

bags were filled with sand and thrown overboard among the piles and along the side of the caisson, which suspended the scour.

On the 13th the masons began work, laying the first course of stones on the hardened surface of the beton ; in the evening of the same day the dredges were again set in motion, and the work of sinking resumed. The following day the river began to rise again, repeating the scour of the preceding week ; the wash was again restrained by the use of sand bags, over five hundred of which were thrown around the works on this and the two succeeding days. This method of protection was found effective, while it was free from the objections which prevented the use of riprap ; if stones had been thrown around the pier it was feared that they might work under the edge of the caisson and obstruct the descent ; the sand bags might also work under the edge, but their soft and yielding nature would prevent their doing harm ; some of them did actually find their way inside of the caisson, and one was brought up in a dredge bucket uninjured.

It being found impossible to lay masonry as fast as the dredges could sink the caisson, the plan was adopted of running the machinery only by night, and giving the masons every convenience for work by day. Mr. Tomlinson then took charge of the night shift, and the pier was sunk for the remaining distance under his directions. The masons were often unable to do more than set the face stones of a course, together with a few of the heavier pieces of backing, in a day, in which case the night force would be employed during the first hours of their shift in backing up with beton. The material excavated had changed to a coarse sand which was easily handled, each dredge throwing six full buckets in a minute ; the pier also settled more rapidly than hitherto, sinking five inches in an hour when everything was working well. The lower platform and the second floor were lighted by locomotive head-lights, which threw a strong glare over the works and men, and a visit to the pier late in the evening, when the machinery was all working to its best advantage, and half an hour showed a decided settlement, became a very interesting thing.

On the 19th, a pile top was found buried in the sand below dredge No. 2, which was secured by a diver and drawn out with little trouble. The next day some timber, supposed at first to be the branches of a large snag or tree, was