Table of Contents

Collection Overview ........................................................................................................ 1
Administrative Information .............................................................................................. 1
Arrangement ..................................................................................................................... 3
Scope and Contents ......................................................................................................... 2
Biographical / Historical ................................................................................................. 1
Names and Subjects .......................................................................................................... 3
Container Listing ............................................................................................................. 4
   Series 1: Corporate Records, 1868 - 1953.............................................................. 4
   Series 2: Sales Records, 1928 - 1963..................................................................... 5
   Series 4: Photograph Scrapbooks, 1887 - 1925.................................................... 11
   Series 5: Specifications, 1892 - 1927.................................................................... 12
   Series 6: Clippings, 1953 - 1971........................................................................... 14
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.

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

Return to Table of Contents
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

*Return to Table of Contents*

**Howe Scale Co. Ledgers**

<table>
<thead>
<tr>
<th>Box</th>
<th>Description</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Ledger</td>
<td>1882 - 1885</td>
</tr>
<tr>
<td>11</td>
<td>Ledger</td>
<td>1888 - 1890</td>
</tr>
<tr>
<td>12</td>
<td>Ledger</td>
<td>1893 - 1899</td>
</tr>
<tr>
<td>13</td>
<td>Ledger</td>
<td>1912 - 1916</td>
</tr>
<tr>
<td>14</td>
<td>Ledger</td>
<td>1917 - 1921</td>
</tr>
<tr>
<td>15</td>
<td>Ledger</td>
<td>1922 - 1927</td>
</tr>
</tbody>
</table>

**Howard Scale Co. Journals**

<table>
<thead>
<tr>
<th>Box</th>
<th>Description</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Journal</td>
<td>1882 - 1888</td>
</tr>
<tr>
<td>17</td>
<td>Journal</td>
<td>1888 - 1890</td>
</tr>
<tr>
<td>18</td>
<td>Journal D</td>
<td>1912 - 1924</td>
</tr>
<tr>
<td>19</td>
<td>Journal E</td>
<td>1924 - 1929</td>
</tr>
</tbody>
</table>

**Howard Scale Co. Cash Books**

<table>
<thead>
<tr>
<th>Box</th>
<th>Description</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Cash Book</td>
<td>1882 - 1884</td>
</tr>
<tr>
<td>20</td>
<td>Cash Book</td>
<td>1888 - 1911</td>
</tr>
<tr>
<td>21</td>
<td>Cash Book</td>
<td>1912 - 1916</td>
</tr>
<tr>
<td>22</td>
<td>Cash Book G</td>
<td>1917 - 1921</td>
</tr>
<tr>
<td>23</td>
<td>Cash Book H</td>
<td>1921 - 1925</td>
</tr>
<tr>
<td>24</td>
<td>Cash Book I</td>
<td>1925 - 1937</td>
</tr>
</tbody>
</table>
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

Box 37  Cash Book A, 1891 - 1910
Box 38  Cash Book B, 1896 - 1901
Box 39  Cash Book C, 1901 - 1906
Box 40  Cash Book D, 1906 - 1911

Box 45  John A. Mead and Co., Invoices, 1894 - 1897
Box 45  John A. Mead and Co., Ledger, 1924 - 1927
Box 28  Rutland Manufacturing Co., Ledger, 1918 - 1923
Box 29  Rutland Manufacturing Co., Journal

Unidentified Ledgers

Box 46  Unidentified Ledgers, 1885 - 1888
<table>
<thead>
<tr>
<th>Box</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>46</td>
<td>Unidentified Ledgers, 1894 - 1899</td>
</tr>
<tr>
<td>46</td>
<td>Unidentified Ledgers, 1895 - 1898</td>
</tr>
<tr>
<td>46</td>
<td>Unidentified Ledgers, 1911</td>
</tr>
<tr>
<td>41</td>
<td>Unidentified Ledgers, 1917 - 1918</td>
</tr>
<tr>
<td>42</td>
<td>Unidentified Ledgers, 1919 - 1925</td>
</tr>
</tbody>
</table>

**Unidentified Journals**

<table>
<thead>
<tr>
<th>Box</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>Unidentified Journals, 1885 - 1888</td>
</tr>
<tr>
<td>47</td>
<td>Unidentified Journals, 1891 - 1894</td>
</tr>
<tr>
<td>47</td>
<td>Unidentified Journals, 1894 - 1895</td>
</tr>
<tr>
<td>47</td>
<td>Unidentified Journals, 1911</td>
</tr>
<tr>
<td>47</td>
<td>Unidentified Journals, 1927</td>
</tr>
<tr>
<td>41</td>
<td>Unidentified Journals, 1923 - 1928</td>
</tr>
</tbody>
</table>

**Unidentified Cash Books**

<table>
<thead>
<tr>
<th>Box</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>Unidentified Cash Books, 1883 - 1885</td>
</tr>
<tr>
<td>48</td>
<td>Unidentified Cash Books, 1885 - 1888</td>
</tr>
<tr>
<td>48</td>
<td>Unidentified Cash Books, 1894 - 1895</td>
</tr>
<tr>
<td>48</td>
<td>Unidentified Cash Books, 1911 - 1912</td>
</tr>
<tr>
<td>48</td>
<td>Unidentified Cash Books, 1917</td>
</tr>
</tbody>
</table>

*Return to Table of Contents*
### Series 4: Photograph Scrapbooks, 1887 - 1925

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

Return to Table of Contents
Series 5: Specifications, 1892 - 1927

Box 67-71

Specification Numbers

Box 67-71

Box 67  No. x----x , 1890 August - 1892 December
Box 67  No. x----x , 1893 July - 1894 May
Box 67  No. 2578-2815 , 1894 March - 1895 March
Box 67  No. 2573-3116 , 1894 March - 1896 February
Box 68  No. 3117-3437 , 1896 February - 1897 March
Box 68  No. 3437-3949 , 1897 March - 1898 December
Box 68  No. 3950-4414 , 1899 February - 1900 March
Box 68  No. 4416-4919 , 1900 April - 1901 May
Box 68  No. 4920-5476 , 1901 May - 1902 December
Box 69  No. 5478-7282 , 1902 December - 1908 June
Box 69  No. 7284-8767 , 1908 June - 1912 January
Box 69  No. 10118-11145, 1914 January - 1916 March
Box 70  No. 11142-11699 , 1916 March - 1916 September
Box 70  No. 11701-12642 , 1916 August - 1917 December
Box 70  No. 12661-14251 , 1917 December - 1921 October
Box 71  No. 14252-15755 , 1921 October - 1925 August
Box 71  No. 15759-16611, 1925 August - 1927 May

Specification Notebooks

Box 71
Series 6: Clippings, 1953 - 1971

Box 43-44

Box 43  Newspaper Clipping Scrapbook, 1953 - 1961

Box 44  Newspaper Clipping Scrapbook, 1962 - 1971

Return to Table of Contents