

Six of these compressors were brought from the Brooklyn caisson, the remaining seven being purchased anew.

From the compressor house the air was carried by a ten-inch cast-iron pipe through an intermediate air reservoir, for a distance of one hundred and fifty feet under the dock, to the caisson, whence two branches of six-inch rubber hose continued it by means of the supply shafts to the air chamber below.

The idea governing the general arrangement of the air pumps was the necessity of an uninterrupted supply of air, day and night, for at least a year, under a constantly increasing duty.

This could only be done by a number of smaller machines, so that if one were out of repair the remainder would have sufficient capacity for the work.

Besides the buildings for machinery and offices, a number of sheds were erected for the accommodation of blacksmiths, carpenters, machinists, for cement and for general stores; also wash-room, clothes-houses, hospital, and resting-rooms for the caisson men.

Three unloading derricks, a double railroad track, and two overhanging platforms comprised the preparations on the dock for supplying the caisson derricks with stone.

TOWING THE CAISSON INTO POSITION.

All preparations for receiving the caisson being completed by September 11, it was on that day towed from the Atlantic basin to its final resting-place. While at the basin, seven additional courses of timber and concrete had been built upon it under contract with Mr. D. Burtis, Junior. All the outer seams were caulked and protected by felt, tin, and creosoted sheathing. The various pipes, shafts, and locks were also carried up to the necessary height.

This work was very carefully attended to under direction of Colonel Paine.

Four air pumps and boilers placed on the deck served to inflate the structure during the voyage. Its draft of water when empty was twenty-three feet, reduced by inflation to seventeen.