

Submarine Warfare In The Civil War

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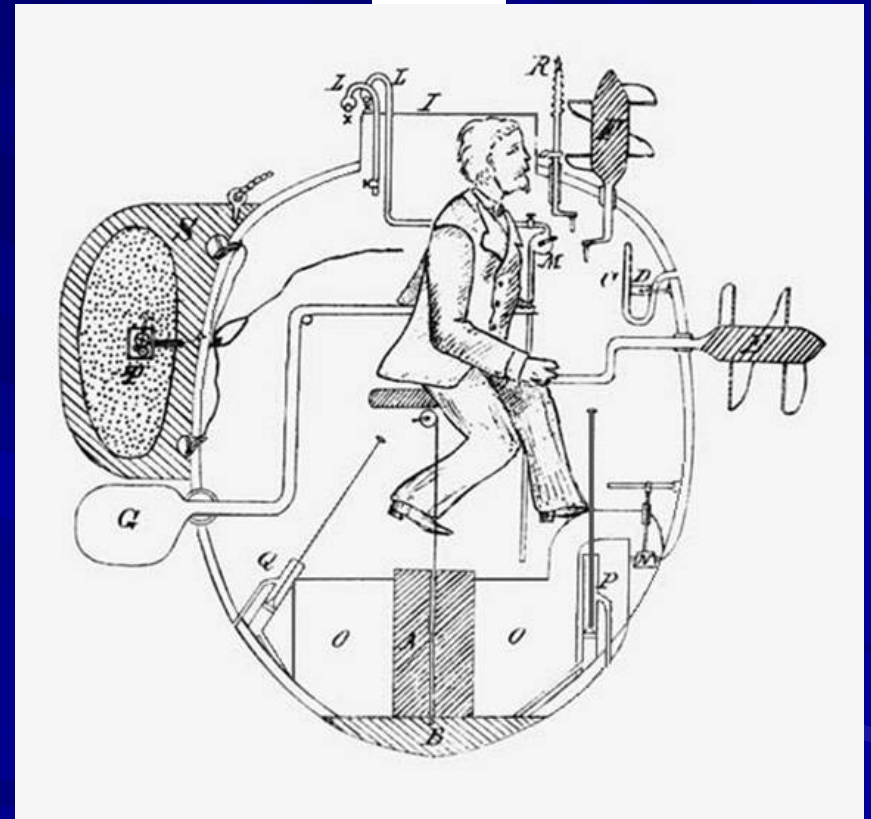
First Submarines

- The idea of a submersible vehicle is not new.
Quote [Hicks and Kropof, p. 5]
- The *Turtle* of 1776 was developed by a Yale graduate named David Bushnell.

First Submarines

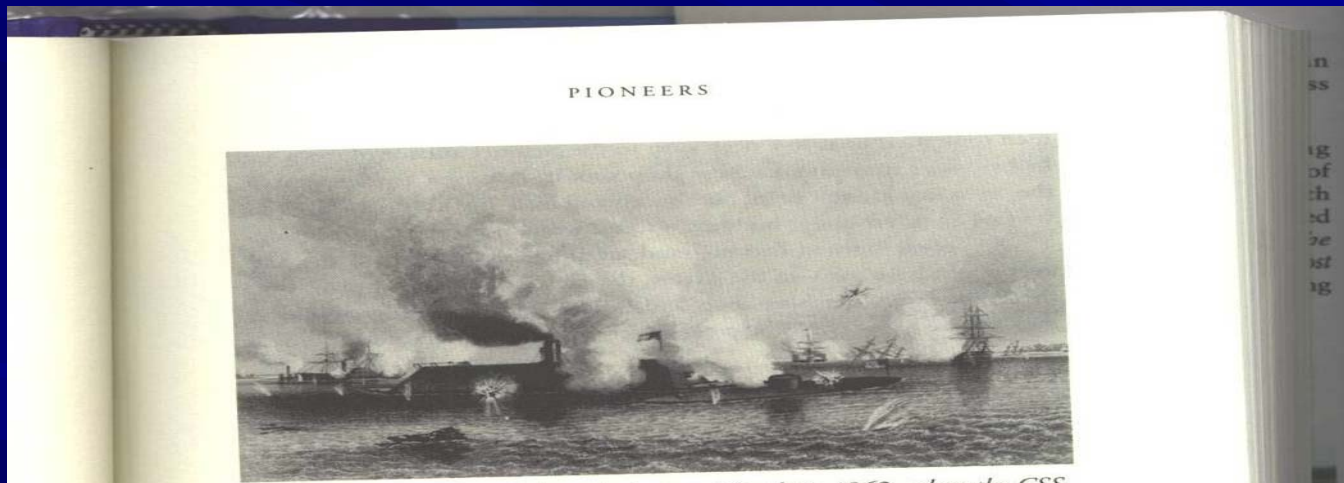
- Wartime Application: “During the Revolutionary War, the *Turtle* made one unsuccessful try at sinking a British ship in New York harbor by stabbing it with a screw like spar, trying to affix a mine. The Submarines pilot grew frustrated and gave up when he couldn’t get through the vessel’s copper siding.” [Hicks and Kropof, p. 5]

Turtle



Precursors To Submarine Warfare During The Civil War

- The development of Iron Clad Ships changed the way Naval Battles were fought. Naval Doctrine would have to be re-written during the civil war. This Inventive atmosphere set the stage for Submarine Warfare.



Precursors To The Submarine

- The David was not a true submarine but floated so close to the water line it was hard to detect from any distance and harder to hit with gun fire.

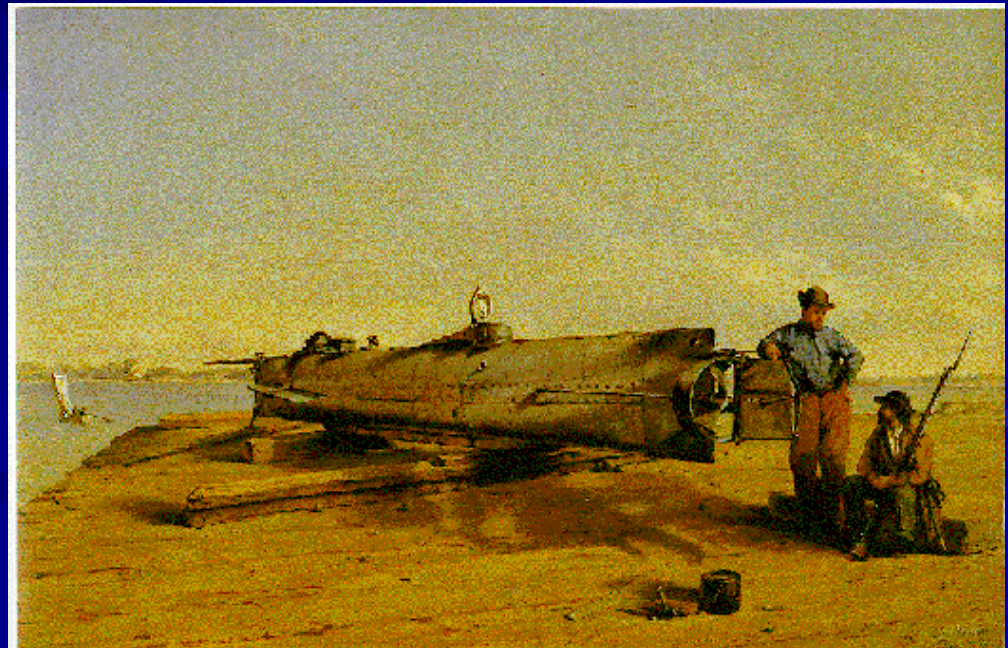
Submarines of The Civil War

- The Confederacy created The *Pioneer*, a 34 foot long submarine with no ballast tanks. Could travel under water and surface at will but was slow to maneuver, unstable, and could only go 2 knots an hour. After some successful trial runs the craft was scuttled just before the Union Army took New Orleans on the 25 April 1862.



Submarines of The Civil War

- The Hunley was created by the same inventor's who built the Pioneer. They attempted to improve on all the shortcomings the Pioneer in the new submarine.



The Hunley

- The Hunley's first crew lost August 29, 1863.
- The second crew lost October 15, 1863.
- The third crew lost the night of February 17, 1864 after attacking the USS Housatonic.



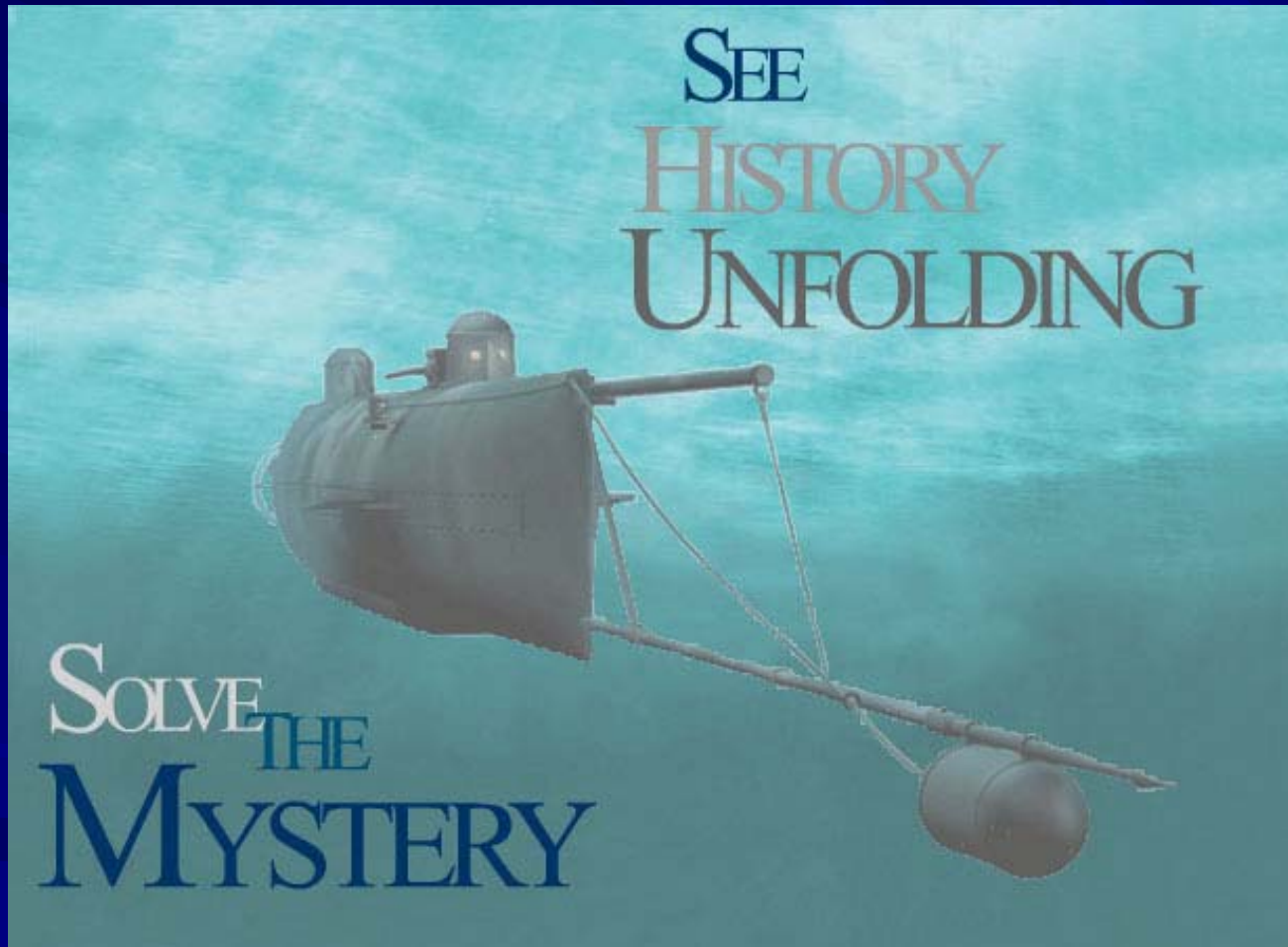
The Hunley's Success

- The Hunley attacked a ship 2 miles out of the harbor because the harbor ships had prepared for a submersible attack by throwing nets and logs off the sides of their ships. The crew on the USS Housatonic sighted the Hunley just before it rammed them and describe seeing a blue light from off their bow after the explosion.

The method

- The Hunley was equipped with a spar projecting forward of the bow with a charge attached to the end. The supposition is that the Hunley charged the Housatonic and drove the charge into the side of the ship with a spike attached to the end of the charge. Then backing up and unwinding a line lanyard they detonated the charge once a safe distance from the ship.

The weapon



The attack



The USS Housatonic



The Hunley

- The Hunley is still a subject clad in folk lore and mystery. Since the fateful night in February of 1864 stories of the boat and crew are contradictory and inaccurate.



The Hunley

- Until the Hunley was located and raised from the ocean floor the most complete account of its existence came from the builder and first officer, William A. Alexander, in a news paper article in 1902. “As the last surviving crew member, Alexander decided to set the record straight. In June 1902 the *New Orleans Picayune* published the most complete history of the Hunley ever written, Under the headline THE TRUE STRORIES OF THE CONFEDERATE SUBMARINE BOATS.” [Raising The Hunley p. 101,102]
- In the article William claims not to remember the exact dimensions of the Hunley and his estimates turn out to be incorrect.

Willian's Hunley sketches

Photo # NH 58769 Cutaway drawings of the Confederate submarine H.L. Hunley

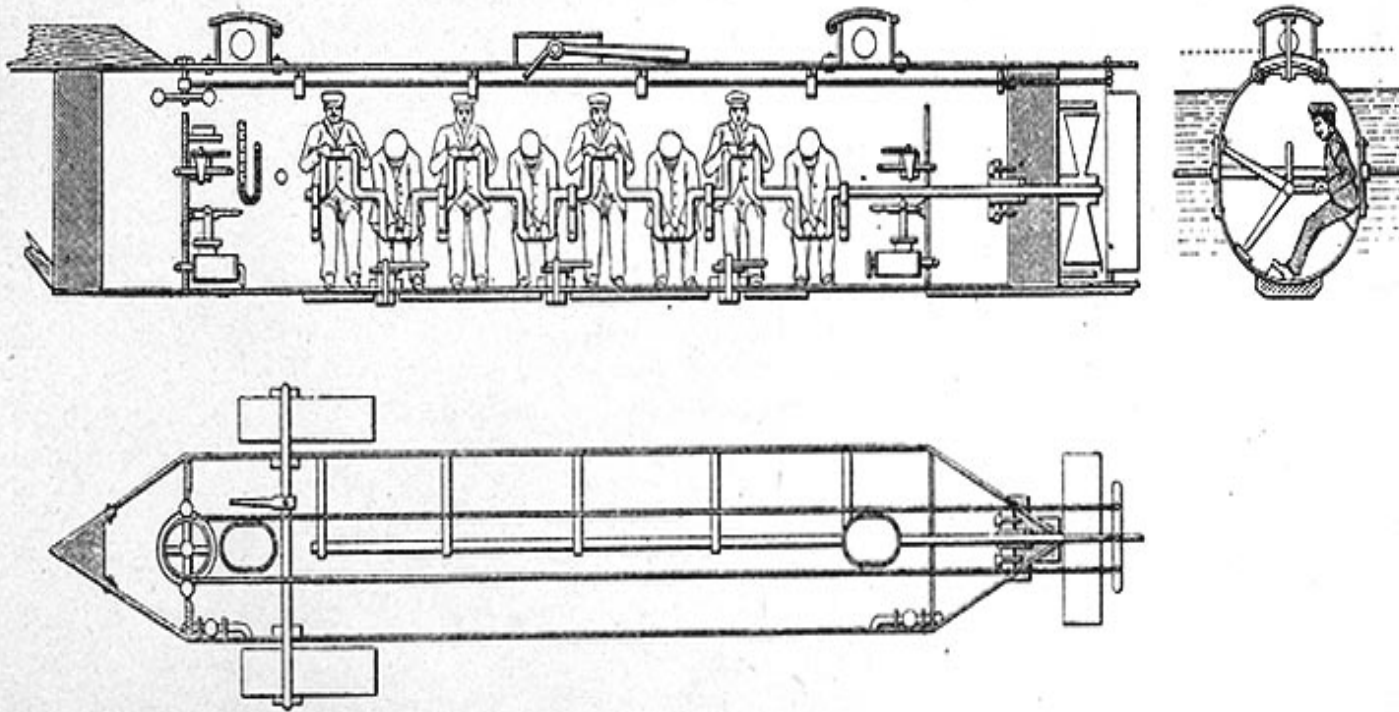


FIG. 175 à 177. — Le *David* de Hunley reconstitué d'après les dessins de M. William-A. Alexander (1863).

The Raised Hunley



More fantasy

The account in By Sea and By River "The Naval History of the Civil War" by: Bern Anderson; Claims that the Hunley was towed to sea by a David [p172]. All other sources do not make mention of this and the tale of a noisy steam engine powered David sneaking by the Union War ships in the harbor does not make much sense.

The True Tale?

- The raising of the Hunley has raised as many questions as it has answered. The film by: National Geographic “Raising The Hunley” is a great film depicting the events surrounding the recovery of the boat but does not speculate much on the events which caused the lost of the boat or it’s crew after sinking the Housatonic.

Hollywood's Version



Lessons Learned

- Following the Hunley submarines were not used in warfare until 1914. The submarines created after the Hunley had many of the same features as the Hunley.
- “By the time of the Second World War, the United States had nearly 250 submarines. They had become one of the...most effective tools in the Navy’s arsenal. And still, the boats followed the basic formula designed by James McClintock in a little southern machine shop. [Raising The Hunley p.132]

Summary

- The fact remains that the Hunley was the first true submarine to successfully attack and sink a ship in combat. This distinction places the crew and craft in the history books however contradictory the details may be.