Should it become necessary to operate in a depth of water of 30 to 60 feet, then wrought iron caissons will become necessary. They will prove expensive, but will make sure work.

As it is proposed in any case to use timber foundations, a few remarks on the ravages of the seaworm will be in place here. The opinions of those who have had good opportunities to observe the habits of this mollusk about the harbor of New York, vary very greatly on this subject. While some well informed gentlemen assure me that the seaworm has entirely disappeared from the East River, in consequence of the pollution of its waters by the refuse poured in from the adjoining gasworks; others again, equally well informed, maintain that its ravages are as bad as ever. All agree, however, that the attacks of the worm are never found below the bed of the river, and that timber is safe which is buried below or is otherwise protected.

The timber foundations will be formed by layers of flat timber, alternately crossing each other, and well bolted together.

The sides of the sticks being left rough, they will be laid with wide open joints, and these will be filled with concrete; and every course, after being leveled off, will be thoroughly grouted with cement. The width of the joints, left open, will be determined by the comparative cost of timber and concrete. It is probable that timber will cost more, and in this case I propose to make the joints as wide as the timber is. An impregnation of the