



Smithsonian  
*National Museum of American History*  
*Kenneth E. Behring Center*

## Guide to the W.J. Eney Collection

NMAH.AC.1062

Alison Oswald

2018

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## Collection Overview

<b>Repository:</b>	Archives Center, National Museum of American History
<b>Title:</b>	W.J. Eney Collection
<b>Identifier:</b>	NMAH.AC.1062
<b>Date:</b>	1929-1977
<b>Extent:</b>	2.5 Cubic feet (5 boxes, 1 map-folder)
<b>Source:</b>	Work and Industry, Division of, NMAH, SI Eney, William J.
<b>Language:</b>	English  Some materials in French and Spanish.
<b>Summary:</b>	The collection documents William J. Eney, a civil engineer whose research primarily focused on model analysis of bridges, stress test and concrete.

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## Administrative Information

### Immediate Source of Acquisition

Original source and date of acquisition unknown.

### Provenance

Transferred to the Archives Center in 2007 by the Division of Work and Industry.

### Processing Information

Collection processed by Alison Oswald, archivist, 2018.

### Preferred Citation

William J. Eney Collection, 1929-1977, Archives Center, National Museum of American History.

### Restrictions on Access

Collection is open for research. Unprotected photographs must be handled with gloves.

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## Biographical Note

William J. Eney (d. 1981) was a 1927 graduate of Lehigh University, earning a degree in civil engineering. Eney was head of the Department of Civil and Mechanical Engineering and Director of the Fritz Engineering Laboratory. In addition to teaching, he published widely, in various engineering publications and was a co-author of the textbook, *Structural Steel Design*.

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## Scope and Contents

The collection relates to Eney's professional career at Lehigh University in Pennsylvania as a researcher, professor, and the director of the engineering laboratory. The papers include reports, publications, teaching materials, photographs and blueprints.

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## Arrangement

1 series.

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## Names and Subject Terms

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

Subjects:

- Bridges
- Civil engineering
- Civil engineers
- Materials -- Testing
- Structural design

Types of Materials:

- Blueprints
- Correspondence -- 20th century
- Drawings -- 1900-1950
- Photographs -- 20th century
- Reports

Names:

- Lehigh University
- Work and Industry, Division of, NMAH, SI

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## Container Listing

Box 1, Folder 1	Lehigh University Financial Report, 1976-1977
Box 1, Folder 2	Correspondence related to model materials and construction, 1938-1952
Box 1, Folder 3	Writings by William J. Eney, 1936-1959
Box 1, Folder 4	A Model Study of Continuous Truss Bridge, 1930
Box 1, Folder 5	A Model of Continuous Truss Bridge, 1941
Box 1, Folder 6; Map-folder 1	Submarine Ring Model, 1934
Box 1, Folder 7	Model Analysis Welded Building Frame, 1939
Box 1, Folder 8	Determining Stresses in Semi-Elliptical Sewers with a Deformeter Apparatus, 1939
Box 1, Folder 9	Susquehanna River Bridge Model , 1939
Box 1, Folder 10; Map-folder 1	Susquehanna River Bridge Model , 1939, 1941
Box 1, Folder 11; Map-folder 1	An Investigation of the Deflection of a "C" Frame Press with Celluloid Models, 1941
Map-folder 1	Walt Whitman Suspension Bridge, 1954
Map-folder 1	Bridge Over the Maumee River, Toledo, Ohio, 1930
Box 2, Folder 1	Determining the Deflection of Structures with Elastic Models, 1941
Box 2, Folder 2	An Investigation of a Submarine Arch Rib by means of Plastic models, 1948
Box 2, Folder 3	Physical Properties of Laminated Sheets and Slabs of Cellulose Acetate used in the fabrication of a Plastic Model of a Gun Turret, 1948
Box 2, Folder 4	A Study of the Performance of SR-4 Strain Gage's Young's Modulus and Creep Characteristics of Cellulose Acetate, 1948

- Box 2, Folder 5      Prestressed Concrete Bridge Members, A Comparison Between Ordinary Reinforced and Prestressed Reinforced Concrete Beams, 1952
- Box 2, Folder 6      Prestressed Concrete Bridge Members, Progress Report 5, Endurance of a Full Scale Pre-Tensioned Concrete Beam, 1953, 1957
- Box 2, Folder 7      Strand Research for Prestressed Concrete , 1955
- Box 2, Folder 8      Field tests on a Prestressed Concrete Multi-Beam Bridge, Progress Report 9, 1956
- Box 2, Folder 9      Modern Installation for Testing of Large Assemblies Under Static and Fatigue Loading, 1959
- Box 3, Folder 1      Continuously Reinforced Concrete Pavements, Experimental Pavement on U.S. Route 22 in Berk County, Pennsylvania, 1962
- Box 3, Folder 2      Structural Steel Design, 1964
- Box 3, Folder 3      Combined bending and Torsion of Plate Girders, undated
- Box 3, Folder 4      Determining the Deflection of Structures with Elastic Models, undated
- Box 3, Folder 5      Miscellaneous notes, drawings and sketches, 1938-1952
- Box 3, Folder 6      Miscellaneous notes, drawings and sketches, 1952-1964
- Box 4, Folder 1      Micro-Influentiometer, 1930-1937
- Box 4, Folder 2      United States Experimental Model Basin, Navy Yard, Washington, DC, Further Structural Tests of Turret Models, 1939
- Box 4, Folder 3      Investigation of the Rigidity of Turret Rings with plastic Models, 1945
- Box 4, Folder 4      Model Study of an Arch Bridge for Statically Indeterminate Stresses, 1932
- Box 4, Folder 5      Department of Civil and Sanitary Engineering, Massachusetts Institute of technology, Structural Analysis Laboratory Research, 1937-1938
- Box 4, Folder 6      Applied Mechanics and Model Analysis, 1938
- Box 4, Folder 7      A Structural Model of Study of the Holston Bridge , 1941
- Box 4, Folder 8      Analysis of a Vierendeel Truss by Eney Deformeter, 1941

- Box 4, Folder 9      The Stressometer, A Laboratory Instrument for Structural Engineering and Research, 1947
- Box 4, Folder 10     Civil Engineering Course Outline (C.E. 401), 1955-1956
- Box 5, Folder 1      Review of Model Analysis of the Yadkin River Bridge by the Beggs Deformeter method, 1956
- Box 5, Folder 2      Prestressed Concrete Research at Lehigh UNiversity from 1952-1957, 1958
- Box 5, Folder 3      Continuously Reinforced Concrete Pavement, Full Scale and Model tests, Highway Research Boards, Bulletin 1818, 1958
- Box 5, Folder 4      American Society of Civil Engineering Structural Engineering Conference, reprints, 1967
- Box 5, Folder 5      A Striuctural Model Study of Load Distribution in Box-Beam Bridges, 1968
- Box 5, Folder 6      Mechanical Analysis, undated
- Box 5, Folder 7      Mechanical Analysis of a Two-Hinged Arch Truss, undated
- Box 5, Folder 8      Writings by others, 1940, 1973
- Box 5, Folder 9      Model Studies of a Folded Plate Structure, 1962
- Box 5, Folder 10     Model Investigation of a Northlight Barrel Shell Structure, 1964
- Box 5, Folder 11     Proceedings, American Society of Civil Engineers, Volume 69, No. 8, 1943
- Box 5, Folder 12     Structural Model Testing-Load Distribution in Concrete I-Beam Bridges, Journal of Portland Cement Association, Vol. 7, No. 3, 1965
- Box 5, Folder 13     Research and Industrial Testing, Fritz Engineering Laboratory, Lehigh University, undated
- Box 5, Folder 14     Schnitzer Alloy Products Company, 1954
- Box 5, Folder 15     Torrington Company, trade literature, undated