

The sheets of Profile numbered from 1 to 19 inclusive, are the vertical projections of the line used as the basis of the estimates. On them are given the heights of the ordinates of the curves at every three hundred feet on some parts of the route, and at every two hundred feet on others. The plane of comparison to which the ordinates are referred, is not the same for every part of the line, as may be seen by reference to the profiles—a circumstance that has not been overlooked in arranging the grades. On these sheets likewise are shown the extent of wood and cleared land, the width of the water courses and the nature of the soil as it affects the question of the cost of excavation and embankment, and they show the inclination of the gradients and the quantities of excavation and embankment. Accompanying them is a table of grades.

The line now referred to begins at Somers' Cove on Little Annemessix which enters Tangier sound immediately north of Watkins' Point, and nearly opposite to the mouth of the Potomac river. From Somers' Cove it was traced by the shortest route, south of great Annemessix river, by the head of tide water of Back Creek to Princess Anne on the Manokin river, and thence crossing Manokin river, Wicomico creek and Wicomico river, west of Handy's ferry, and some of the heads of Barron's creek to Nanticoke river, 7 $\frac{3}{4}$ yards from the Delaware State line, thence it was traced by a very direct course to Marshy Hope branch of Nanticoke, which it crossed near the State boundary, thence by a direct line running along the eastern side of the Mill Pond at Johnson's, to Chopank river at Greensboro'—thence to Chester river at Millington, by a course lying a little to the eastward of Sudler's cross roads thence to the head of Sa-safras river by a course passing west of Georgetown cross roads—thence to the head of Bohemia river, west of the Mill Pond—thence across the Chesapeake and Delaware Canal, west of the Pivot Bridge, and thence by the Feeder Valley (so called) to the Wilmington and Susquehanna rail road east of Red

22111.

Wicomico and Nanticoke rivers are broad and naviga-