

BROOKLYN BRIDGE



- **Height:** 82.9 m (272 ft) (Towers)
- **Length:** 1834 m (6,016 ft)
- **Width:** 25.9 m (85 ft)
- **City:** New York City
- **Country:** America
- **Built:** 1869 – May 24, 1883

The Brooklyn Bridge is a hybrid cable-stayed/suspension bridge in New York City, spanning the East River between the boroughs of Manhattan and Brooklyn. Opened on May 24, 1883, the Brooklyn Bridge was the first fixed crossing of the East River. It was also the longest suspension bridge in the world at the time of its opening, with a main span of 1,595.5 feet (486.3 m) and a deck 127 ft (38.7 m) above mean high water. The span was originally called the New York and Brooklyn Bridge or the East River Bridge but was officially renamed the Brooklyn Bridge in 1915.

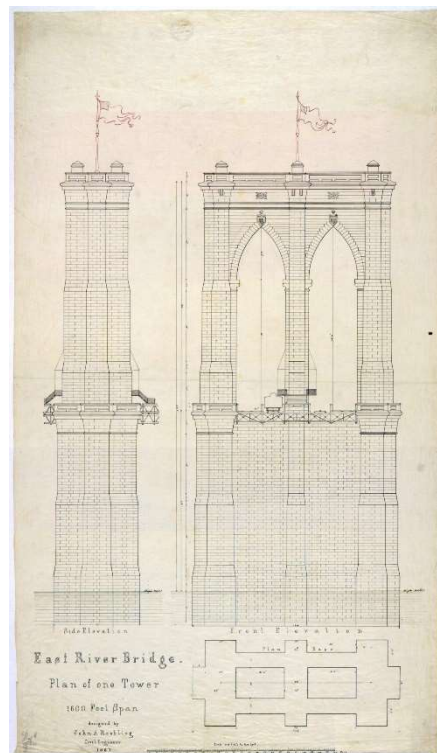
Proposals for a bridge connecting Manhattan and Brooklyn were first made in the early 19th century, which eventually led to the construction of the current span, designed by John A. Roebling. The project's chief engineer, his son Washington Roebling, contributed

further design work, assisted by the latter's wife, Emily Warren Roebling. Construction started in 1870, with the Tammany Hall-controlled New York Bridge Company overseeing construction, although numerous controversies and the novelty of the design prolonged the project over thirteen years. Since opening, the Brooklyn Bridge has undergone several reconfigurations, having carried horse-drawn vehicles and elevated railway lines until 1950. To alleviate increasing traffic flows, additional bridges and tunnels were built across the East River. Following gradual deterioration, the Brooklyn Bridge has been renovated several times, including in the 1950s, 1980s, and 2010s.

The Brooklyn Bridge is the southernmost of the four toll-free vehicular bridges connecting Manhattan and Long Island, with the Manhattan Bridge, the Williamsburg Bridge, and the Queensboro Bridge to the north. Only passenger vehicles and pedestrian and bicycle traffic are permitted. A major tourist attraction since its opening, the Brooklyn Bridge has become an icon of New York City. Over the years, the bridge has been used as the location of various stunts and performances, as well as several crimes and attacks. The Brooklyn Bridge has been designated a National Historic Landmark, a New York City landmark, and a National Historic Civil Engineering Landmark.

HISTORY

Planning



Early Brooklyn Bridge tower plan, 1867

Proposals for a bridge between the then-separate cities of Brooklyn and New York had been suggested as early as 1800. At the time, the only travel between the two cities was by a number of ferry lines. Engineers presented various designs, such as chain or link bridges, though these were never built because of the difficulties of constructing a high enough fixed-span bridge across the extremely busy East River. There were also proposals for tunnels under the East River, but these were considered prohibitively expensive. The current Brooklyn Bridge was conceived by German immigrant John Augustus Roebling in 1852. He had previously designed and constructed shorter suspension bridges, such as Roebling's Delaware Aqueduct in Lackawaxen, Pennsylvania, and the John A. Roebling Suspension Bridge between Cincinnati, Ohio, and Covington, Kentucky.

In February 1867, the New York State Senate passed a bill that allowed the construction of a suspension bridge from Brooklyn to Manhattan. Two months later, the New York and Brooklyn Bridge Company was incorporated with a board of directors (later converted to a board of trustees). There were twenty trustees in total: eight each appointed by the mayors of New York and Brooklyn, as well as the mayors of each city and the auditor and comptroller of Brooklyn. The company was tasked with constructing what was then known as the New York and Brooklyn Bridge. Alternatively, the span was just referred to as the "Brooklyn Bridge", a name originating in a January 25, 1867, letter to the editor sent to the Brooklyn Daily Eagle. The act of incorporation, which became law on April 16, 1867, authorized the cities of New York (now Manhattan) and Brooklyn to subscribe to \$5 million in capital stock, which would fund the bridge's construction.

Roebling was subsequently named the main engineer of the work, and by September 1867, had presented a master plan. According to it, the bridge would be longer and taller than any suspension bridge previously built. It would incorporate roadways and elevated rail tracks, whose tolls and fares would provide the means to pay for the bridge's construction. It would also include a raised promenade that served as a leisurely pathway. The proposal received much acclaim in both cities, and residents predicted that the New York and Brooklyn Bridge's opening would have as much of an impact as the Suez Canal, the first transatlantic telegraph cable or the first transcontinental railroad. By early 1869, however, some individuals started to criticize the project, saying either that the bridge was too expensive, or that the construction process was too difficult.

To allay concerns about the design of the New York and Brooklyn Bridge, Roebling set up a "Bridge Party" in March 1869, where he invited engineers and members of U.S. Congress to see his other spans.[68] Following the bridge party in April, Roebling and several engineers conducted final surveys. During the process, it was determined that the main span would have to be raised from 130 to 135 feet (40 to 41 m) above MHW, requiring several changes to the overall design.[69] In June 1869, while conducting these surveys, Roebling sustained a crush injury to his foot when a ferry pinned it against a piling.[70][71]



PUBLISHED BY CURRIER & IVES

Entered according to act of Congress in the year 1872 by Currier & Ives, in the Office of the Librarian of Congress at Washington.

125 NASSAU ST. NEW YORK

The Bridge is to cross the river by a single span of 1600 feet to start on the New York side from the City Hall rising by a gradual approach of 2381 feet in length and on the Brooklyn side by an approach of 1881 feet its elevation above the river in the

THE GREAT EAST RIVER BRIDGE.

To Connect the Cities of New York & Brooklyn.

centre of the bridge will be 130 feet its floor is to be 50 feet wide with tracks for steam-cars, roadway for carriages, and walks for foot-passengers; it is to have an elevated promenade commanding a view of extraordinary beauty and extent and its cost is to be about \$8,300,000.

Artists' conception, by Currier and Ives, of the bridge while construction was underway, 1872

After amputation of his crushed toes, he developed a tetanus infection that left him incapacitated and resulted in his death the following month. Washington Roebling, John Roebling's 32-year-old son, was then hired to fill his father's role. When the younger Roebling was hired, Tammany Hall leader William M. Tweed also became involved in the bridge's construction because, as a major landowner in New York City, he had an interest in the project's completion. The New York and Brooklyn Bridge Company—later known simply as the New York Bridge Company—was actually overseen by Tammany Hall, and it approved Roebling's plans and designated him as chief engineer of the project.