

## MINERALS IN AMERICAN HISTORY: THE STATUE OF LIBERTY



As the American Civil War drew to a close in 1865, a French historian named Édouard de Laboulaye proposed France create a statue for the United States to celebrate America's successful development of a democracy. In 1886, President Grover Cleveland officially dedicated the finished Statue of Liberty in front of thousands of onlookers in New York City. More than 179,000 pounds of copper were used to build the Statue and the mineral's importance to the monument is still clear today.

The copper exterior of the Statue is as thick as two American pennies placed together, or 2.5 millimeters. When analyzed closely, the weathering and oxidation of the copper outer layer amounted to only a five percent reduction in thickness. This meant that when the Statue celebrated its centennial in 1986, the copper skin was one of the few major elements

that did not require significant rebuilding or replacement. Strong winds, rain and the hot sun have made impressively little impact on this piece of American history thanks to the strength of copper.

The original torch held in Lady Liberty's hand was constructed in 1876 and in 1984, was replaced by a new copper torch covered in 24 karat gold leaf that is illuminated at night. The lobby of the monument contains high-alloy copper saddles and rivets that help secure the copper exterior to the skeleton of the Statue, and it is in this lobby that the original torch can be observed.

The Statue of Liberty is one of the most well-known American landmarks in the world today. Without copper, the Statue never would have been built as the symbol of freedom we know and love today.

Sources:

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