space with bags, it became possible to dig a comparatively dry pit underneath, into which it was tumbled, provided it was not large.

Several boulders occurred which delayed all settling for three or four days at a time. In order to gain time a special force of some thirty men was then organized, who worked only at boulders from eleven o'clock at night until six A.M., when the regular gangs came to work.

It may truly be said that the results of the first month's work were not very encouraging. We had a material to deal with which is difficult to remove, even under favorable circumstances, on top of the ground. The rate of descent had not averaged six inches per week, and the boulders were increasing instead of diminishing in numbers. To look forward to a rate of lowering of even one foot per week seemed hopeless.

The work inside was rendered still more disagreeable by the frequent "blows," caused by the rushing out of the compressed air under the shoe. This would continue for several minutes until a returning wave of inflowing water from some other part of the caisson would check it, leaving, however, a foot of water all over the ground for some time, until the air pressure drove it out and the occurrence repeated itself. The trenches were usually flooded thereby, and had to be pumped or bailed out incessantly. These flows were caused by change of the water level outside, due partly to passing steamboats, but principally to constant changes in the tide. The thick fog which accompanied them was always an indication that they were transpiring in some part of the caisson.

On the other hand we were gaining daily in experience. The workmen became more accustomed to the novel situation and more practiced in the particular kind of work to be done, and the heaping up of a bank of earth around the outside, led us to hope that when the caisson had sunk a few feet lower, the conditions of air pressure, and the general regimen of the caisson would become more equable, and, what was of more importance, the free access of water from without would probably be materially curtailed. These ex-