

The Green Lady of the Harbor

By: Sylvia C. Montrone

The Statue of Liberty- the green lady of the harbor - is America's most famous **immigrant**. She was born in **1871** when a French sculptor named **Frederic Auguste Bartholdi** imagined her as he sailed into New York Harbor on a visit.

Bartholdi planned to present the statue as a gift from the people of France to the United States on our country's 100th birthday.

For over a **century** (100 years) now, Lady Liberty has been welcoming immigrants to America, although she has been repaired from time to time, she has always kept her familiar green color. Bartholdi created the **colossal** lady in a specially built workshop in **Paris, France**. Because a huge statue of stone, bronze or cast iron would have been too heavy to transport across the Atlantic Ocean, Bartholdi decided to use a skeleton of iron bars covered with lightweight **copper**.

From drawings workers made a series of plaster models. They cut the biggest model into sections, and then made the sections even bigger!!!! Lady Liberty was going to be 151 feet tall- 28 times taller than a real lady! When the plaster model was full size, carpenter made wooden molds for each section.

Then metal workers hammered giant **copper** sheets, about twice the thickness of a dime, into the molds. They were able to shape the copper into the folds of Lady Liberty's gown, her face, and even a law book that says *4 July 1776* on it. Finally they attached the copper skin layer to the iron skeleton.

Lady Liberty eventually outgrew Bartholdi's workshop as she steadily became the **world's tallest statue**. Workers took her apart and numbered each section. When Lady Liberty was ready to move, a 70-car train carried her in **214 crates** from **Paris** to a ship bound for **America**.

Reassembling Lady Liberty atop a 154-foot-high **pedestal** in New York Harbor was like fitting together a giant jigsaw puzzle while swinging from a trapeze! Hundreds of workmen braved the harbor's fierce winds to reattach the statue's 300 pieces of copper skin.

In 1886 President Grover Cleveland unveiled the Statue of Liberty exactly where Bartholdi had first imagined her. By now her skin was already as brown as an old penny. The copper would become streaked with black and green before finally getting the blue green color we see today.

When copper is attacked by elements in the atmosphere and combines with them, it forms a crustlike bluish green layer called a **patina**. New York City's **snow, rain, humidity, pollution, and salty sea air** all **attacked** Lady Liberty's **copper skin**. Like a penny, the statue developed its own **patina**, which protects it from further damage.

Between 1981 and 1986, the statue got a makeover that included a glass elevator and a new lighting system. Lady Liberty's old, corroded iron skeleton was rebuilt with steel, but her copper skin was left untouched. Polishing it to the brightness of a new penny would have thinned it out and shortened her life. Now scientists expect she'll survive a thousand years - protected by a green patina coat she made herself.