

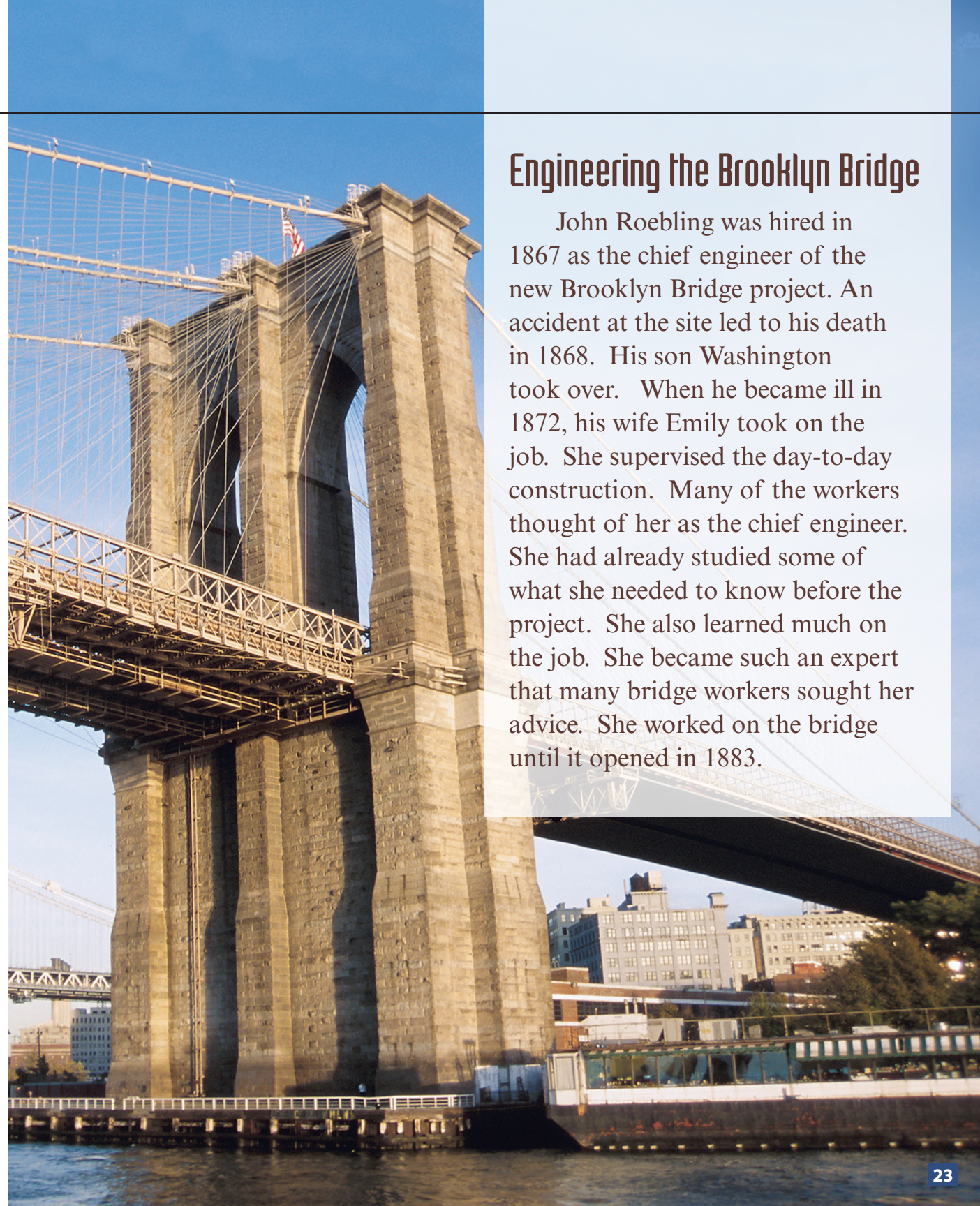
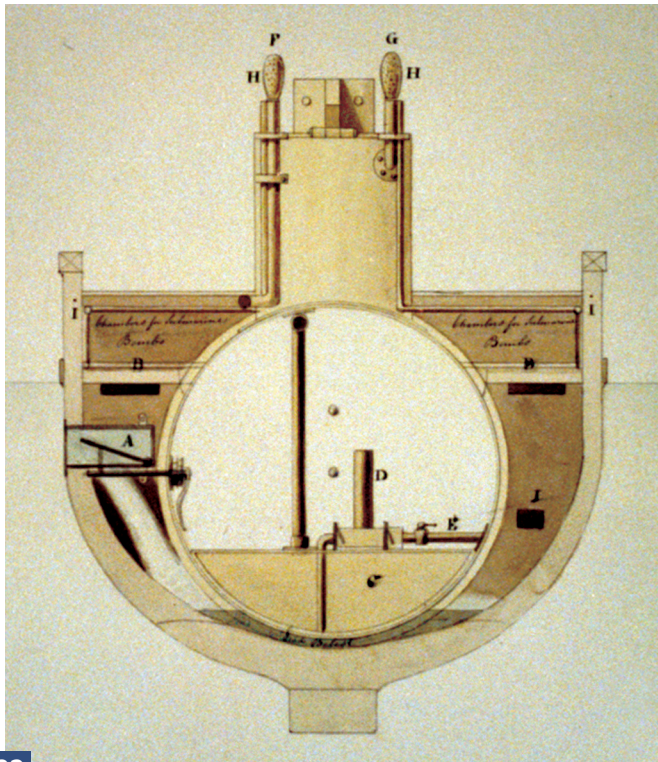
# Maritime Warfare

Robert Fulton lived during a time of many wars. At that time, the British navy ruled the seas. Fulton wished for world peace. Yet, he combined many of his inventions to make weapons. Fulton hoped his weapons would end wars. He tried to sell his weapons to both the United States and countries in Europe. He thought in this way he could help to bring peace.

Fulton put underwater cannons onto boats. Before that time, cannonballs were shot onto decks of other ships. They put holes in the ships or damaged the sails. The ship would sink or slow down. Fulton's new cannons could shoot into the sides of ships. This would put holes in the ships under the water level. Water would then rush into the ships' hulls. This made the ships sink faster.

Fulton also made torpedoes with gunpowder that could explode underwater. He designed his diving boat to tow the torpedoes. His boat could tow a torpedo under a ship and then set the fuse. This would blow up the ship's hull and sink the ship.

← This sketch done by Fulton in 1806 shows a cross section through a "plunging boat."



## Engineering the Brooklyn Bridge

John Roebling was hired in 1867 as the chief engineer of the new Brooklyn Bridge project. An accident at the site led to his death in 1868. His son Washington took over. When he became ill in 1872, his wife Emily took on the job. She supervised the day-to-day construction. Many of the workers thought of her as the chief engineer. She had already studied some of what she needed to know before the project. She also learned much on the job. She became such an expert that many bridge workers sought her advice. She worked on the bridge until it opened in 1883.