

#### THE NORDENFELT SUBMARINE BOAT AT CONSTANTINOPLE.

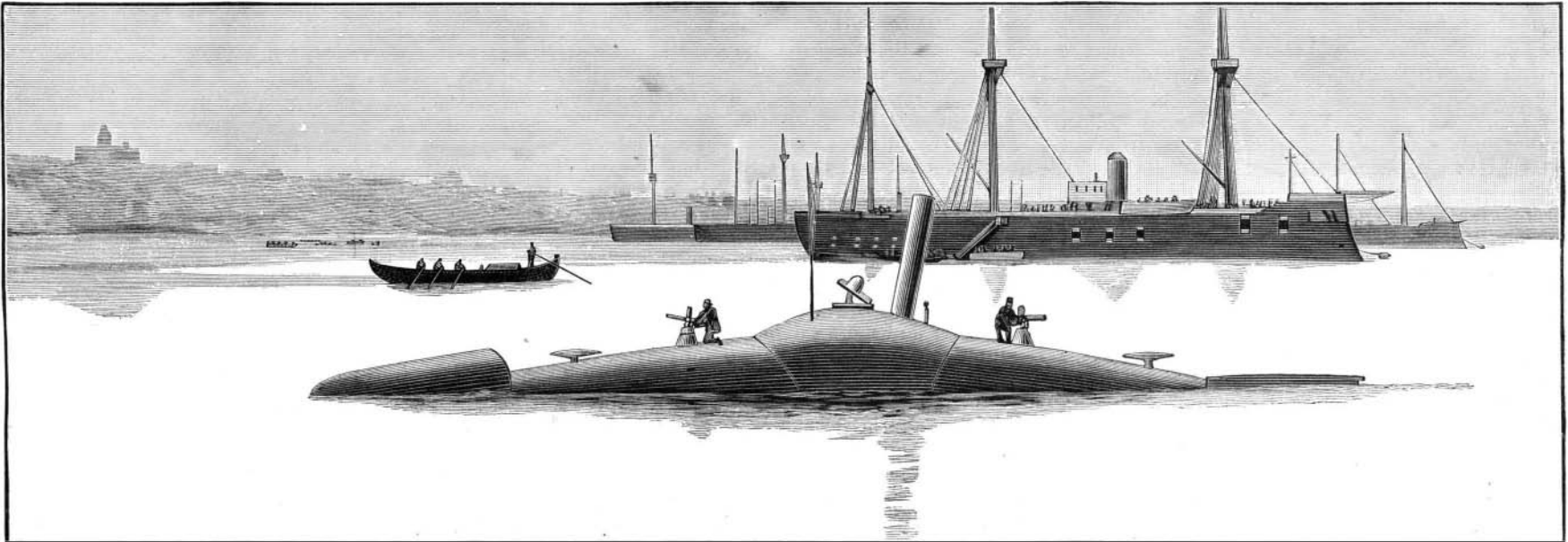
The modern Turks have ever shown much enterprise in providing themselves with the latest novelties in arms and munitions of war. Sultans Abdul Musjid and Aziz spent large sums in ironclads, while it was in a great measure due to the Martini-Peabody rifle that Turkey was enabled to make so prolonged a stand against Russia in the late campaign. They have now been experimenting with the new Nordenfelt submarine torpedo boat, two of which were ordered from the inventor last year, and being sent to Constantinople in

fresh supply, and she is furnished with the means for both attack and defense in the fish torpedoes carried in the case at the bows and the two Nordenfelt quick-firing guns, seen on the upper surface.

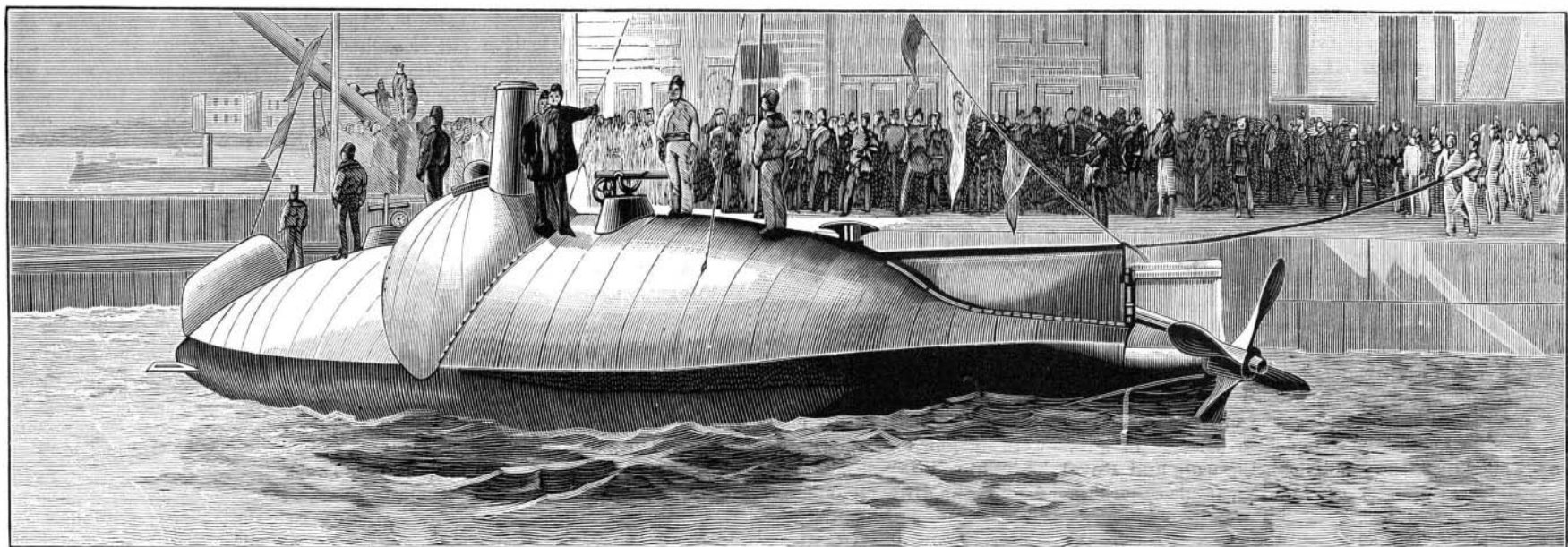
The great fact about the Nordenfelt system of torpedo boats is that the public demonstrations of its capabilities the year before last at Elsinore, of which we published illustrations, showed clearly enough that it had reached a really practical stage. It is not pretended that the boat can make a long submarine voyage. Indeed, one great drawback to such an attempt would be the impossibility of seeing ahead, as the submerged

the boat under to any depth required, and by repeating their motion she can be kept stationary at any distance below the surface which may be desired. As soon as the motion of the screws ceases, the boat rises at once to the surface, owing to her spare buoyancy. The motive power is steam, and Mr. Nordenfelt can store up the heat necessary for its generation when the boat is submerged and combustion is no longer possible. In this particular boat there is sufficient steam power when she first goes under to drive her fifty miles without relighting fires.

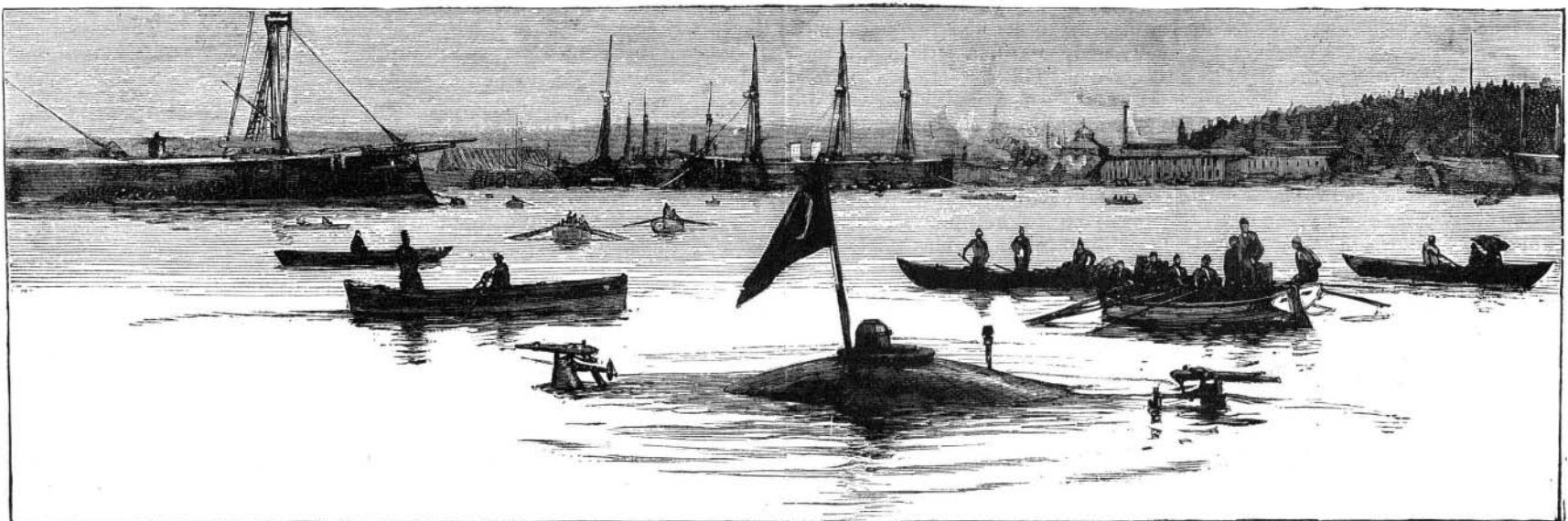
The last engraving shows the position for attack. As



GENERAL VIEW OF THE BOAT.



BOAT IN THE DOCK.



THE BOAT SUBMERGED SHOWING THE MACHINE GUNS.

#### THE NORDENFELT SUBMARINE BOAT.

sections, have been now remounted in the Imperial Dockyard. One of them was launched a few weeks since, and our engravings, from photographs by Mr. Bergren, of Constantinople, represent the little vessel in the various stages of "launching," of "making a voyage as a surface boat," and when "prepared for action." The boat is the largest of its kind as yet launched, being 100 feet long, 12 feet beam, 160 tons displacement, and is engined to 250 horse power. She is able to descend to a depth of 50 feet, to remain submerged some nine hours, and proceed at a maximum speed of ten knots. Her coal capacity is sufficient to enable her to steam for 900 knots without taking in a

craft must come up to the surface from time to time to correct her course. The great advantage claimed over the ordinary torpedo boat is its capacity for approaching a hostile vessel unseen, as it is exceedingly difficult for the ordinary torpedo boat to get within striking distance of a war ship without being detected. As a surface boat, moreover, the Nordenfelt can undertake a long voyage, and, owing to the greater strength of its construction, is better able to defend itself against the attacks of other vessels. When about to attack, the boat is submerged by admitting water until the vertically acting screws seen in the upper surface are under water. A few revolutions of these screws suffice to send

the boat approaches the enemy, she is brought lower in the water, until nothing but the small glass cupola is showing above the surface. There is no disturbance at the surface from the action of the screws to mark her passage through the water, and the cupola is too small an object in itself to arrest the eye of even the most wary observer, when a short distance off. The captain, with his head in the glass, carefully watches the movements of the enemy, directing his own boat toward her, and thus, stealthily approaching, the torpedo is sent on its mission of destruction as soon as the effective range, some three or four hundred yards, is reached.—*London Graphic.*