Guide to the Howe Scale Company Records

NMAH.AC.0004
Robert Harding
1984
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Collection Overview

Repository: Archives Center, National Museum of American History
Title: Howe Scale Company Records.
Identifier: NMAH.AC.0004
Date: 1868 - 1963
Extent: 32 Cubic feet (77 boxes)
Creator: Howe Scale Co.
Language: English

Administrative Information

Provenance
Transferred from the Division of Physical Sciences, 1983/02/03.

Other Finding Aids
Inventory available; contact the Archives Center for more information.

Processing Information
Processed by Robert S. Harding, archivist, June 1984; revised C. A. Orr, archivist, 11 23 88 ; revised Robert S. Harding 11/96

Preferred Citation
Howe Scale Company Records, Archives Center, National Museum of American History

Restrictions
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Biographical / Historical
The original inventor of the Howe Scale was Frank M. Strong of Vergennes, Vermont. In 1855 while working for the Sampson Scale Company of Vergennes, he conceived of the idea of ball bearing protection for the scale. In 1856, along with Thomas Ross, Strong obtained the first patent.
The lever system was also simplified. This problem of accuracy led to a new ball bearing principle. The Strong and Ross improvement concerned a method for protecting the knife edges.

"A scale weighs by means of a system of levers. The fulcrum, or balancing support of this system is the sharp edge of a piece of steel called a pivot, on which the platform of the scale rests. When a load is placed on the platform the impact causes it to shift about on the pivots. This action tends to blunt the sharp edge of these pivots and affects the accuracy of the scale."

Frank Strong conceived of the idea of placing the scale platform on metal balls resting in cup shaped depressions over the knife edged pivots. This enabled the platform to move freely, absorb vibrations, reduce wear on the pivots and insure longer accuracy expectation of the scale. This invention became the first outstanding scale improvement in America, and was the real foundation of the present business.

The first scale with the new improved ball bearing was installed at Vernon Village Mills in Oenida County, New York in 1856. In 1857 the installation of a gigantic scale on the Morris Canal, Washington, New Jersey, for weighing canal boats was completed. The scales also took first premium at the Vermont State Fair in 1857 and 1858, competing with older and better known scales.

Also in 1857, Mr. John Howe, Jr., who owned a foundry at Brandon, lent financial assistance and in the Spring purchased all the patents taken out by Strong and Ross. The two partners remained with the company on a salary and royalty basis.

In 1858 the Howe Scale Co. began to win awards consistently at fairs and exhibitions throughout the country. By 1859 the Howe Scale Company had no competition at these annual events. At the Paris Exposition in 1867 Howe Scale took first prizes competing against all the manufacturers of the world.

In 1868 the Brandon Manufacturing Company was incorporated. The name was subsequently changed and the company merged into the Howe Scale Company in November, 1878. In 1873 Howe began manufacturing hand trucks as a utility measure to facilitate handling of scales and parts within the factory.

However, that same year 1873, proved disastrous. The warehouse, dryhouse, and office of the company was destroyed by fire. The company moved to Rutland.

In 1886 there was a general reorganization of the Howe Scale Company. The newly reorganized company was incorporated as the Howe Scale Company of 1886. John A. Mead of Rutland became president. A new Board was formed and held its first meeting in August of 1888. In 1920 Mead died and his son in law, Carl B. Hinsman was elected president. In 1925 the Mead interests were purchased by another management group, and Frank G. Riehl became head of the company. The new management purchased rights for the weightograph, a device which produces weight readings on a ground glass screen by means of optical magnification. This was one of the greatest innovations in weighing improvements since the original Strong and Ross patent.

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Scope and Contents

These records, 1868 1963, include records of various companies some of which eventually merged into the Howe Scale Company. Included are corporate records: minutes, charters, legal documents, stock certificate books, and correspondence; sales records: newsletters, inter branch correspondence, catalogs and price lists; financial records: ledgers, journals; cash books, inventories, reports, trial balances with recapitulations; photographs; specifications; and news clippings. The 32 cubic feet of material is housed in 15 Paige boxes, 6 Hollinger boxes, and 44 volumes.

There is also a collection, the Howe Scale Company Papers, 1856 1961, at the Special Collections, Bailey Howe Library of the University of Vermont.
Arrangement

The collection is divided into six series.

Series 1: Corporate Records, 1868-1953
Series 2: Sales Records, 1928-1960
Series 4: Photographic Scrapbooks, 1887-1925
Series 5: Specifications, 1890-1927
Series 6: Clippings, 1953-1971

Names and Subject Terms

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

Subjects:
- Scales (Weighing instruments)

Types of Materials:
- Cashbooks
- Charters
- Clippings
- Correspondence -- 1930-1950
- Inventories
- Journals (accounts)
- Ledgers (account books)
- Legal documents
- Minutes
- Newsletters
- Photographs -- 20th century
- Sales records
- Specifications
- Stock certificate books

Names:
- Ross, Thomas
- Strong, Frank M.

Geographic Names:
- Vermont
**Container Listing**

Series 1: Corporate Records, 1868 - 1953

Subseries 1.1: Howe Scale Company (and predecessors)

*Box 1*

Box 1  Minutes and Charters, 1868 - 1926

Box 1  Stock Certificate Records, 1878 - 1916

Box 2  1.2: Misc. Corporate Records (Loose papers, including legal documents, correspondence, announcements, and minutes of stockholder meetings), 1880s - 1950s

Subseries 1.3: Rutland Manufacturing Company

*Box 3*

Box 3  Stock Certificate Book, 1902 - 1927

Box 3  Check Register, 1927 - 1928

Subseries 1.4: Richardson Scale Company

*Box 3*

Box 3  Minutes of Stockholders' Meetings, 1907 - 1953

Box 3  Stock Certificate Book, 1908 - 1951

Subseries 1.5: Vermont Scale Company

*Box 3*

Box 3  Stock Certificate Book, 1891 - 1911

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Series 2: Sales Records, 1928 - 1963

Box 4  The Scalesman (Company Newsletter), 1928 May - 1933 December

Box 5  The Scalesman, 1934 October - 1940 November

Box 6  The Scalesman, 1941 January - 1944 December

Inter Branch Correspondence (Memoranda, bulletins, announcements, from central office to branch sales offices and to various departments)

Box 7

Box 7  Inter Branch Correspondence, 1927 May 24 - 1933 December 21

Box 7  Inter Branch Correspondence, 1943 August 02 - 1946 November 22

Box 7  Inter Branch Correspondence, 1853 January 08 - 1954 August 11

Box 7  Inter Branch Correspondence, 1954 August 16 - 1956 February 28

Catalogs and Price Lists

Box 8

Box 8  Howe Richardson Scale Co. Products Manual, 1962 - 1963

Box 8  Howe Scale Co. Catalog #53 (with open house schedule for visiting personnel from the Canadian Fairbanks Morse Company, Ltd.), 1960 December 14-15

Box 8  Howe Trucks Catalog #15

Box 8  Howe Scales: Electrical Products Catalog, 1957 - 1959

Box 8  Howe Scales Price List: Catalogs #46 and #48

Box 9  Howe Scale Order Book: The Use, Abuse and Proper Care of Scales, Howe Scale Co., Vermont, U.S.A. [Leaflet]

Box 9  Howe Scale Company Labels

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Howe Scale Co. Ledgers

Box 10-15

Box 10  Ledger, 1882 - 1885
Box 11  Ledger, 1888 - 1890
Box 12  Ledger, 1893 - 1899
Box 13  Ledger, 1912 - 1916
Box 14  Ledger, 1917 - 1921
Box 15  Ledger, 1922 - 1927

Howard Scale Co. Journals

Box 16-19

Box 16  Journal, 1882 - 1888
Box 17  Journal, 1888 - 1890
Box 18  Journal D, 1912 - 1924
Box 19  Journal E, 1924 - 1929

Howard Scale Co. Cash Books

Box 19-24

Box 19  Cash Book, 1882 - 1884
Box 20  Cash Book, 1888 - 1911
Box 21  Cash Book, 1912 - 1916
Box 22  Cash Book G, 1917 - 1921
Box 23  Cash Book H, 1921 - 1925
Box 24  Cash Book I, 1925 - 1937

Box 45  Invoices of Goods sold to John A. Mead Co., 1894 - 1897
Box 45  Inventory 3, 1881 - 1883
Box 45  Inventory 4, 1883 - 1884
Box 45 Inventory B, 1920 - 1926

Reports of Sales and Expenses of Branch Offices and Agencies

Box 45

Box 49 Page, Dennis Co., New York, 1889 - 1906
Box 49 Howe Scale Co., Philadelphia, 1889 - 1906
Box 49 Howe Scale Co., Pittsburgh, 1889 - 1906
Box 49 Borden and Selleck, Chicago, 1886 - 1906
Box 49 Borden and Selleck, Cleveland, 1886 - 1906
Box 49 Borden and Selleck, St. Louis, 1886 - 1906
Box 49 Borden and Selleck, Kansas City, 1892 - 1906
Box 49 Howe Scale Co., Cincinnati, 1886 - 1906
Box 49 Howe Scale Co., San Francisco, 1889 - 1906
Box 49 Howe Scale Co., Portland, 1892 - 1899
Box 49 Howe Scale Co., Portland, 1915
Box 49 Howe Scale Co., Minneapolis, 1906 - 1914
Box 49 Howe Scale Co., New York, 1907 - 1915
Box 49 Howe Scale Co., Philadelphia, 1907 - 1915
Box 49 Howe Scale Co., Pittsburgh, 1907 - 1915
Box 49 Howe Scale Co., Cleveland, 1907 - 1915
Box 49 Howe Scale Co., St. Louis, 1907 - 1915
Box 49 Howe Scale Co., Kansas City, 1907 - 1915
Box 49 Howe Scale Co., Cincinnati, 1907 - 1915
Box 49 Howe Scale Co., San Francisco, 1907 - 1915
Box 49 Howe Scale Co., Portland, 1913 - 1914

Box 45 Financial Records of Washington State Branch Operations, 1919 - 1926

Trial Balances
Box 25-27

Box 25  Trial Balances, 1884 - 1889
Box 25  Trial Balances, 1899 - 1926
Box 25  Trial Balances, 1900 - 1903
Box 26  Trial Balances, 1900 - 1908
Box 26  Trial Balances, 1904 - 1910
Box 26  Trial Balances, 1908 - 1916
Box 26  Trial Balances, 1911 - 1917
Box 27  Trial Balances, 1918 - 1923
Box 27  Trial Balances, 1922 - 1923
Box 27  Trial Balances, 1927
Box 27  Trial Balances, 1924 - 1928
Box 27  Manufacturing Records, Iron Coal Coke, 1913 - 1920
Box 28  Check Stub Book (unidentified), 1925 June 23 - 1927 May 06
Box 29  Voucher Record (unidentified), 1895 April - 1901 September

Vermont Scale Co., Ledgers

Box 30-34

Box 30  Ledger A, 1891 - 1895
Box 31  Ledger B, 1896 - 1899
Box 32  Ledger C, 1900 - 1903
Box 33  Ledger D, 1904 - 1908
Box 34  Ledger E, 1909 - 1910

Vermont Scale Co., Journals

Box 35-36

Box 35  Journal A, 1891 - 1899
Box 36  Journal B, 1899 - 1910
Vermont Scale Co., Cash Books

**Box 37-40**

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<td>Cash Book D, 1906 - 1911</td>
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<td>John A. Mead and Co., Ledger, 1924 - 1927</td>
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<td>Rutland Manufacturing Co., Ledger, 1918 - 1923</td>
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<td>Rutland Manufacturing Co., Journal</td>
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**Unidentified Ledgers**

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**Unidentified Journals**

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**Unidentified Cash Books**

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Series 4: Photograph Scrapbooks, 1887 - 1925

Box 49  Vol. 1 (No. 1-265) , 1887 - 1891
Box 50  Vol. 2 (No. 266-736) , undated
Box 51  Vol. 3 (No. 737-1397) , - 1894
Box 52  Vol. 4 (No. 1021-1916) , 1893 February - 1896 May
Box 54  Vol. 6 (No. 2519-3108) , 1899 February - 1901
Box 53  Vol. 5 (No. 1959-2518) , 1896 September - 1899 February
Box 55  Vol. 7 (No. 3466-3804) , 1902 April - 1904 March
Box 57  Vol. 9 (No. 4124-4478), 1905 June - 1907 October
Box 58  Vol. 10 (No. 4479-4881) , 1907 October - 1910 October
Box 59  Vol. 11 (No. 4882-5267), 1910 June - 1913 March
Box 56  Vol. 8 (No. 4016-5014) , - 1911 December
Box 60  Vol. 12 (No. 5017-5607) , 1911 June- 1915 February
Box 61  Vol. 13 (No. 5599-5886) , undated
Box 62  Vol. 14 (No. 5741-6652), 1916 February - 1925 September
Box 63  Vol. 15 (No. 5911-6092) , 1917 October -
Box 64  Vol. 16 (No. 6093-6337) , unknown - 1922 May
Box 65  Vol. 17 (No. 6190-6595), 1920 April - 1925 April
Box 66  Vol. 18 (No. 6338-6655), 1922 June - 1925 September

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## Series 5: Specifications, 1892 - 1927

### Box 67-71

#### Specification Numbers

**Box 67**
- No. x----x, 1890 August - 1892 December
- No. x----x, 1893 July - 1894 May
- No. 2578-2815, 1894 March - 1895 March
- No. 2573-3116, 1894 March - 1896 February
- No. 3117-3437, 1896 February - 1897 March
- No. 3437-3949, 1897 March - 1898 December
- No. 3950-4414, 1899 February - 1900 March
- No. 4416-4919, 1900 April - 1901 May
- No. 4920-5476, 1901 May - 1902 December
- No. 5478-7282, 1902 December - 1908 June
- No. 7284-8767, 1908 June - 1912 January
- No. 10118-11145, 1914 January - 1916 March
- No. 11142-11699, 1916 March - 1916 September
- No. 11701-12642, 1916 August - 1917 December
- No. 12661-14251, 1917 December - 1921 October
- No. 14252-15755, 1921 October - 1925 August
- No. 15759-16611, 1925 August - 1927 May

#### Specification Notebooks

**Box 71**
- Specification Notebooks (3 Volumes), 1898 - 1926
Series 6: Clippings, 1953 - 1971

*Box 43-44*

Box 43  
Newspaper Clipping Scrapbook, 1953 - 1961

Box 44  
Newspaper Clipping Scrapbook, 1962 - 1971

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