

The pile-driving was completed on the 1st of December. The piles were then cut off under water at an elevation of 89.9 with a circular saw suspended from a movable frame and worked by six men. The space amongst the piles, above the sand, was filled with beton, which served to tie the piles together, and, being enclosed by the caisson, would of itself form a sufficient foundation, if not undermined by the scour. The pit was then pumped dry and the piles were capped with flattened sycamore sticks, on which was laid a second course of timber of the same kind, the hollow spaces being all filled with beton ; on this the masonry was started on the 14th of January, at an elevation of 91.1.

During the low-water season, after the completion of the bridge, a large quantity of heavy stones which had been left over from the masonry, were collected and placed around the base of this pier, forming the foundation of a substantial riprap protection.

PIER No. 6.

A few piles were driven on the proposed site of this pier in the spring of 1867, the locations of the piers being then so arranged as to divide the distance of 577 feet between Piers 4 and 7 into three equal parts. After the summer flood these few piles were found to have collected a quantity of drift and roots, which was partly buried in the sand bar, and could be removed only with difficulty ; the location of the pier was accordingly moved 15 feet to the north, or to a point 400 feet from the old site of Pier No. 4, and these obstructions were avoided.

On the 3d of September, 1867, work was begun by driving an enclosure of sheet piling. The sheet piles consisted of pieces of four inch oak plank, the edges grooved and pointed to fit one another, and the lower ends sharpened to a feather edge. They were driven between wales, which were bolted on square timbers previously driven, a wooden follower being interposed between the iron hammer of the driving engine and the planks.* On the 28th of September the enclosure was completed, when a pit was dug with shovels within the piling ; the excavation was carried to a depth of 15 feet below the sand bar, reaching

* The plan of this enclosure and a detail plan of the form of sheet piles are given on Plate VI.