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STATUE OF LIBERTY ENLIGHTENING THE WORLD.

JANUARY 10, 1885.—Recommitted to the Committee on the Library and ordered to be printed.

MR. NUTTING, from the Committee on the Library, submitted the following

REPORT:

[To accompany H. Res. 296.]

The Committee on the Library, to whom was referred joint resolution 296, have had the same under consideration, and make the following report:

In the summer of 1875 a society was formed in France to further projects in that country to take part in the then coming commemoration of the hundredth anniversary of the national independence of the United States. This society was called the "Union Franco-Americaine de France," and the way in which it proposed to emphasize its sympathy in the great event about to be celebrated in the United States was by the preparation and erection of a colossal statue in the harbor of New York, representing "Liberty Enlightening the World."

A statue meant to represent this grand idea had been conceived and projected by the eminent French sculptor, M. Bartholdi, and the Franco-American Union set itself to the task of having it executed, and when finished presented to the people of this nation.

When this project was inaugurated in France, eloquent addresses were made by distinguished Frenchmen, recalling the alliance made between the French and American people during our struggle for national independence, and the grand and far-reaching results which have made it so memorable for a higher plane of civilization.

In their first appeal to the French people these gentlemen said: "Our design is in remembrance of a glorious anniversary, to raise an unequaled monument. We propose to erect in the middle of the fine harbor of New York, on an island belonging to the States of the Union, opposite Long Island, where some of the earliest battles of independence were fought, a gigantic statue whose frame on the horizon shall be the great cities of New York, Brooklyn, and Jersey City. There on the threshold of the continent so full of a new life, where vessels from all parts are constantly passing, it will rise from the bosom of the wave and represent 'Liberty Enlightening the World.'"

Afterwards the Congress of the United States passed the following joint resolution:

Whereas the President has communicated to Congress the information that citizens of the French Republic propose to commemorate the one hundredth anniversary of our independence by erecting, at their own cost, a colossal statue of "Liberty Enlight-

ening the World," upon a pedestal of suitable proportions, to be built by private subscription, upon one of the islands belonging to the United States in the harbor of New York; and

Whereas it is proper to provide for the care and preservation of this grand monument of art, and of the abiding friendship of our ancient ally: Therefore,

Be it resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the President of the United States be, and he is hereby, authorized and directed to accept the colossal statue of "Liberty Enlightening the World," when presented by citizens of the French Republic, and to designate and set apart for the erection thereof a suitable site upon either Governor's or Bedloe's Island, in the harbor of New York; and upon the completion thereof shall cause the same to be inaugurated with such ceremonies as will serve to testify the gratitude of our people for this expressive and felicitous memorial of the sympathy of the citizens of our sister Republic; and he is hereby authorized to cause suitable regulations to be made for its future maintenance as a beacon, and for the permanent care and preservation thereof as a monument of art, and of the continued good-will of the great nation which aided us in our struggle for freedom.

In pursuance of the terms of this resolution the President of the United States authorized General William T. Sherman to designate one of the two places mentioned which he should think best fitted for the purpose, and General Sherman, after due deliberation and careful inspection of the locality, fixed upon Bedloe's Island as the place best fitted for the location of the statue.

There is a committee charged with the raising of funds for and the completion of the pedestal and foundation for this statue. This committee consists of over three hundred men, chosen from States east, west, north, and south. The chairman of the committee is the Hon. William M. Evarts.

The statue itself cost the French people more than \$250,000.

The cost of the pedestal, with its foundation, is estimated to be more than \$250,000. All of this latter sum has been raised and expended except about \$130,000.

One hundred thousand dollars is asked for from the public Treasury by the resolution under consideration.

The following description of what has been done toward the completion of the pedestal is taken from the American Contract Journal of January 5, 1884:

The foundation up to the "terrace" level is designed by Chief Engineer Stone; the cut-stone pedestal above that level is from the plans of Richard M. Hunt, architect to the commission. We are also indebted to General Stone for the accompanying data, and for the privilege of using the plans referred to.

The drawing, which is made to scale, will sufficiently explain the general design and proportions of the statue, its pedestal, and foundations. The site is the center of the old Fort Wood on Bedloe's Island, in the harbor of New York, and this "star" fort will itself be utilized in the base of the monument, as shown in section on the drawing.

The material underlying the foundation is compact clay, gravel, and bowlders, no rock appearing in test-holes sunk for at least 35 feet below the bottom of the concrete base.

The foundation mass up to the "terrace" level is of solid concrete; it is 90 feet square on the bottom, 65 feet square at the top, and 52 feet 10 inches high. This foundation is now in place to some little distance above the level of the floor of the "sally port" of the fort, about 5,000 cubic yards being laid. The concrete is mixed in the following proportions for the foundation proper, *i. e.*, to the surface of the ground: 2 barrels Norton's Rosendale cement; 2 barrels sharp river sand; 3 barrels small broken stone (trap); 4 barrels stone passing through a 2-inch ring, or one part cement to four and one-half parts of sand and broken stone.

For the portion above the ground the following proportions are used: 1 barrel Portland cement; 1 barrel Norton's Rosendale cement; 5 barrels of sand; 6 barrels of stone, broken to pass through a 1-inch ring.

All cement is systematically tested, and the concrete is laid and rammed in 6-inch courses. About 200 to 250 barrels of cement are used each day. Smith, Magaw &

Drake are the contractors for the concrete base. Four arched ways, on the parade level, lead from the sides of the base to the central shaft, which has been reduced to 10 feet square instead of 16 feet, as shown in the accompanying plan. Surrounding the entire base and spanning the space lying between the inside walls of the fort and the sides of the base will be sprung a concrete arch, about $3\frac{1}{2}$ feet thick and of a chord span of 49 feet. This arch will be covered with earth and form the foundation for a grassy mound rounding up to the base of the ornamental stone pedestal; and it will also carry the four flights of stone stairways by which the "terrace" level is reached.

The pedestal proper is 62 feet square at the base, 40 feet at the top, and will be 114 feet high to the base of the statue. The central shaft in this portion of the structure will be 24 feet square, and is reached by two arched ways leading through the base from side to side. The material of the pedestal will be dimension cut-stone throughout, although the exact character of the stone to be used has not yet been determined upon, and will ultimately depend somewhat upon the bids received. Of the stone presented as specimens, granites, marble, and a black compact limestone have been classed among those "acceptable." Since our illustration was made the architect has slightly changed some few of the details above the "loggia" floor, and has also changed the dimensions of the base of the pedestal and its height from the dimensions given on the plan and elevation; these changes are noted in the text. The circular shield on the base will contain the coats of arms of the different States.

The plans for the anchorage of the statue to its base, and the precautions to be taken against the leverage of wind pressure, are not just yet sufficiently advanced to be published with this sketch, but as this is a most interesting engineering feature in the design, we hope, through the courtesy of General Stone, to present the completed plans to our readers. At present we can only say that the iron anchorage rods will pass from the figure to the very base of the stone pedestal, throwing the entire weight of the mass upon them.

As of interest in this connection, we give some details concerning the statue of "Liberty" itself, taken from *Le Journal Illustré* of May, 1883.

M. Bartholdi, the designer of the figure, was born in Colmar, Alsatia; was a student at the Lyceum of Louis the Great; first studied art with Ary Scheffer, and at the age of 22 exhibited his first work, a statue of General Rapp, also a native of Colmar. He took an active part in the Franco-Prussian war, and after the termination of that struggle, executed his famous work of the Lion of Belfort. Ten years ago he conceived the idea of this statue of Liberty Enlightening the World, and, enlisting the sympathies and aid of his countrymen, has pushed forward to a final and grand success the greatest statue of modern times. When his first model, known as the committee model, had been accepted, M. Bartholdi finished another study 2.11 meters or 6.9 feet high from head to foot. This second model was increased four times, or made 27.9 feet high, and the effect studied, and after it had been remodeled and completed to the satisfaction of the sculptor, this third model was divided into sections; and finally each of these sections was enlarged again four times with mathematical care to serve as a model for the statue itself.

All the work has been erected at the shops of Messrs. Gaget & Gauthier, 25 Rue de Chazelles, Paris. M. Eisel was the engineer who designed the interior iron framework and bracing, M. Simon had charge of the modeling department, M. Bargaret the copper-work and mounting of the plates, and M. Baron superintended the wood-work of the preliminary molds. The general method of proceeding in the production of this enormous figure was as follows: Each section of the third model was marked out in points according to the usual method of enlargement employed by sculptors; about 300 principal points and more than 1,200 secondary points being required for each section; and each point, usually a nail-head, required six measurements, without counting those of verification, or about 9,000 distinct measurements to each section.

By this method of transfer a frame-work was produced in wood, covered with laths and finally coated with plaster, of the full size of the statue, each section, however, being separate as in the original divided model. When a full-size model of any section was completed the carpenters cut profiles in boards of the exterior of parts of the model, and then by placing the boards side by side formed a species of mold. In these wooden molds the hammersmen then shaped the sheets of copper destined to form the exterior of the completed statue; this shaping was done by pressure with levers or by beating with hammers; the finishing was done by small hammers and by punching. The sheets of copper are backed at regular distances by forgings to give them stiffness, these forgings being first carefully fitted to a mold. For the smaller details sheets of lead were pressed upon the model and the copper worked to fit them. The sheets of copper are finally attached by the interior ribs, straps, and forgings to a strong four-sided iron frame-work which occupies the center of the figure, and which will in itself be firmly anchored to the masonry of the pedestal.

The copper sheets used are $2\frac{1}{2}$ millimeters or about one-eighth of an inch thick.

The entire weight of the figure is about 440,000 pounds (200,000 kilograms), of which 176,000 pounds (80,000 kilograms) are copper and the remainder wrought iron.

	Feet.
Base of figure to top of torch (46.08 meters).....	151. 14
Base of figure to top of diadem (35.50 meters).....	116. 44
From the heel to the top of the head (34 meters)	111. 52
Length of index finger (2.45 meters)	8. 03
Circumference of same at second joint (1.44 meters).....	4. 72
The finger nail is (0.35x0.26 meter)	1. 14x0. 85
Height of head (4.40 meters).....	14. 43
Width of eye (0.65 meter).....	2. 13
Length of nose (1.12 meters)	3. 67

At the Paris Exhibition of 1878 forty persons at one time could find standing room within the head, and twelve persons can stand together in the torch above the hand, access to which is obtained through the arm.

For the purpose of transportation to America the statue will be divided into 300 distinct parts.

It is easily seen from these details that this statue, when finished and in place, will easily take its place as one of the wonders of the world.

The foundation for the pedestal will be 52 feet 10 inches high; the pedestal itself from the top of the foundation will be 114 feet high; the statue itself will be 151 feet high; total height of complete structure, 317 feet and a little more—nearly 318 feet.

On July 4, 1882, the French people, with imposing ceremony, presented this completed and magnificent work of art to the American people through our minister to Paris, the Hon. Levi P. Morton, and the French Republic has promised to bring this beautiful gift to our shores in one of its ships of war. It will start from France about May 15, 1885.

Our minister was instructed by this Government to express “the high appreciation of the American people for this grand manifestation of the enduring friendship and continued sympathy of the people of France, our earliest allies in our struggle for independence a century ago.”

The history of this undertaking shows that not only the French people as individuals, but the French people as a nation, have been interested in and identified with this emphasizing of the friendship between that people and us and our national institutions.

Our Government also, from time to time, as has been shown, has identified itself in a friendly and official way with this statue.

The people have subscribed largely to the building of the pedestal, but it moves too slow. It has been said that “New York is to have the statue; let her pay for it.” Such utterances are unworthy the principle and the sentiment which is the foundation of the gift. You might as well say, “Washington City has Washington’s Monument; let that city pay for it.”

This was a magnificent gift from the people of France to our *whole people*, and not to the people of New York, and it belongs to the people as a nation. It would be arrogance in the State of New York to pay for it, and then claim the statue as its own.

It is true that the committee of which Mr. Evarts is chairman at first thought, believed, and planned to erect and pay for the foundation and pedestal by private subscription. This plan has failed. If it has not failed, so long a time has elapsed since its initiation, and since the statue was ready, that the delay has become a national disgrace.

Washington’s Monument in this city was commenced way back in 1848, by private enterprise, and under that management went up 175 feet, and then that plan of building it was abandoned, and Congress

took the work where it was left off, and has appropriated it for almost a million dollars, and the monument is finished.

Washington's Monument was and is a national enterprise, and we are glad the people, as a nation, have built it, and paid for it.

Liberty Enlightening the World is a national symbol. It is national property, and Congress should, in the opinion of your committee, finish what has so well been begun.

We recommend that the joint resolution pass.

H. REP. 2259—2

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