



# Barry Lawrence Ruderman Antique Maps Inc.

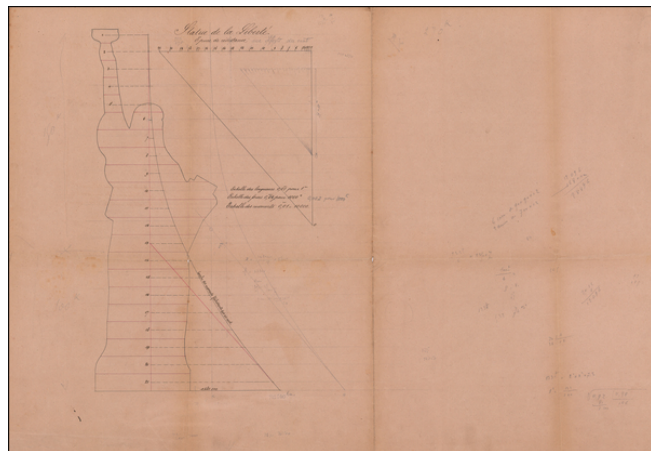
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## [Gustave Eiffel's Drawings and Blueprints for the Statue of Liberty]

**Stock#:** 58964  
**Map Maker:** Eiffel  
**Date:** 1880 -1883  
**Place:** Paris  
**Color:** Pen & Ink  
**Condition:** VG  
**Size:** (sizes vary)  
**Price:** \$ 1,500,000.00



### Description:

#### *Liberty Enlightening the World: Gustave Eiffel's Original Drawings for the Statue of Liberty*

An unparalleled architectural archive consisting of all the extant Établissements Eiffel drawings for the Statue of Liberty, executed at the firm's workshop at Levallois-Perret, Paris, from 1880 to 1883. The archive consists of 22 original drawings, 12 blueprints and whiteprints, the original lettered folder, and an extensive series of handwritten notes, tables, sketches, and other supporting matter.

After the statue's original engineer, Eugène Viollet-le-Duc, died in 1879, Frédéric Auguste Bartholdi turned to Gustave Eiffel to help him build his masterpiece. Bartholdi's partnership with Eiffel "marked a turning point of the project and gave it the momentum that brought it to completion in 1884" (Pierre Provoyeur, "Technological and Industrial Challenges," *Liberty: The French-American Statue in Art and History*, 1986, page 110).

Eiffel's work on the statue did not just result in the construction of the single most important piece of American public art; his engineering breakthroughs laid the groundwork for the modern skyscraper to become part of the American cityscape. The large-scale curtain wall structure of the Statue would be utilized in many of the early skyscrapers of the last quarter of the nineteenth century.

In this archive, we see the mind of the nineteenth century's greatest architect at work, developing and manipulating the sculpture. We see the emergent form of the statue that would come to symbolize New York City, the United States, and the ideal of liberty itself.

#### Eiffel and the Statue of Liberty



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## **[Gustave Eiffel's Drawings and Blueprints for the Statue of Liberty]**

Today, Gustave Eiffel is best known for his eponymous tower and for his work on the Statue of Liberty. In 1880, however, Bartholdi would have known Eiffel for his work on railroad bridges, and in particular his work on the metal structures and pylons that supported them. Eiffel's inclination for daring and his technical prowess convinced Bartholdi that he could solve the structural problems facing the statue.

Eiffel's task was a tricky one. He had to make sure the statue would support its own weight, stand up to the forces of wind in New York Harbor, and not create unpredictable electrical charges due to the interaction of the wrought-iron frame, the copper cladding, and the salt-rich sea air and spray.

Eiffel conceived a great iron pylon comprising four wrought-iron posts (*arbaletriers*), attached at the foot of each post by anchorage bolts (*tirants*) descending through a masonry base to girders (*sommiers*) below. Eiffel created, "an envelope not bearing, but borne. His inventive genius avoided the trap into which Viollet-le-Duc had fallen and opened the way to the curtainwall ... and the high rise architecture from which the United States was to profit so greatly." Indeed, the high rise was "to become a specialty of Richard Morris Hunt" the designer of the statue's base (Provoyeur, pages 118-119).

Importantly, this collection hints at the previously little-known interactions between Bartholdi and Eiffel, as well as an alternate design for Lady Liberty. One of the sketches shows a more upright, extended arm and a bulkier shoulder--the better to support the torch and the hand holding it. This was Eiffel's design; it has long been suspected, however, that Bartholdi favored a more angled arm and a slighter shoulder design. One of the sketches here shows Eiffel's design in blue; in red ink, there is a recalculation of the arm angle, an attempt to add elegance without losing structural integrity.

Perhaps most interestingly, this design change is dated July 28, 1882. Eiffel joined the project in 1880, during the drafting and construction phase. By mid-1882, construction of the statue was well underway. The statue was ultimately finished with Bartholdi's preferred arm angle and design; it is likely that, by this stage in the project, Eiffel had moved on to other works and no longer had detailed oversight over the changes.

Once the statue had been fully constructed and assembled in Paris, a completion ceremony was held in 1884. It was then disassembled and shipped to New York to be erected in its permanent location, where it was dedicated on October 28, 1886.

### **Components of the collection**

The archive includes drawings as general as those used to calculate the wind resistance of the whole structure, and as specific as the literal nuts and bolts of the superstructure. The central structure is treated in great detail, in a number of different iterations, as is Liberty's outstretched arm, and the



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linkages between the Statue and its base (which would have to be modified with changes to Richard Morris Hunt's designs for the masonry base).

A series of blueprints and whiteprints are also present, all of which derive from drawings in the collection. They include later changes in red ink, revealing how the design process continued after the drawings were completed.

Importantly, the archive also includes tables which list out the individual components of the Statue, their lengths, counts, and positions in the structure.

### **Rarity**

Three archives of architectural blueprint plans for the Statue of Liberty are known to exist: Richard Morris Hunt's set of 11 blueprints, which now reside in the Library of Congress (ex-AIA); Frédéric Auguste Bartholdi's set of 10 blueprints; and the present collection, the Eiffel firm's own archive, with blueprints and original drawings.

The present Eiffel archive is the mother of both the Morris and Bartholdi blueprint collections; of the blueprints included in those collections, all but one of the images are taken from original drawings in the Eiffel group. The one blueprint not represented by a drawing in the Eiffel collection shows four profiles of the interior structure. Thus, the present group is a far more complete and original set of renderings than what circulated with the designer of the statue's base and with its artist.

### **Conclusion**

The Statue of Liberty is THE symbol of America. No building or public artwork is more symbolic of the country, nor better-known at home or abroad. For almost 150 years, it has represented the ideals and promise of America to its citizens, immigrants, and the world. The present collection of original designs for the Statue of Liberty, executed as they were by one of the most famous architects in history, qualifies as Americana of the highest order.

### **Detailed Condition:**

See images