



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

## Guide to the Royce L. Beers Papers

NMAH.AC.0880

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2004

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## Collection Overview

<b>Repository:</b>	Archives Center, National Museum of American History
<b>Title:</b>	Royce L. Beers Papers
<b>Identifier:</b>	NMAH.AC.0880
<b>Date:</b>	ca. 1900-1969.
<b>Extent:</b>	1.5 Cubic feet (4 boxes, 1 map-folder)
<b>Source:</b>	Mechanical and Civil Engineering, Division of [former name], NMAH, SI. Beers, Royce. L., 1888-
<b>Language:</b>	English
<b>Summary:</b>	Collection documents stokers and fuel burners and includes patents, awards, articles, notebooks, graphs, drawings, tables, and company publications.

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## Administrative Information

### Immediate Source of Acquisition

Found in the collection of the Division of the History of Technology.

### Ownership and Custodial History

Collection transferred from Division of the History of Technology (now known as the Division of Work and Industry) to Archives Center, 2005.

### Processing Information

Collection processed by Laura Waayers (intern), supervised by Jeffrey Stine, curator; edited by Vanessa Broussard Simmons, archivist, 2004.

### Preferred Citation

Royce L. Beers Papers, 1900-1969, Archives Center, National Museum of American History.

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## Biographical Note

Mechanical engineer.

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## Scope and Contents

The collection consists of the personal papers of Royce L. Beers, mostly as they relate to his work in mechanical engineering. It includes trade literature, publications, articles, company records and price lists, patents, correspondence, technical reports, tables, graphs, calculations, drawings and sketches, blueprints, research notebooks, field notes, photographs and prints. Also included are personal and biographical material, such as portraits and documents related to an awards banquet.

The Beers papers contain several items that are of general interest: copies of the Ringlemann scale, a photograph of the Panama Canal Zone, reference to Nestle's Milk Products Company, and an article written by Orville Wright. There are even some unexpected materials, such as a write-up of Mrs. Beers' hospital diet.

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## Arrangement

The collection is arranged into eight series.

Series 1, Personal Materials, circa 1900-1969

Series 2, Trade Literature, 1919-1947

Series 3, Publications, 1921-1948; undated

Series 4, Reports, 1917-1946; undated

Series 5, Blueprints, Drawings, Graphs and Tables, 1914-1949; undated

Series 6, Engineering Research Notebooks, 1913-1945

Series 7, Photographs and Prints, undated

Series 8, Miscellaneous Materials, undated

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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:

Power (Mechanics)  
Stokers, Mechanical

Types of Materials:

Articles -- 20th century  
Awards  
Blueprints  
Business records -- 20th century  
Drawings -- 20th century  
Notebooks -- 1900-1950  
Patents  
Photographs -- 20th century  
Technical reports

Names:

Mechanical and Civil Engineering, Division of [former name], NMAH, SI.

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## Container Listing

### Series 1: Professional Materials, circa 1900-1969

Series 1, Professional Materials, circa 1900-1969, includes some of Beers' patents dating from 1900-1945. There are some photographs, including an image of Gorgona in the Panama Canal Zone dating from circa 1912-1913. Correspondence, photographs, and a banquet program relating to the National Association of Manufacturers' Modern Pioneers award in 1940, which honored outstanding inventors and research scientists, are also included among the materials. In addition there is an award from the American Society of Mechanical Engineers for fifty-five years of service, including a portrait of Beers from 1969. The materials are arranged in chronological order by date.

Box 1, Folder 1	Patents, 644,388-2,065,552, 1900-1936
Box 1, Folder 2	Photographs, 1912-1969
Box 1, Folder 3	Correspondence, 1923-1946
Box 1, Folder 4	Office Files, 1929-1942
Box 1, Folder 5	Patents, 2,065,553-2,384,433, 1936-1945
Box 1, Folder 6	Awards, 1940, 1969

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## Series 2: Trade Literature, 1919-1947; undated

Series 2, Trade Literature, 1919-1947; undated, consists primarily of catalogs from some of the companies that Beers worked for but also includes other businesses. The materials are from American Blower Company, Babcock & Wilcox, B. F. Goodrich, Buffalo Forge Company, Chicago Automatic Stoker Corporation, Clarage Fan Company, Combustion Engineering Corporation, Detroit Stoker Company, Driscoll Transmission Corporation, Hamilton Foundry & Machine Company, Stoker Manufacturers Association, and Western Precipitation Corporation. The materials are arranged in alphabetical order by company.

Box 1, Folder 7	American Blower Company, undated
Box 1, Folder 8	Babcock & Wilcox Limited, 1929; undated
Box 1, Folder 9	B. F. Goodrich Company, 1947
Box 1, Folder 10	Buffalo Forge Company, undated
Box 1, Folder 11	Chicago Automatic Stoker Corporation, 1929
Box 1, Folder 12	Clarage Fan Company, undated
Box 1, Folder 13	Combustion Engineering Corporation, 1919
Box 1, Folder 14	Detroit Stoker Company, 1938, 1943; undated
Box 1, Folder 15	Driscoll Transmission Corporation, undated
Box 1, Folder 16	Hamilton Foundry & Machine Company, 1944
Box 1, Folder 17	Stoker Manufacturers Association, undated
Box 1, Folder 18	Under-Feed Stoker Company of America, 1920; undated
Box 1, Folder 19	Western Precipitation Corporation, 1945

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## Series 3: Publications, 1921-1948; undated

Series 3, Publications, 1921-1948; undated, includes some articles written by Royce Beers. There are also reference bulletins, proceedings from association meetings and trade journals. The materials are arranged in chronological order by date.

Box 1, Folder 20            Publications, 1921-1925

Box 1, Folder 21            Publications, 1933-1939

Box 2, Folder 1            Publications, 1942-1948;

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## Series 4: Reports, 1917- 1946; undated

Series 4, Reports, 1917-1946; undated, consists primarily of materials from the Babcock & Wilcox company. These reports were created in 1946 by the company's research department and cover topics such as injectors for grit entrainment, combustion on experimental pot furnace and spreader firing. In addition, there is a committee report from the Stoker Manufacturers Association. A report detailing the kind of coals available for steam in Springfield, Missouri and a report on air pressure is also found among these materials. Materials are arranged in chronological order by date.

Box 2, Folder 2

"Stoker Manufacturers Association," committee report, 1922

"Confidential Report on Various Kinds of Coals Available for Steam Purposes in Proximity of Springfield, Missouri," report, 1917 July 22

*Box 2, Folder 2*

Box 2, Folder 3            Technical Association papers and reports, 1925

Box 2, Folder 4            Babcock & Wilcox, "Investigation of Injectors for Grit Entrainment," Research Department Report, 1946

Box 2, Folder 4            Babcock & Wilcox, "Investigation of Overfeed Combustion on Experimental Pot Furnace," Research Department Report, 1946

Box 2, Folder 4            Babcock & Wilcox, "Investigation of Overfeed Firing," Research Department Report, 1946

Box 2, Folder 4            Babcock & Wilcox, "Investigation of Overfeed Spreader Firing, Research Department Report", 1946

Box 2, Folder 5            "Corrections for Altitudes: Report for Air Pressure", undated

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## Series 5: Blueprints, Drawings, Graphs and Tables, 1914-1949; undated

Series 5, Blueprints, Drawings, Graphs and Tables, 1914-1949; undated, includes technical notes and engineering data primarily for stokers. The materials are arranged first by type and then in chronological order by date.

Map-folder 1	Drawing for safety device, Deer Engineering Company, 1913 August 1914
Box 2, Folder 6	Drawings, circa 1918-1949
Box 2, Folder 7	Drawings, circa 1921-1947
Box 2, Folder 8	Graphs and tables with calculations, circa 1930-1944
Map-folder 1	Blueprints for stokers, Detroit Stoker Company, 1931-1941
Box 2, Folder 9	Graphs and tables with calculations, circa 1939-1942
Box 2, Folder 10	Heat balance graphs and tables, 1940
Map-folder 1	Drawings of boilers, Babcock & Wilcox, undated
Map-folder 1	Chart of draft loss in brick chimneys one hundred feet high, compiled by R. L. Beers, undated

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## Series 6: Engineering Research Notebooks, 1913-1945

Series 6, Engineering Research Notebooks, 1913-1945, includes four volumes of research notes created by Royce Beers. Notebook one dates from 1913-1920 and is a six-ring, Lefax pocket notebook filled with notes, drawings, and calculations. There is an article on airplane stability written by Orville Wright in 1917. There are also detailed notes on the six-day "hospital diet" fed to Beers' wife at Columbia Hospital following the birth of their child on October 16, 1916. Notebook two dates from 1913-1921 and is also a six-ring, Lefax pocket notebook filled with notes, drawings, and calculations with various reference tables and technical articles printed and sold by the Lefax Corporation of Philadelphia. The third engineering notebook dates from circa 1914-1922 and is, like volumes one and two, a six-ring, Lefax pocket notebook filled with Beers' notes, drawings, and calculations. Included in the notebook are three copies of the 2.5 x 4.25 inch Ringlemann scale for grading the density of smoke. The fourth engineering notebook dates from circa 1919-1945 and contains Beer's field notes, drawings, calculations, and copies of correspondence, data tables, and salesmen's bulletins. The notes and correspondence address such topics as how the Nestle's Milk Products Company could burn coffee grounds for fuel (1941), how to dry fish and beet sugar pulp and garbage incineration (1939). There is also a photographic postcard with an image of a working stoker. The notebooks are arranged in chronological order by date.

Box 3, Folder 1	Engineering Research Notebooks, Volume one, circa 1913-1920
Box 3, Folder 2	Engineering Research Notebooks, Volume two, circa 1913-1921
Box 3, Folder 3	Engineering Research Notebooks, Volume three, circa 1914-1922
Box 4, Folder 1	Engineering Research Notebooks, Volume four, circa 1919-1945

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## Series 7: Photographs and Prints, undated

Series 7, Photographs and Prints, undated, include images of various types of stokers, control panels, furnaces, workers and electric motors. The images are not identified by location or date.

Box 4, Folder 2            Images of various types of stokers, control panels, furnaces, and workers

Box 4, Folder 3            Images of stokers, control panels, electric motors, and furnaces

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## Series 8: Miscellaneous Materials, undated

Series 8, Miscellaneous Materials, undated, consists of a cover from a notebook from the Clarage Fan Company and an empty loose leaf binder from the Under-Feed Stokers Company.

Box 4, Folder 4                      Clarage Fan Company, loose cover of notebook, undated

Box 4, Folder 5                      Under-Feed Stokers Company, empty notebook, undated

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