

## Brooklyn Bridge: Built for the Ages

The Brooklyn Bridge, whose construction began less than five years after the end of the Civil War, stands today in happy rebuke to those who oppose great public infrastructure projects.

At the time of its celebratory opening, on May 24, 1883, the structure, then the longest suspension bridge in the world, was deemed the “Eighth Wonder of the World.” Mayor Abram Hewitt declared it be “a monument to the moral qualities of the human soul.” It was designed by John A. Roebling, a German immigrant, schooled in the tradition of the Humboldt education reforms, to withstand whatever forces of man or nature would be thrown at it, including storms and hurricanes. Roebling accomplished this by employing classical principles, namely the catenary (the principle used as well in the construction of Brunelleschi’s great dome that crowns Florence Cathedral), and the stability of the triangle. The unique feature of Roebling’s suspension bridges, including an earlier railroad suspension bridge over Niagara Falls, was the use of diagonal “stays” which were fixed to the towers at one end, and to the roadway, at a right angle, at the other. Its huge towers, with their double gothic arches, were designed to suggest the great cathedrals of Europe.

As today, the budget hawks, austerity mongers, environmental pessimists, et al., were livid. The *New York Times*, on opening day, complained that “the progress that was defined in terms of public works also had its price. It often enriched the corrupt, exploited the weak, and disrupted urban life in unforeseen and undesirable ways.”

Roebling, who envisioned a worldwide land-bridge



*Brooklyn Bridge ca. 1900.*

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connecting the nations of the world, of which the Brooklyn Bridge would be a part, had written earlier, in his *The Harmonies of Creation*:

“Why is this splendid domain entrusted to our care? Is it that we should enslave our brother of a darker color, or that we should employ nature’s forces and make them our slaves?”

“When the miserable competition, strife and jealousy that now exist between the different nations will cease and give way to more rational pursuits which will make plenty for all, then we shall go to work with these stupendous forces at our command, and change the face of the desert of Sahara in Africa....

“...[W]e will then go to work on a large scale and sink artesian wells of 1,000 feet deep to water the extensive forests which we are bound to plant in the great basin. This will influence our climate and seasons.

“Nature invites us to do all this and plenty more.”

—Bonnie James