## Telegraph

The laying of the first successful transatlantic cable marked one of the greatest communication advances in history. The extraordinary feat—commemorated symbolically in this painting—was a testament to the ingenuity of a host of scientists and engineers, the labor of countless workers, and the perseverance, entrepreneurship, and faith of American financier Cyrus W. Field.

At a time when the telegraph offered the quickest and most efficient means of communication, the unavailability of underwater cables severely limited the distances that messages could travel. Numerous attempts at laying cables underwater failed, until cable makers finally discovered the insulating qualities of gutta-percha, a rubberlike material. In 1851 two English brothers, Jacob and John Brett, used hemp and autta-percha to insulate an underwater cable across the English Channel. Other narrow underwater distances were soon spanned, but the obvious challenge—to connect Europe and North America seemed insurmountable.

Then U.S. Navy oceanographer Matthew Fontaine Maury discovered that the sea floor between Newfoundland and Ireland was relatively shallow and level, providing an ideal path for a transatlantic cable. With this news, Field gathered investors and created the New York, Newfoundland, and London Telegraph Company in 1854. Two years later, he reformed the enterprise as the Atlantic Telegraph Company. It would take another decade, however, for Field's project to reach fruition.

The first two cables broke while they were being laid, but in 1858 a third cable was installed successfully. The accomplishment would have been less meaningful were it not for the contribution of British physicist William Thomson (later known as Lord Kelvin). Because telegraph signals tended to grow faint and distorted over long distances under water, he invented the mirror galvanometer, a receiving device that allowed easy interpretation of weak signals.

n addition to supervising the construction of the new Senate and House wings of the Capitol in the 1850s, Captain Montgomery C. Meigs directed plans for their interior spaces. To decorate room S–211, originally intended for the Senate Library, Meigs envisioned "groups of history, legislation, etc." adorning the ceiling. In 1857 he wrote, "I hope to make this a beautiful room." Meigs asked Italian frescoist Constantino Brumidi (p. 46), whom he had hired two years earlier to paint a number of rooms in the new Capitol extension, to submit a proposal. Brumidi suggested themes appropriate for a library: allegorical representations of history, geography, print, and philosophy.

Before he began a project, Brumidi analyzed the architectural space and created a pencil sketch showing his frescoes in relation to the overall decorative scheme of the room. He then prepared a small oil sketch of each scene, which he submitted to Meigs for approval. Finally, the sketches were enlarged on heavy paper to the exact scale of the proposed fresco, and the resulting cartoon placed on the wall, over the area to be painted. The outlines of the image were then transferred to the wet mortar using a variety of techniques, and Brumidi executed the actual painting, using the preparatory sketch as a reference.

In 1858 Brumidi completed the lunette of *Geography* and one corner group in the library room, but was then assigned work elsewhere in the Capitol. He did not return to the room until several years later. By that time, the space had become the Senate Post Office; its anticipated use as a library was never realized. Consequently, Brumidi changed his original sketch for the ceiling, replacing the figures of *Print* and *Philosophy* with allegorical images of *Physics* and *Telegraph*. The small oil sketch, *Telegraph*, was probably completed around 1862, in preparation for the ceiling fresco. Brumidi was paid \$4,989 for designing and painting the room's remaining three panels, which included the fresco *Telegraph* and three corner groups. The ceiling was completed in 1867.

This painting, and the large mural decoration for which it is the study, are charming examples of the imaginative way in which Brumidi took classical European themes and adapted them to contemporary New World achievements. Europa, the mythological daughter of the king of Tyre, was desired and abducted by Zeus (Jupiter). Taking the form of a bull, Zeus feigned gentleness until Europa garlanded his horns with flowers and climbed on his back, whereupon he carried her out to sea and off to Crete. There, resuming his normal shape, he ravished her. Her name

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## Constantino Brumidi (1805-1880)

Oil on canvas, ca. 1862 13<sup>5</sup>/<sub>8</sub> x 23<sup>5</sup>/<sub>8</sub> inches (34.6 x 60 cm) Unsigned Gift of The Charles Engelhard Foundation, 1984 Accepted by the U.S. Senate Commission on Art, 1984 Cat. no. 33.00019



was given to the continent west of Asia, and it is as the personification of Europe that she is painted by Brumidi.

Now, instead of being carried to Crete, Europa/Europe has been conveyed across the Atlantic, where she is greeted with a handclasp by America, the latter garbed in gilt armor and a starry blue robe. America wears the phrygian, or freedom, cap and holds the caduceus (ancient emblem of the messenger of the gods), while resting her arm on an anchor representing hope. Beside her on the rock is the American bald eagle. America's strength is symbolized by the cannon lying behind the anchor, her mechanical invention by the gear wheel beside it, and her abundance and generosity by the cornucopia. Prominent among the fruits are giant grapes, signifying (in the Old Testament) the Promised Land, and the pineapple of hospitality.

## Telegraph—continued

Despite the apparent success of the third cable, the insulation failed after only four weeks, and it was abandoned. On Field's fourth attempt, in 1865, the cable broke again. At last, on July 27, 1866, the British steamship the *Great Eastern* finished laying cable from Valentia, Ireland, to Heart's Content, Newfoundland. Carrying clear signals, this cable remained intact and inaugurated a new era of communication.



The fresco *Telegraph*, top left, can be seen in this ca. 1900 photograph of room S–211 during the occupancy of the Senate Committee on the District of Columbia.

(Architect of the Capitol)

The purpose of this sea journey is for Europe to receive the telegraph wire from America. The telegraph line and one pole are seen in the right middle ground. The end of the wire is offered to Europe by a cherub. Europe will recross the ocean with this gift, and the two continents will be united by the telegraph, as symbolized by the joined hands. Although the meeting of the two continents in Brumidi's picture is amicable, their attitudes nonetheless clearly signify that Europe is the suppliant and America the generous benefactor in this exchange.

Along with the *Telegraph* study, Brumidi also included a depiction of the transatlantic cable in his final sketch for *The Apotheosis of Washington*, his monumental fresco in the canopy of the Capitol dome. Both works were most likely completed by 1862, even though sustained telegraphic communication between Europe and North America was not achieved until 1866. Brumidi must have been an optimist, accepting Cyrus Field's brief success in 1858 as proof that a reliable transatlantic cable would soon be a reality. Indeed, his optimism was soon borne out, as Field's fifth and final cable was laid before Brumidi finished painting the *Telegraph* fresco.

Brumidi is sometimes patronized as nothing more than a competent craftsman who, as the right man at the right time, seized the opportunity to gain life-employment decorating the U.S. Capitol. But he was, in fact, a fine painter who took the time even in this study to sound a poetic note in the lovely rose of the dawn sky, the winsome cherub, and the freely painted flowers. The main figures here are less persuasive than in the final lunette. In the fresco, Brumidi displays greater fluidity, unity, and organic feeling in the rhythm and bulk of the robed figures.

Telegraph emerged from obscurity in 1919, when objects from the artist's estate, including 27 paintings, were uncovered in a bank vault. Passing through several owners, the study was acquired at auction in 1984 by The Charles Engelhard Foundation for presentation to the U.S. Senate.

Right:
Telegraph decorates the ceiling of the
Lyndon Baines Johnson Room (S-211) in
the Senate wing of the Capitol.
(1999 photograph)

