

ONE-HUNDRED DAY MIRACLE

How the USS *Monitor* became the Navy's first "total system" weapon design

BY ROSALYN O. BARRY

Among the earliest military "total system" weapon designs was the USS *Monitor*, assembled by the bold and brilliant engineer John Ericsson — called "cracked" by some, considered difficult or arrogant by others — whose single-minded attention to his work and his belief in his design made possible turning out the USS *Monitor* in just 100 days. Disbelievers in the ability of his metal "cheesebox on a raft" to float, watched and made bets when the gunboat first was launched as Ericsson, with supreme confidence, stood on the deck, riding his materialized dream onto the water. Bookmakers made little profit that day.

Defense rather than attack, from the first, was Ericsson's intent and certainly his commission: To design a ship that could defend the Union's Navy against the Confederate Navy's ironclad CSS *Virginia* (*Merrimack*).

When the young nation of the Confederate States of America was born 4 February 1861, every vessel in the US Navy was built of wood. With these wooden ships, the Federal government, in its fight to "preserve the Union," would have to control Southern waters, interdict Confederate shipping, blockade ports and rivers, attempt to seize enemy forts, harbors, and other strategic and tactical installations in the eleven states that formed the Confederacy: South Carolina, Mississippi, Florida, Alabama, Georgia, Louisiana, Texas,

Virginia, Arkansas, Tennessee, and North Carolina.

At the outbreak of the Civil War in April 1861, Stephen Russell Mallory, for ten years a US Senator from Florida and a Chairman of the Committee on Naval Affairs, became Secretary of the Confederate Navy and could well imagine the military strength of sending an iron-plated ship against vulnerable wood.

The idea was not new, either with Mallory or Ericsson; England and France had for some years experimented with protecting ships with armor. In fact, since man first took to warring on the seas, defense was part of it: Ancient Grecian ships carried lead plates, Norsemen carried shields and added metal strips to their vessel's wooden hulls.

Mallory realized that the new nation had to achieve some sort of naval balance if it was going to secure its lines of trade and communication with Europe and South America. He also knew the agricultural-based Confederacy couldn't match the Union in either numbers of wooden ships or in shipbuilding capability. But he'd watched the growth of iron-armored ship technology carefully and pressed the Confederate Naval Committee towards a bold step:

"I regard the possession of an iron-armored ship as a matter of first necessity. Such a vessel could at this time traverse the entire coast of the United States, prevent all blockades and encounter, with a fair

prospect of success, their entire Navy... inequality of numbers may be compensated by invulnerability; and thus not only does economy but naval success dictate the wisdom and expediency of fighting with iron against wood, without regard to first cost."

Mallory was in luck in that the South gained possession of the Norfolk (Gosport) Navy Yard. When the War Between the States broke out, the US Navy controlled the Norfolk Yard, a major shipbuilding facility and a depot for guns, powder, machinery, steam engines and tools. Also berthed there was one of the best ships in the Navy — the steam frigate USS *Merrimack* (often spelled "Merrimac") that was undergoing repair. She had been ordered to Philadelphia to prevent possible capture by the rebels, but was still waiting for her guns when the State of Virginia seceded from the Union,

On the night of 20 April 1861, retreating Federal naval personnel evacuated the base; they set fire to many of the yard buildings and destroyed or removed as much equipment as they could. When the Confederates took over the Navy Yard, they found over 100 heavy guns, 2800 barrels of powder

Sadly, one of the most famous naval battles in history took place between two American ships. The ferocious fight between the USS *Monitor* and CSS *Virginia* (*Merrimack*) has been depicted in numerous paintings and lithographs, including this magnificent rendition issued by Louis Prang & Company.