The towers of the Ohio Bridge, at Cincinnati, are supported by similar foundations, but of less extent and depth. The pressure upon each square foot is 3.63 tons. These foundations have proved adequate; they have never shown the least sign of unequal settlement. A slight settlement may be harmless, provided it is uniform. But whatever settlement takes place, it should occur at an early stage of the work, before the masonry reaches a great height.

To obtain a correct knowledge of the nature of the substrata, borings have been commenced on the Brooklyn side. The borehole, now being sunk, had reached a depth of 70 feet on the 23d August. So far the material encountered is composed of compact sand and gravel, mixed with clay and interspersed with boulders, which latter have detained this operation considerably. It appears from the soundings which I have taken, about 30 feet beyond the pier line, out into the river, that the river bed is composed of the same material, coarse gravel and sand, and very compact.

The depth of water outside of the coal wharf of Marston & Powers, and in front of the spare slip, near the line of the Bridge, averages about 20 feet at high tide, 25 or 30 feet out from the pier line. The bed of the East River appears to be composed of a layer of gravel and sand, of sufficient compactness to resist the action of the tides. There is no evidence that the bottom is much affected at any time by this tidal current. In the line of the Bridge the depth of water in the river