presence of so large a number of men in a confined space, was the provision of a water closet so arranged as to discharge its contents out into the open air. That some care had to be exercised in its use will be self-evident to caisson men.

MASONRY.

Eleven courses of masonry were laid, averaging from twenty-four to twenty-eight inches high. Each course contained from seven hundred to eight hundred cubic yards and the size of the stone varied from thirty to one hundred cubic feet. The masonry of the first seven courses was composed of rough blocks, all bedded to an uniform rise. The blocks were all rectangular in shape, with the vertical faces trimmed down so as not to exceed joints four inches wide when laid in the wall. The Kingston limestone was used alone for these courses. They were set in heavy beds of cement, and all the spaces filled in with cement or with concrete, when the spaces were large enough to admit of the latter. As the low water line was approached granite was substituted on the face in place of limestone, the latter being continued for backing.

Where the backing is all cut and composed of large blocks, such masonry can be laid quite rapidly. One whole course has been laid per week, notwithstanding the drawbacks caused by the mud and water from the dredges, and at no time was the masonry behind the excavation in point of progress. On the 10th of December the level of the masonry had arrived at ordinary high water level, and was then suspended for the season by the severity of the weather. The granite was furnished by Bodwell & Webster, from the Island quarries in Penobscot Bay, on the coast of Maine. When the regular masonry was laid off it was found that the caisson had moved one foot toward the river and nine inches toward the ferry.

The stone-setting machinery consisted of three boom derricks standing on the masonry with masts fifty-five feet high and thirty-five feet horizontal booms. They controlled all points of the stone-work. The guys were secured outside