

# Holland I

This vessel was John Holland's first step toward the development of the modern submarine. Built and tested in 1878, the *Holland I* is a one-man transportation vessel. While not a great success on its own, the *Holland I* proved that Holland's principles were more than just theoretical. The experiments he conducted in this vessel in May and June of 1878, persuaded Holland's financial backers to provide him the funds to build a second boat.

Holland originally planned for the operator to use the submersible to approach an enemy ship undetected underwater. Upon arrival, the operator (in a diving suit) would exit the *Holland I*, plant a torpedo on the enemy's hull, return to the *Holland I*, pump out all of the water that had flooded the vessel, and then slip away before the torpedo detonated. Poor visibility underwater quickly proved such a plan impractical.

After he had concluded his experiment, Holland stripped the *Holland I* of all useful equipment and sunk her in the Passaic River, above the Great Falls. In 1889, an attempt was made to raise the ship and sell it for scrap. The effort was not a success, and the turret was torn from the submarine in the attempt. In August 1927, a group of young men located the hull and excavated it from the river bed. In October, it was paraded through the streets and ceremonially presented to the City of Paterson.

In 1927, *Holland I* again surfaced through the efforts of a team of young men:  
Harry Wolstenholme, George W. Duggan, Theodore P. Bowes, Tice Van Dyk,  
Richard C. H. Jenkinson, Fred P. Bomelyn and Joseph Lister.

*The Paterson Museum, General Photograph Collection*



# Holland II – The Fenian Ram

John Holland's second attempt at creating a submersive vessel was the *Holland II*. Work began on this vessel in 1879. Launched in May 1881, she was dubbed the *Fenian Ram* by Blakely Hall of the *New York Sun*. Though unclear if Hall was making a connection between the boat and its Irish inventor or its Irish revolutionary financiers, the name stuck.

While the *Holland I* was built to prove that a submersive vehicle was possible, the *Fenian Ram* was designed to test some of Holland's more complex theories about underwater navigation. He made changes to the engine, relocated the diving planes from the middle to the stern and added a gun to the vessel. The *Fenian Ram* was also the first submarine to use the porpoise diving method of descending into the water. Instead of lowering into the water on a vertical line and then travelling forward once the appropriate depth was achieved, the *Fenian Ram* steered into the water at an angle, a technique that received skepticism from other inventors and seamen alike.

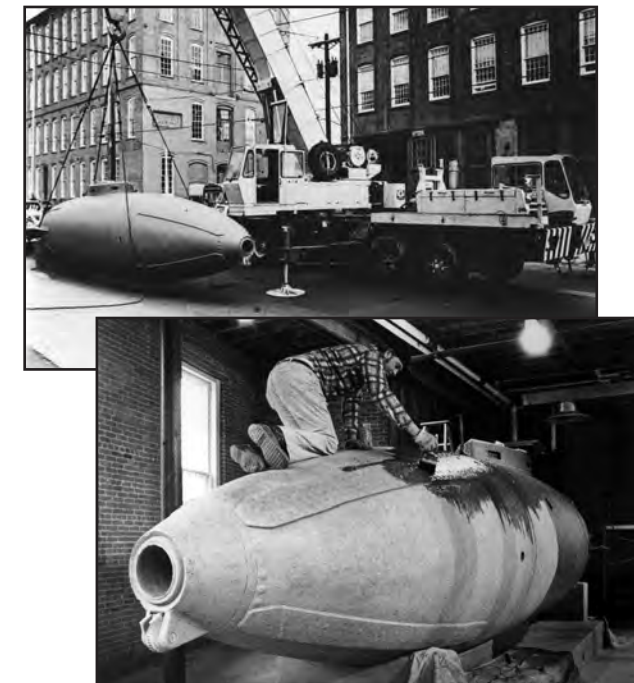
After extensive testing, she was stolen by a faction of the Fenian Society in November 1883. The *Fenian Ram* was taken to New Haven, Connecticut and eventually stored in a shed off the Mill River. The boat remained in storage until 1916, when it was put on display in an Irish relief bazaar at Madison Square Garden. The boat then went on display on the grounds of Clason Point Military Academy, Bronx NY. In 1927, the academy sold the vessel for scrap. After changing hands a few times, the boat made its way to Paterson, where it was offered to the city for a John Holland memorial in Westside Park. The sub remained in Westside Park until 1980, when it was removed to the Paterson Museum to be better protected from the elements.

“I hate to think of that boat becoming a curiosity in a museum. She is the only boat that John P. ever built that he didn't have somebody to tell him what to do and how to do it.”

John's brother Michael Holland in a letter to John Devoy, referring to the *Fenian Ram*, 1916.



The Boston Globe, June 24, 1927



Moving the *Fenian Ram* into the Paterson Museum and restoring it for exhibition, May 1980. The Paterson Museum, General Photograph Collection



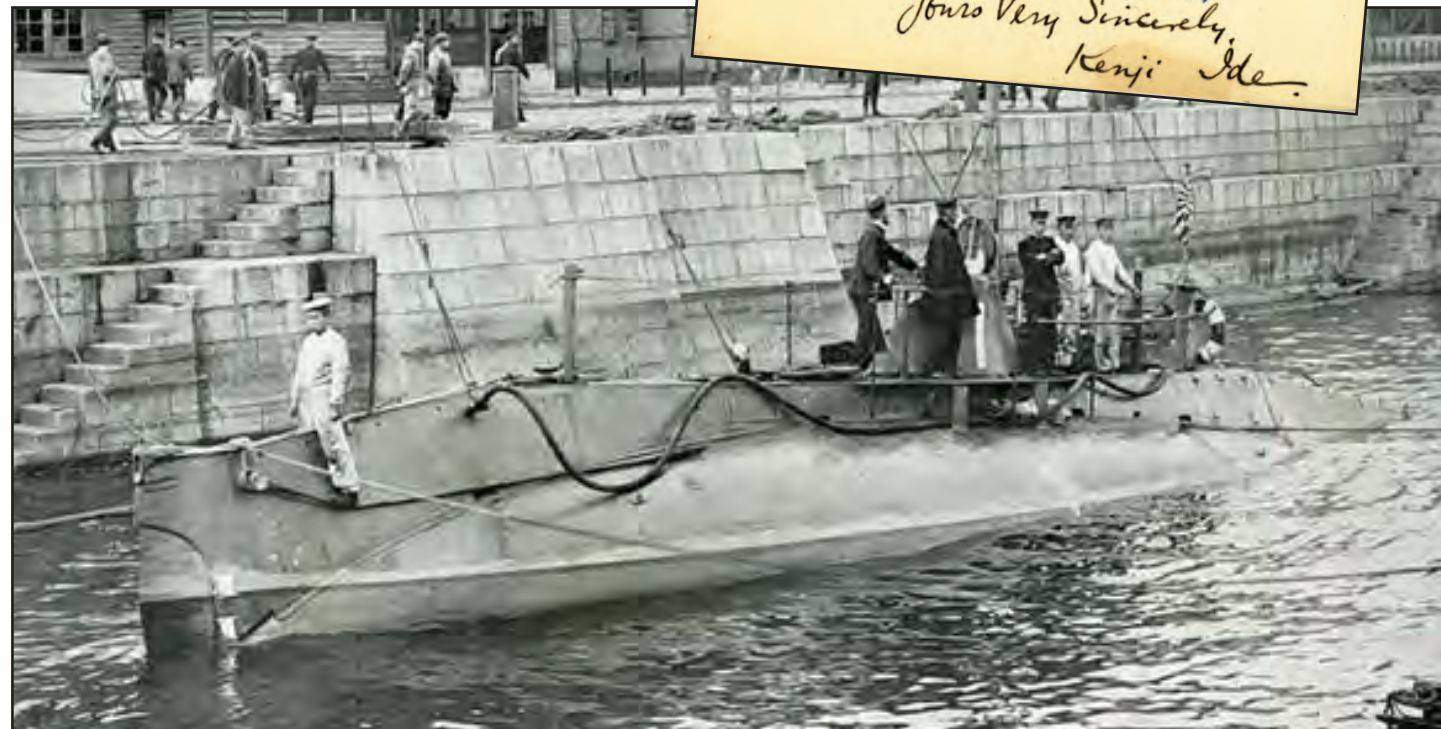
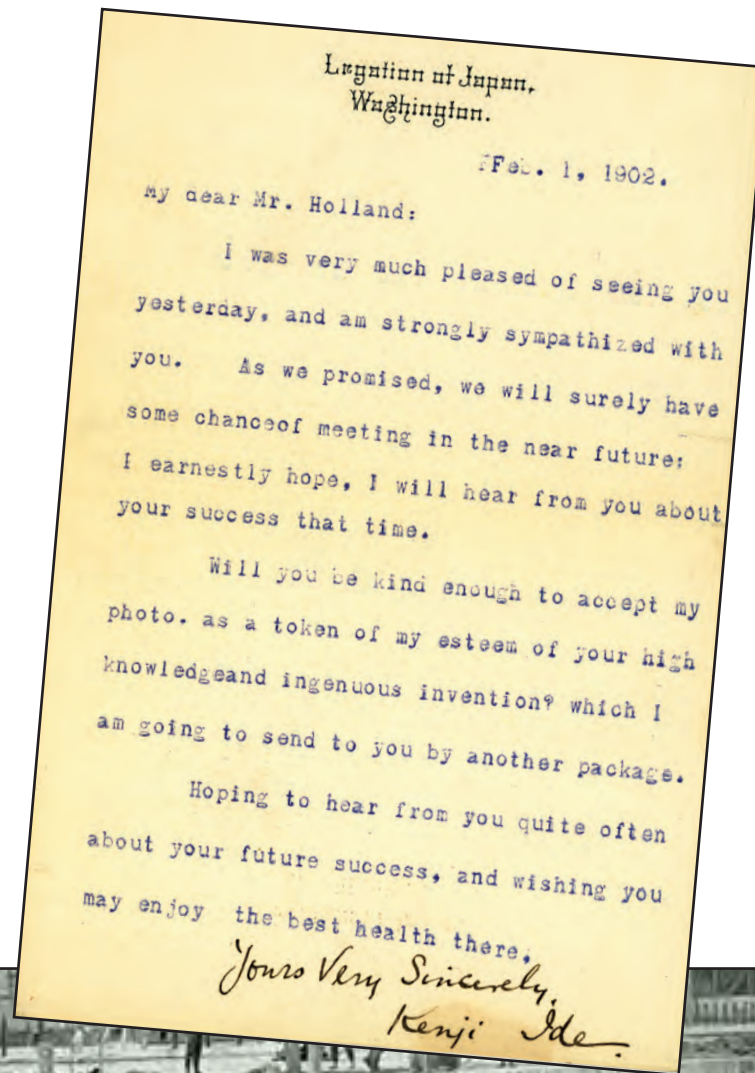
The John P. Holland Memorial in Westside Park, circa 1970. The Paterson Museum, General Photograph Collection

# Gift from the Emperor



Emperor Meiji (1852-1912), circa 1890.  
Photographer unknown

Letter from the Japanese Naval Attaché,  
Lieutenant Kenji Ide to John Holland, 1902.  
*The Paterson Museum, Edward M. Graf Collection*



Holland 1 class submarine – the first submarine in Japan, date unknown. From *The Air and Sea*, Volume 2, No. 6

A rising world power in the later 1800s, Japan was one of the nations that saw opportunity in John Holland's submarines. Several representatives of the Japanese government met with Holland and accompanied him on trials of the *Holland VI* in the 1890s, including Lieut Kenji Ide, the Japanese Naval attaché.

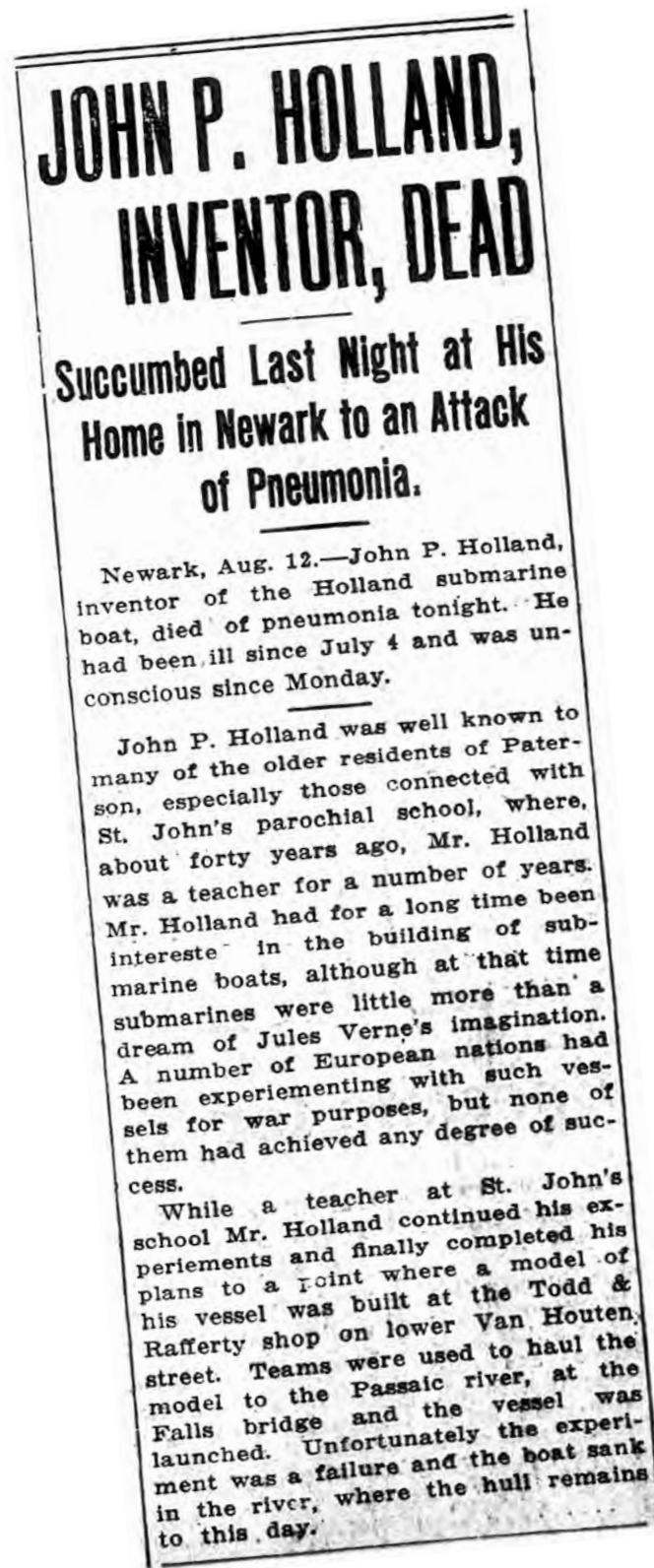
At war with Russia in 1904, the Japanese saw the submarine as the advantage they needed to dominate the seas. The government purchased five Holland submarines from the Electric Boat Company in 1904. They also purchased two more vessels, directly from the inventor, Holland having cut ties with his company earlier the same year. Holland was unable to visit Japan himself, but he consulted by mail with Kojiro Matsukata, the Director of the Kawasaki Dockyard in Kobe, while the boats were under construction.

Three years after the launch of Boat 6, *Dai-roku* and Boat 7, *Dai-shichi* the Emperor of Japan decorated John Holland with the Fourth Class Order of the Merit Rising Sun for "offer[ing] his plan of submarines to the Japanese Navy of his own will." The award was conferred on Holland at the Japanese embassy in Washington. As a part of the ceremony the inventor was also presented with this silk panel.

“dedicated himself to our country's  
benefit, sacrificing his own profit”

Count Kaoru Hayashi, Minister of Foreign Affairs and Baron Saito, Navy Minister to Emperor Meiji  
in their citation recommending Holland for the Order of Merit Rising Sun

# A Fitting Memorial



John Holland's obituary, *The Morning Call*, August 13, 1914.



The memorial of John P. Holland in Liscannor, Ireland, circa 1976.  
*The Paterson Museum, General Photograph Collection*

John Holland died on August 12, 1914, at the age of seventy-three. Following the funeral on August 17, his body was laid to rest in Holy Sepulchre Cemetery, on the Paterson/Totowa border. For over sixty years, Holland's gravesite was marked with the very simple marble slab you see before you. The headstone memorialized this great inventor and his wife, Margaret Foley Holland, with only their last names.

In 1975, an article appeared in the *Paterson News* alerting the public of the inventor's understated headstone. The article caught the attention of retired Naval Quartermaster Raymond Guernic. He agreed that the inventor of the modern submarine deserved a gravestone that would celebrate his achievements. He began raising funds for a more fitting stone. The headstone that can be seen in Holy Sepulchre today was

unveiled on October 10, 1976. A second memorial was erected in Liscannor, Ireland, commemorating John Holland's achievements in the village of his birth.



John P. Holland's contributions to the US Navy are still commemorated by the American Legion. *Photograph courtesy of Joe Imperato, Submariner/Patersonian*