



Smithsonian
National Museum of American History
Kenneth E. Behring Center

Guide to the John A. Roebling Collection

NMAH.AC.0981

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Collection Overview

Repository:	Archives Center, National Museum of American History
Title:	John A. Roebling Collection
Identifier:	NMAH.AC.0981
Date:	1836-1975 (bulk 1930-1950)
Extent:	18.5 Cubic feet (62 boxes)
Creator:	Roebling, Charles Gustavus, 1849-1918 Roebling, Ferdinand W. (Ferdinand William), 1842-1917 National Museum of American History (U.S.). Division of Mechanical and Civil Engineering John A. Roebling's Sons Company National Museum of American History (U.S.). Division of History of Technology Roebling, John Augustus, 1806-1869 Roebling, Washington Augustus, 1837-1926. National Museum of American History (U.S.). Division of Work and Industry
Language:	Collection is in English. Some materials in German, French, Italian, and Spanish.
Summary:	Collection documents the work of the John A. Roebling's Sons Company, builders of bridges. The materials consist primarily of photograph albums documenting some of the bridges, tramways, ski lifts and chair lifts that Roebling's Sons Company was involved with. The documentation also includes specifications, patents, and reference materials about the engineering process of building bridges and bridges in general.

Administrative Information

Acquisition Information

This collection was donated by Blair Birdsall, former chief engineer at John A. Roebling's Sons Company in 1981.

Provenance

This collection was formerly known as the Blair Birdsall Collection. It was transferred to the Archives Center from the Division of Work and Industry in 2007.

Related Materials

[Materials in the Archives Center](#)

George S. Morison Collection (AC0978)

Modjeski and Masters Company Records (AC0976)

Materials at Other Organizations

The Rutgers University, Special Collections and University Archives

Papers of [Mary G. Roebling and Roebling Family Papers](#), 1821-1960 (MC 654.1).

Processing Information

Processed by Beatrice Kelly (intern) and Alison Oswald (archivist), August 2009.

Preferred Citation

John A. Roebling Collection, dates, Archives Center, National Museum of American History

Restrictions

The collection is open for research use.

Researchers must handle unprotected photographs with gloves.

Conditions Governing Use

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Biographical / Historical

John Augustus Roebling (1806-1869) was the founder and proprietor of John A. Roebling's Sons Company. Born in Mülhausen, Germany, he was a civil engineer famous for his wire rope suspension bridge designs, in particular, the design of the Brooklyn Bridge. Roebling married Johana Herting in 1836 and they had nine children: Washington A. Roebling (1837-1926); Laura R. Methfessel (1840-1873); Ferdinand W. Roebling (1842-1917); Elvira R. Stewart (1844-1871); Josephine R. Jarvis (b. 1847); Charles Gustavus Roebling (1849-1918); Edmund Roebling (1854-1930); William Roebling (b. 1856, d. 1860); and Hannah Roebling (died in infancy). Roebling's three sons, Washington Augustus Roebling; Ferdinand William Roebling and Charles Gustavus Roebling, worked for the company.

Roebling's Sons Company was active in the design and manufacture of wire rope used in the erection of suspension bridges since the 1840s. Roebling devised a system of spinning the wires together where weights and swivels turned the wire coils in the opposite direction from the twisting, thereby removing kinks. Method of and Machine for Manufacturing Wire Rope (US Patent # 2,720) issued on July 16, 1842. Roebling would adapt this wire rope to his suspension bridge principle. In 1848, he established a company—John Roebling's Sons Company—in Trenton, New Jersey, to manufacture his wire rope. Roebling manufacturing plants were sold in 1952 to the Colorado Fuel and Iron (CF&I) Company of Pueblo, Colorado. In 1968, the Crane Company purchased the CF&I.

Scope and Contents

The collection documents the work of the John A. Roebling's Sons Company, builders of bridges. The materials consist primarily of photograph albums documenting a variety of bridges, mostly in the United States. The documentation also includes specifications, patents, and reference materials about the engineering process of building bridges and bridges in general.

Series 1, Historical background materials, 1895-1958, is divided into two subseries: Subseries 1, John A. Roebling's and Sons Company materials, 1895-1949 and Subseries 2, Newsletters, 1929-1931.

Subseries 1, John A. Roebling's and Sons Company materials, 1895-1949, contains a variety of items related to the company such as historical narratives, correspondence, price lists, testing data, and a ledger with cost estimates. The correspondence is partially bound (pages 1 to 104) from a letter press book (handwritten and typescript) belonging to John A. Roebling's and Sons Company. William Hildebrand and Charles G. Roebling are the chief correspondents. The correspondence documents daily activities related to the design and erection of bridges as well as finances and supplies. Charles G. Roebling's notebook, undated, contains calculations and notes about various bridge projects.

Subseries 2, Newsletters, 1929-1931, contain copies of *Blue Center* and *Wire Engineering*, which were John A. Roebling's and Sons Company publications intended for employees. The newsletters were apparently used as scrapbooks, with black-and-white photographs pasted into the pages. Found among the pages of *Blue Center* are photographs of the Hudson River Bridge and in *Wire Engineering*, there are photographs of the Maysville, Kentucky Bridge.

Series 2, Photographs, 1926-1975, comprises the largest series in the collection. The photographs are primarily black-and-white and document aerial tramways, tramways for logging or mining, chair lifts, ski lifts, floods, and bridge construction projects. The latter makes up the majority. Most photographs were assembled into albums with corresponding captions and dates, and almost all of the photographs document bridges in the United States. There is one exception, the Yauricocha Tramway in Peru. In some instances, the captions are recorded on the back of the photographs, and others were recorded on album pages. The series is arranged alphabetically by name of bridge and/or project.

Series 3, Specifications, 1855-1962, consists of printed textual documents (both bound and loose) that contain information for bidders, proposals, contracts, and bonds, and the detailed specifications. This series is arranged alphabetically by bridge name.

Series 4, Reports, 1928-1938, contains bound reports (both progress and final) detailing problems, requirements, research, manufacture, plant installation, cable equipment, strand adjustments, and Roebling Company developments. This series is arranged alphabetically by bridge/and/or project.

Series 5, Patent materials, 1849-1952, consists of issued patents (to a variety of individuals) for cable and cable appliances, cables, and cable apparatus, cableways and tramways, and grips. The patents are arranged by subject area, then by patent number.

Series 6, Reference materials, 1836-1964, contains a wide range of materials—articles, biographical files, drawings, photographs, newspaper clippings, advertising, correspondence, notes—documenting all aspects of bridges. This series is arranged alphabetically by topic.

Arrangement

The collection is arranged into six series.

Series 1, Historical background materials, 1895-1958, undated

Subseries 1, Biographical, 1900-1958, undated

Subseries 2, John A. Roebling's and Sons Company materials, 1895-1949

Subseries 3, Newsletters, 1929-1931

Series 2, Photographs, 1926-1975

Series 3, Specifications, 1855-1962

Series 4, Reports, 1928-1938

Series 5, Patent materials, 1849-1952

Series 6, Reference materials, 1836-1964

Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

- Bridge construction industry -- United States
- Bridges -- Design and construction
- Bridges -- New York (N.Y.)
- Iron industry and trade -- Colorado
- Iron industry and trade -- United States
- Ski lifts
- Suspension bridges -- Design and construction
- Wire industry -- New Jersey
- Wire-rope industry -- New Jersey

Types of Materials:

- Blueprints
- Correspondence
- Genealogies
- Ledgers (account books)
- Letterpress books
- Newsletters -- 1920-1940
- Notebooks
- Patents
- Photograph albums
- Photographs -- 20th century
- Price lists
- Reports
- Specifications

Names:

- National Museum of American History (U.S.). Division of History of Technology
- National Museum of American History (U.S.). Division of Mechanical and Civil Engineering
- National Museum of American History (U.S.). Division of Work and Industry

Container Listing

Series 1: Historical Background, 1895-1958

Subseries 1.1: John A. Roebling's and Sons Company materials, 1895-1949

Box 17, Folder 1	Roebling family genealogical chart, 1949
Box 17, Folder 2	<i>The Roebling Story</i> , 1941
Box 21, Folder 3	<i>Trenton Sunday Times Advertiser</i> (overview of Roebling's and Sons Company), 1945 May
Box 21, Folder 1	Roebling Scrapbook, 1975 October Image(s)
Box 21, Folder 2	John A. Roebling's Sons Company (correspondence), 1900-1903
Box 17, Folder 3	John A. Roebling's Son Company Book, <i>Suspension Bridges: A Century of Progress</i> , undated
Box 17, Folder 4	Charles G. Roebling notebook, undated
Box 17, Folder 5	Roebling's Sons Co., Price list, 1904
Box 17, Folder 6	<i>John A. Roebling's Sons Company Wire in Electrical Construction Book</i> , 1897
Box 17, Folder 7	Price List for John A. Roebling's Son's Company, 1919
Box 17, Folder 8	John A. Roebling's Sons Price List, 1922 June
Box 18, Folder 1	<i>John A. Roebling's Sons Company Catalog of Wire Rope and Wire Rope Fastenings</i> , 1912
Box 18, Folder 2	Cableways, Tramways, 1905
Box 18, Folder 3	Construction of Parallel Wire Cables for Suspension Bridges, 1925
Box 18, Folder 4	Ledger of list of estimates, 1895 January-1905 February
Box 18, Folder 5	Testing data/cost estimates, 1903-1910
Box 18, Folder 6	Wire rope tables, 1887 and undated

Subseries 1.2: Newsletters, 1929-1931

Box 1, Folder 6	<i>Blue Center</i> , 1929 January-1929 April
Box 1, Folder 7	<i>Blue Center</i> , 1929 May-1929 August
Box 1, Folder 8	<i>Blue Center</i> , 1929 September-1929 December
Box 1, Folder 9	<i>Blue Center</i> , 1930 January-1930 June
Box 1, Folder 10	<i>Wire Engineering</i> , 1930-1931

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Box 50	Chesapeake Bay Bridge, 1951-1952
Box 20, Folder 1	Deer Isle Bridge, 1943-1944
Box 30, Folder 1-4	El Paso Gas Company Bridge Photograph Album, 1932-1952
Box 52	Golden Gate Bridge, 1935, undated
Box 41	Golden Gate Bridge #1, 1935-1936
Box 42	Golden Gate Bridge #2, 1936
Box 43	Golden Gate Bridge #3, 1936-1937
Box 23, Folder 1-5	Hudson River Bridge Photograph Album #1, 1928 April-1929 March
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Box 25, Folder 1-4	Hudson River Bridge Photograph Album #3, 1929 September-1929 December
Box 26, Folder 1-6	Hudson River Bridge Photograph Album #4, 1930 January-1930 June
Box 27, Folder 1-6	Hudson River Bridge Photograph Album #5, 1929 July-1930 June
Box 28, Folder 1-6	Hudson River Bridge Photograph Album #6, 1929 April-1930 August
Box 52	Hudson River Bridge, Miscellaneous, 1929-1931 Image(s)
Box 53	Hudson River Bridge, Miscellaneous, 1927-1929
Box 54	Hudson River Bridge, 1929-1930

Box 56	Hudson River Bridge, 1930 (#1-75)
Box 57	Hudson River Bridge, 1930 (#126-175)
Box 58	Hudson River Bridge, 1930 (#177-229)
Box 55	Hudson River Bridge, 1930 (#230-290)
Box 62	Hudson River Bridge, 1930 (#291-348)
Box 59	Hudson River Bridge, 1930 (#349-389)
Box 60	Hudson River Bridge, 1931 (#390-427)
Box 61	Hudson River Bridge, 1931 (#428-488)
Box 49	Kingston Port Ewan Bridge, undated
Box 40	Lumberville Bridge, 1947-1948
Box 49	Manhattan Bridge, 1908-1909
Box 30, Folder 5-7	Manhattan Bridge (repair), 1956
Box 39	Maysville Bridge, 1931
Box 33, Folder 1-6	Mt. Hood Tramway Photograph Album, 1949-1959
Box 20, Folder 2	Peace River Bridge, 1943
Box 38	Portsmouth, Ohio Bridge, undated
Box 20, Folder 3	Sciotoville Cantilever Bridge, undated
Box 51	Skelton, West Virginia Mine Tramway, 1937-1938
Box 32, Folder 1-5	Ski Lift Construction Photograph Album, 1947-1957
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Box 48	Tacoma Narrows Bridge, 1931, 1948 June, 1949 April -1949 August
Box 36, Folder 7-9	Tramways, 1914
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Box 29, Folder 8-10	Yauricocha Tramway (Peru) Photograph Album, undated
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Box 31	Miscellaneous Bridges (floods), 1936-1938

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