Flynn's Knoll.

One mile from Sandy Hook, in northerly direction— is open to the ocean—ground water at all times, —small in calm weather, —great force in boisterous weather, —current at high tide, three miles per hour, —spring tide, four miles, —depth of water diminishes, as you recede from the west side, —in all other directions it increases, but is not over twenty feet, at low water, in any direction, within five hundred feet, —course of the tide changes in every direction, during ebb & flood, —piles for the principal breakwater, was to be driven five or six feet into the sand, —piles for the temporary pier breakwater, was to be driven eight or nine feet into the sand, —the examination of the bottom showed that the sand was coarse, more compact, & less mixed with mud, at the surface, —near it, than it was lower down, —the examination was carried to a depth of twenty seven feet, with the aid of an iron pipe, eight inches diameter, this pipe gradually settled as the sand was excavated from within, by means of a cylindrical barrel, with a valve in the bottom, every barrel full raised, except the first, which contained the surface mud, indicated the dissemination of mud, through the sand, though not to such a degree as to authorize the impression, that a stratum exclusively of mud, had in any instance been passed through, nor was the appearance, different from what is usual in the formations of shoals, of sand, in positions contiguous to a mud bottom.