solely with the view of resisting the fire of a fleet, and it stood uninjured, except as to armament, in two of the fiercest bombardments the world ever witnessed. The two faces to the works were 2,580 yards long. The land face was 682 yards long, and the sea face 1,898 yards long.

The Land Face of Fort Fisher.

At the land face of Fort Fisher the peninsula was about half a mile wide. This face commenced about one hundred feet from the river with a half bastion, and extended with a heavy curtain to a full bastion on the ocean side, where it joined the sea face. The work was built to withstand the heaviest artillery fire. There was no moat with scarp and counterscarp, so essential for defense against storming parties, the shifting sands rendering such a construction impossible with the material available.

The outer slope was twenty feet high and was sodded with marsh grass, which grew luxuriantly. The parapet was not less than twenty-five feet thick, with an inclination of only one foot. The revetment was five feet nine inches high from the floor of the gun chambers, and these were some twelve feet or more from the interior plane. The guns were all mounted in barbette on Columbiad carriages, there being no casemated gun in the fort. There were twenty heavy guns on the land face, each gun chamber containing one or two guns, and there were heavy traverses, exceeding in size any before known to engineers, to protect from an enfilading fire. They extended out some twelve feet or more in height above the parapet, running back thirty feet or more. The gun chambers were reached from the rear by steps. In each traverse was an alternate magazine or bombproof, the latter ventilated by an air chamber. The passageways penetrated traverses in the interior of the work, forming additional bombproofs for the reliefs of the guns.

As a defense against infantry, there was a system of subterranean torpedoes extending across the peninsula, five to six hundred feet from the land face, and so disconnected that the explosion of one would not affect the others; inside the torpedoes, about fifty feet from the berm of the work, extending from river bank to seashore, was a heavy palisade of sharpened logs nine feet high, pierced for musketry, and so laid out as to have an enfilading fire on the center, where there was a redoubt guarding