booms, standing on the caisson itself, and guyed from the land. They control all parts of the foundation.

For the lower courses, the Kingston limestone was used, furnished by Noon & Madden. These stone have both beds cut, but the sides and builds left rough with vertical quarry joints. The beds are exceptionally wide. As the base of the masonry resting on the timber is very much larger than the section of masonry at the water level, it is considered that this class of work is equally as good, and certainly far cheaper than regular dimension stone. All the stone in a course are cut to a uniform rise. The latter varying from two feet to two feet four inches.

Above low water, granite is used exclusively for face-stone.

In connection with the masonry, a large stone-yard has been established, three miles below the bridge, provided with fourteen derricks for piling up stone, and three double steam engines for unloading. The yard has a capacity of fifteen thousand yards. As the stones arrive from the quarries in sailing vessels or barges, they are unloaded and assorted in courses, and then reloaded upon stone scows, of which seven have been built, and sent to the tower. The cutting is all done at the quarries.

**Work in the Air-Chamber.**

On the 10th of May, 1870, the air-chamber was first entered and explored. By degrees, as the masonry was put on, and the caisson settled more, the force of workmen was increased.

The removal of the temporary wooden compartment, as well as pushing all loose material out under the edges, and cutting door-ways through the main division frames was accomplished in due time.

Several weeks were occupied in removing trap boulders which happened to come under the frames and edges. The removal of such stone from under the edge, imbedded as they were in clay, and containing often one hundred cubic