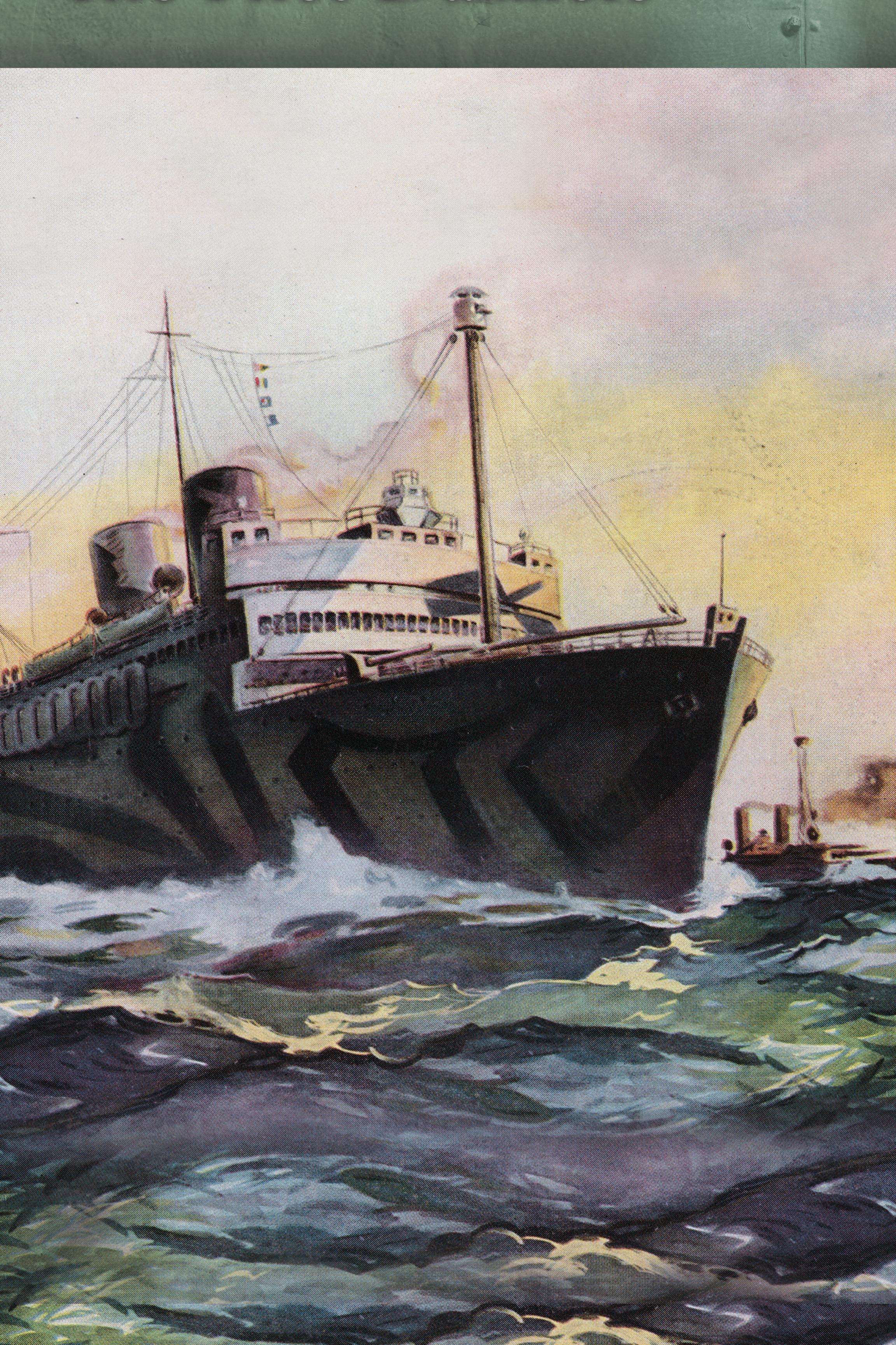
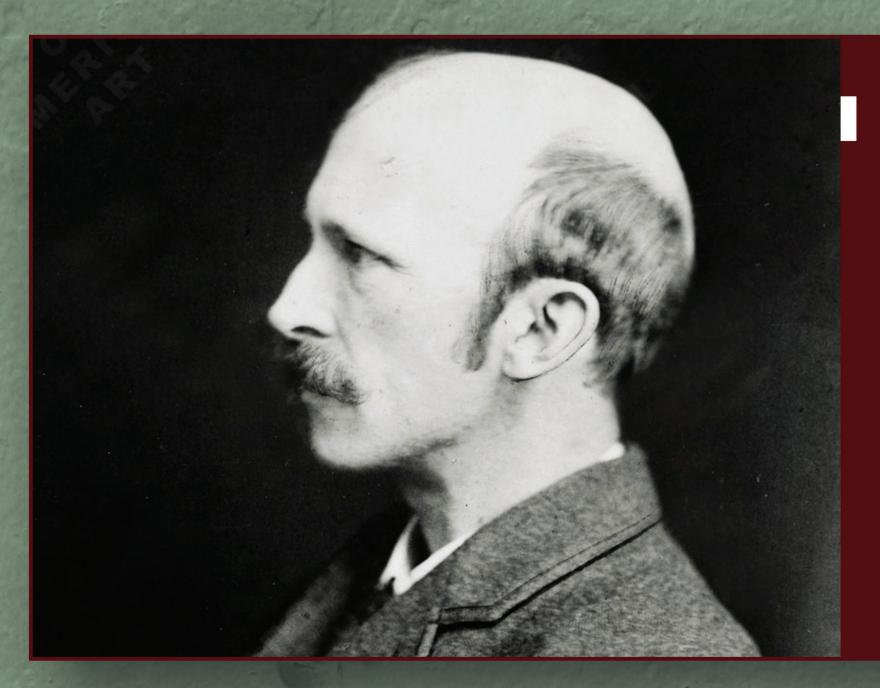
The First Dazzlers

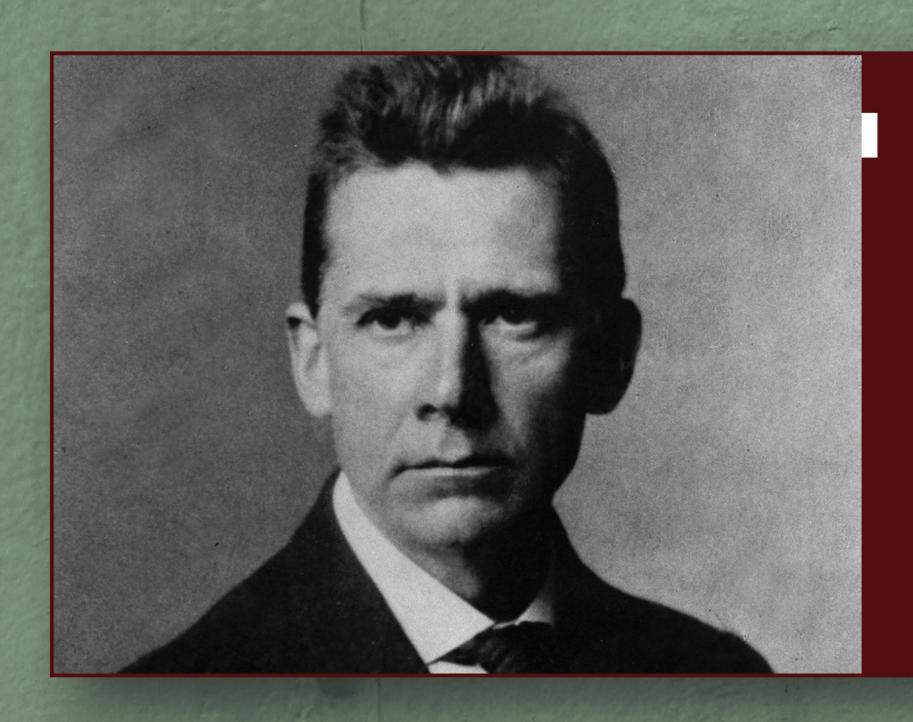


By 1917 the world war, a bloody stalemate in France, had become a deadly contest at sea. Merchant ship losses to German submarines — 1-in-4 on each trans-Atlantic passage — threatened to starve Great Britain into submission. In response, the British adopted *Dazzle*, a novel ship camouflage based on the work of Abbott Thayer, George de Forest Brush and Norman Wilkinson.



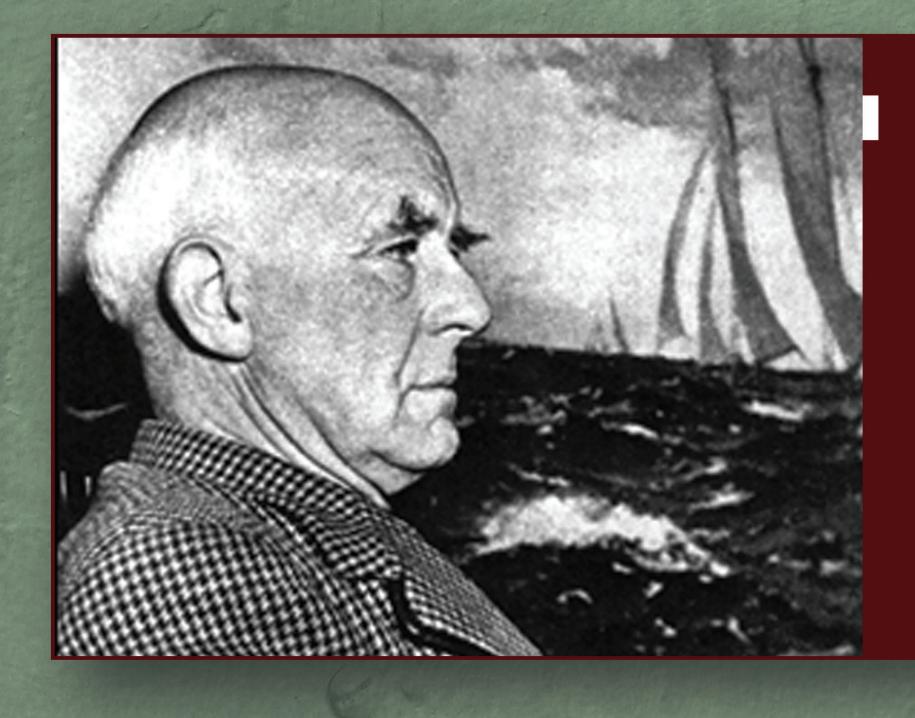
Abbott Thayer

Known as the "father of camouflage," American artist and naturalist Abbott Thayer derived his ideas from the natural coloration that protects certain animals from predators. Thayer patented his ship camouflage paint scheme in 1902, but his idea would not be adopted until World War I.



George de Forest Brush

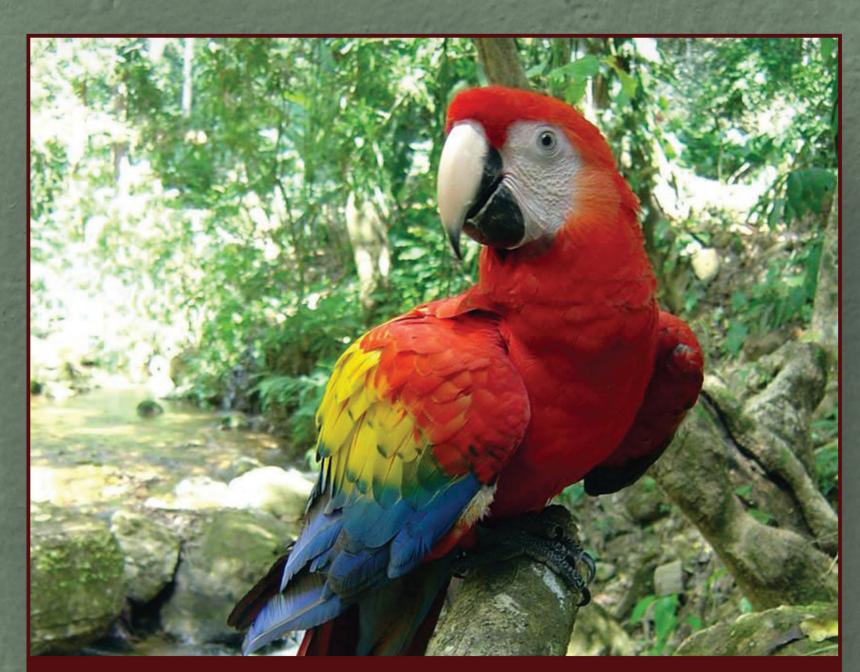
A neighbor of Abbott Thayer, naturalist and artist George de Forest Brush collaborated with him on camouflage schemes, and proposed the concealment of objects by reversing their light and dark areas, a technique he called *countershading*.



Norman Wilkinson

English artist Norman Wilkinson left the *Illustrated London News* and joined the Royal Navy Volunteer Reserve during World War I. Like Thayer and Brush, Wilkinson concluded that ships at sea could not be hidden but could be visually distorted, and proposed his own version of Dazzle camouflage to the Royal Navy in April 1917; the British Admiralty quickly accepted and implemented his design.

A Gray Wolf displays its naturally counter-shaded coat; the wolf's sunlit head and back are darkened by gray fur, while its shadowed chest and belly are lightened by white fur. In effect, this breaks up the animal's outline, making it appear to be part of the snow-covered landscape.



Against a background of tropical foliage, the Macaw's high-contrast coloration breaks up its shape, thereby confusing its predators.





How Razzle Dazzle Worked

Taking their inspiration from concealment coloration in the animal kingdom, early camouflage designs aimed at either concealment or distortion.

George Brush's countershading, derived from animals like the wolf, had limited success when applied to the smoke-belching steamships of World War I, but became the basis for the Navy's post-war camouflage designs, especially on aircraft.

Brightly-colored animals, such as tropical birds, inspired Thayer and Wilkinson to protect ships from predators — in this case, enemy submarines — in the same way. They theorized that high-contrast, irregular paint schemes would distort a ship's apparent size and aspect at a distance.

"The primary object of this scheme was not so much to cause the enemy to miss a shot when actually in the firing position, but to mislead him, when the ship was first sighted, as to the correct position to take up."

NORMAN WILKINSON
Inventor of the British Dazzle System, 1919

Dazzle Becomes Razzle Dazzle

The United States Navy followed the development of Dazzle in Great Britain with great interest. In March 1918, it established its own program, which built on and expanded the British Dazzle system with new patterns of "war paint" and experimented with vivid colors and modern art designs.

The American version was dubbed "Razzle Dazzle" after the work of Abbott Thayer. Applied to thousands of ships built during the war and combined with developing anti-submarine measures, Razzle Dazzle helped reverse the tide of the U-boat war to break the stalemate in Europe.



An American Razzle Dazzle scheme applied to the freighter SS *Absecon*, built in 1918.



British Admiralty Dazzle applied to RMS *Olympic*, circa 1917.

