roof, the result would be a sudden drop of the caisson, and the destruction of all supports by the weight of twenty-eight thousand tons, besides running the risk of causing the caisson to leak so badly as to render its reinflation impossible. The situation was entirely different from that at the first fire, when the water rushed in under the edges as rapidly as the air escaped, and thus maintained a uniform pressure at all times. These various considerations unfortunately appeared of great weight at that time and under such circumstances of mental excitement and bodily prostration. It was concluded first to exhaust all other means for ascertaining whether the fire was out. This resolve was strengthened by the fact that at four A. M. the water thrown by the hose ran back through the orifice into which it was thrown, thereby leading us to think that the burnt cavity was filled with water and could hold no more.

The only way to ascertain the presence of fire was to bore for it at random through the solid timbers. A number of holes were bored up for a distance of two feet. They showed no fire. Others were then bored up for three feet, showing no fire. This result was of course encouraging. Time was lost in lengthening out augers and also in the boring, because the draft carried the chips up. At eight A. M. a hole four feet high revealed the dreaded fact that the fourth course of timber was one mass of living coals.

All available engines of the Fire Department were soon at work pouring water into the other water shaft. Additional forces were brought up by and by. The Fuller, a harbor fire boat, supplied eight powerful streams; the J. L. Tebo three, and the navy yard tug two more. By 10 A. M., thirty-eight streams of water were flowing into the caisson, beside the water from the pipes in the caisson itself.

Our water-shafts most certainly proved their value in this instance. Without them the introduction of such a quantity of water in so short a time would have been out of the question. By half-past three p. m. the air-chamber was filled. Total quantity of water required, one million three hundred and fifty thousand gallons.

The escape of air was regulated by the pressure gauges;