THE ANCHORAGES

Will each contain 33,000 yards of masonry. No rock being available, it is necessary to provide artificial foundations, extending to the water level with an excavation of twenty feet, that in Brooklyn consisting of a timber platform, and that in New York of piles. The Anchorage forms a mass of stone, one hundred and twenty-nine feet by one hundred and nineteen feet at the base, and one hundred and seventeen by one hundred and four at the top. The height is eighty-nine feet above the river, it being necessary to carry it up to the grade of the floor.

The four cables enter the masonry at an elevation of eighty-two feet, and, after passing into the wall for twenty-five feet, they form a connection with the chains. The latter consist of cast steel bars, thirteen feet long and ten inches wide, by one and a-half inches thick, arranged in ten sections, each containing nineteen bars and forming in all four curved lines extending from the cables to the anchor-plates. The connections are made by six inch steel pins.

The four anchor-plates are located at the base of the masonry. They consist of casting, oval in outline, with radial arms, having a dimension of nineteen feet by seventeen feet, and depth of three feet, weighing twenty-five tons each. The arrangement of the anchor walls is such as to have two large spaces in each, eighty feet long by twenty feet wide, and divided into six stories, serving for warehouses above and for an underground railway passage in the lower story.

In March, 1869, the financial affairs of the Company were placed upon such a basis as to warrant the commencement of the preliminary operations usually connected with such a work. A board of Consulting Engineers were convened at the request of Mr. John A. Roebling, with the object of examining into the general feasibility of the work and making a report thereon. Its members consisted of Messrs. Allen, Latrobe, Kirkwood, McAlpine, Adams, Steele, and Serrel. Their deliberations, substantially endorsing the plans, are contained in a report written by the President of the Board, Mr. Horatio Allen.