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# References

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1. Hand Written Copy of *Record Of Watches Made By The American Watch Company*, (no date or author). Available on loan from NAWCC Library.
2. *Serial Numbers With Descriptions of Waltham Watch Movements*, Waltham Watch Co., 1954, with 1963 Addendum by Colonel G.E. Townsend.
3. George White, *Mr. Edward Howard's Watch No. 1*, *The Time Keeper*, Jan. 1945, NAWCC reprint, pages 34-35.
4. George White, *The Early American Watch - Waltham*, NAWCC Bulletin, Aug. 1947, page 173.
5. Divers & Sons, *For Sale*, NAWCC Bulletin, Oct. 1947, page 328.
6. E. Tracy, *letter to C. N. Thorpe on the American Watch Company*, NAWCC Bulletin, Apr. 1949, p 273-276 (reprint 603-606).
7. L. Barr, *Prices Of Clocks*, NAWCC Bulletin, Oct. 1954, pages 268-271.
8. *H.I.A. Journal* (July 1954), NAWCC Bulletin, Oct. 1954, page 303.
9. W. Barclay Stephens, *A Watch Commemorative of the American Revolution*, NAWCC Bulletin #69, June, 1957, page 558.
10. W. Hauptman, *Serial Numbers of the First Waltham Watches*, NAWCC Bulletin, Oct. 1958, page 259.
11. C. Kalish, *My Favorite Watches*, NAWCC Bulletin, Dec. 1960, page 473.
12. A. Kleeb, *Watch Jewels of the Past*, NAWCC Bulletin, Apr. 1962, page 191.
13. Notes of Dr. Percy L. Small compiled by F. Earl Hackett, *E. Howard: The Man and the Company*, NAWCC Supplement to the Bulletin, Number 1 (Whole #901), Winter 1962.
14. Charles Rosenberg, *PITKIN: Fact and Fiction*, NAWCC Bulletin, Feb., 1963, page 582.
15. W. Hauptman, *Appleton Tracy & Co.*, NAWCC Bulletin, Whole No. 103, Apr. 1963, page 690.
16. W. Hauptman, *The Boston Watch Co.*, NAWCC Bulletin, Whole No. 106, Oct. 1963, page 923.
17. Frank Eyles, *Another Curtis Movement (#406)*, NAWCC Bulletin, Dec. 1963, page 54.
18. W. Hauptman, *The American Watch Company*, NAWCC Bulletin, Whole No. 109, Apr. 1964, page 170.
19. W. Hauptman, *An Incredible Reunion!*, NAWCC Bulletin, Dec. 1964, page 555.
20. *Watches and Clocks*, NAWCC Bulletin, Dec. 1964, page 600.
21. J. George Jefferson, *Samuel Curtis Watch #365 Has Removable Jewels*, NAWCC Bulletin, Oct. 1965, page 992.
22. George Townsend, *Warren Watch Number 29 ... What?*, NAWCC Bulletin, Apr. 1967, page 827.
23. From the Waltham Sentinel, Thursday, March 13, 1856, *The Boston Watch Company*, submitted by F. Forgie, NAWCC Bulletin, Feb. 1968, page 143. Also available in [r65].
24. J.J.B., *Very Good Watches*, NAWCC Bulletin, Whole No. 145, Apr. 1970, page 344.
25. *Wm Ellery*, NAWCC Bulletin, Aug 1970, page 483.
26. W.L. Pritchard, *American Watch Sizes*, NAWCC Bulletin", Aug. 1975, page 298.
27. T. L. De Fazio, *The Nashua Venture And The American Watch Company*, NAWCC Bulletin, Dec. 1975, page 574.
28. Robert M. Wingate, *The Pitkin Brothers Revisited*, NAWCC Bulletin, Aug., 1982, page 380.
29. Michael C. Harrold, *American Watchmaking, A Technical History ...*, NAWCC Supplement to the Bulletin, Number 14, Spring 1984.
30. P. Autry, *The Collecting of Watches*, NAWCC Bulletin, Whole # 231, Aug. 1984, page 410.
31. P. Autry, *The Collecting of Watches Part 5*, NAWCC Bulletin, Whole # 265, Apr. 1990, page 121.
32. Philip T. Priestley, *Early History Hallmarks and the Waltham Watch Co.*, NAWCC Bulletin, Dec. 1992, page 745.
33. N. Withrow, *Happy Thanksgiving, Samuel*, NAWCC Bulletin, Feb. 1993, page 57.
34. Clint B. Geller, *E. Howard & Company Watch Dials*, NAWCC Bulletin, Aug 1993, page 387.
35. Philip T. Priestley, *Watch Case Makers of England ...*, NAWCC Supplement to the Bulletin, Number 20, Spring 1994.

- 
36. E.L. Youmans, *Watch-Making in America*, Appletons' Journal, 1870; reprinted 1971 by Eugene T. Fuller, available from NAWCC Library.
  37. *Sketch of A.L. Dennison's life written by E.W. Dennison* in February, 1871, in letter to solicitor, Mr. Schilling; donated to NAWCC Library by Philip Priestley.
  38. *Copy of biographical sketch in Aaron Lufkin Dennison's hand writing*; letter from a solicitor, Geo Dunning, in May 1877, to Eliphalet Whorf Dennison regarding his brother Aaron; donated to NAWCC Library by Philip Priestley.
  39. *Autobiography of Aaron Lufkin Dennison* (probably written in Birmingham, England, around 1880) and *Letter written by Aaron Lufkin Dennison in December 1876 to his brother Eliphalet Whorf Dennison*; donated to NAWCC Library by Philip Priestley, 11 June 1993.
  40. Central New Jersey Times, March 9, 1871. Part of W. Barclay Stephens' collection of notes and papers, NAWCC Library.
  41. George E. Townsend, *almost Everything You Wanted To Know about American Watches and Didn't Know Who To Ask*, 1970 (available from NAWCC Library).
  42. W. Barclay Stephens' collection of notes and papers at NAWCC Library.
  43. Data and pictures by George V. White; part of [r42].
  44. Wells Fargo Bank History Room, San Francisco; part of [r42].
  45. Henry Ford Museum & Greenfield Village.
  46. Charles S. Crossman, *The Complete History Of Watch Making In America*, reprinted from the Jewelers' Circular and Horological Review, 1885-1887. Donald L. Dawes, compilation from microfilm, *A Complete History Of Watch and Clock Making In America by Charles S. Crossman*, March 2002.
  47. *The American Watch Company*, Chapter L, Waltham (continued), pages 738-749, History of Middlesex County, Massachusetts, J.W. Lewis & Co., 1890.  
Also published as: E.A. Marsh and approved by R.E. Robbins (AWCo.), *History of Early Watchmaking in America*, The Keystone, Nov. 1892, Dec., Jan., Feb., Mar., & Apr. 1893.
  48. Anonymous manuscript, probably written by E.A. Marsh in 1921 on the history of the Waltham Watch Company; Catalog Item RC-2, Waltham Watch Co. Collection, Historical Collections Department, Baker Library, Harvard Business School.
  49. Henry G. Abbott, *A Pioneer - History of the American Waltham Watch Co.*, American Jeweler Print, 1905.
  50. *E.W. Dennison A Memorial*, The Barta Press, Cambridge, Mass., no author or date.  
For a more thorough treatise see:  
Charlotte Heath, *Dennison Beginnings 1840-1878*, Dennison Manufacturing Co., 1927.
  51. Charles W. Moore, *Timing a Century*, Harvard University Press, 1945.
  52. H.B. Fried, *Cavalcade of Time*, Zale Corp., 1968, watch #90
  53. Chris Balley, *Two Hundred Years of American Clocks and Watches*, Prentice Hall, 1975
  54. Vernon Hawkins, *Movement Production of the American Waltham Watch Co.*, 1982. See further discussion in *Production of Waltham Movements* by Vern Hawkins in "Vox Temporis", NAWCC Bulletin, Whole No. 251, Dec. 1987, page 476.
  55. Vernon Hawkins, *Waltham Factory Sales Records Nov. 1857 to Dec. 1858*, Roy Ehrhardt, Kansas City, MO, 1983.
  56. Vernon Hawkins, *American Watch Company Annual Reports to the stock holders 1859 - 1899*, West Boxford, MA, 1984.
  57. P.T. Priestley, *The History of the Dennison Watch Case Company and Its Founder Aaron Lufkin Dennison*, Horological Journal, March 1986, page 12.
  58. August C. Bolino, *The Watchmakers of Massachusetts*, Kensington Historical Press, 1987.
  59. M. Cutmore, *Watches 1850 - 1980*, David & Charles Publishers, 1989.
  60. Donald R. Hoke, *Ingenious Yankees*, Columbia University Press, 1990.
  61. Donald R. Hoke, *The Time Museum Historical Catalogue of American Pocket Watches*, The Time Museum, 1991, Rockford, Illinois.
  62. *Sales Records T.B.&Co. June 1857 - December 1858*, Waltham Watch Co. Collection, O-1, v.948, Baker Library, Harvard Business School. (T.B. & Co stands for Tracy Baker & Company)
  63. Michael C. Harrold, *Fulfillment Of American Industrial Watch Manufacture*, NAWCC Bulletin, Oct. 1999, pages 581-597.
  64. Illustrated Catalogue of the Watches Made by the AWCo., approx. 1867, courtesy Charles River Museum of Industry.
  65. Reprints of 1856-57 Waltham Sentinel news articles provided by Leslie Nesky, researcher and volunteer at the Charles River Museum of Industry.

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66. Reported by Donald Dawes.
  67. Sotheby's auction catalog, New York, *Fine Chess Sets, Objects of Vertu, Clocks, Watches, and Continental & English Silver*, February 6 & 7, 1980.
  68. Sotheby's auction catalog, New York, *Fine Watches, Clocks, Chess Sets, and Objects of Vertu*, October 22, 23, & 24, 1980.
  69. Sotheby's auction catalog, New York, *Watches and Objects of Vertu, Continental & English Silver*, Vol II, April 8 & 9, 1981.
  70. Sotheby's auction catalog, New York, *Watches, Clocks, and Scientific Instruments*, June 24, 1981.
  71. Sotheby's auction catalog, New York, *The Warner D. Bundens Collection of Watches and Clocks*, June 21, 1988 (5739 Warner).
  72. Sotheby's auction catalog, New York, *The Thielmann Collection of Watches, Clocks and Scientific Instruments*, June 16, 1989.
  73. Christie's auction catalog, New York, *Fine Watches, Clocks, Scientific Instruments and Related Books*, June 17, 1986.
  74. Christie's auction catalog, New York, *Fine Wristwatches, Watches, Clocks, Scientific Instruments and Related Books*, June 20, 1988.
  75. Tom & Joyce Engle, *Antique Watch Catalog*, Feb 1987
  76. David Searles, *The Cambridge Catalogue - Number One*, June 1992.
  77. 1862 AWCo Factory Catalog; Roy Ehrhardt, *American Pocket Watch 1977 Price Indicator Identification and Price Guide*, Heart of America Press.
  78. Roy Ehrhardt, *Waltham Pocket Watch Identification and Price Guide*, 1976, Heart Of America Press.
  79. Roy Ehrhardt, *American Pocket Watch 1978 Price Indicator Identification and Price Guide*, Heart of America Press.
  80. Roy Ehrhardt, *American Pocket Watch 1979 Price Indicator Identification and Price Guide*, Heart of America Press.
  81. Roy Ehrhardt, *American Pocket Watch 1980 Price Indicator Identification and Price Guide*, Heart of America Press.
  82. Roy Ehrhardt, *American Pocket Watches, Encyclopedia and Price Guide, Vol. 1*, 1982, Heart Of America Press.
  83. R. Ehrhardt & W. Meggers, "American Pocket Watches Identification and Price Guide", Jan. 1987, Heart of America Press
  84. C. Shugart & T. Engle, *The Complete Guide to American Pocket Watches*, No. 2, 1982.
  85. C. Shugart & T. Engle, *The Complete Guide to American Pocket Watches*, No. 3.
  86. C. Shugart & T. Engle, *The Complete Guide to American Pocket Watches*, No. 4.
  87. C. Shugart & T. Engle, *The Complete Guide to American Pocket Watches*, No. 6.
  88. C. Shugart & R. Gilbert, *Complete Price Guide To Watches*, No. 14, Jan. 1994.
  89. These serial numbers were recorded from George E. Townsend's "Black Book", 04/21/1983; copy provided by Stephen Helfant; Roy Ehrhardt owner.
  90. These serial numbers were compiled by Fred Selchow, 09/14/1975; copy provided by Stephen Helfant.
  91. These serial numbers were provided by Michael C. Harrold.
  92. "Pay Rolls 1859" (May 1, 1859 to October 1860), Waltham Watch Co. Collection, KC-1, v.361, Baker Library, Harvard Business School.
  93. Paul M. Chamberlain, *It's About Time*, The Holland Press, London, 1978, reprint.
  94. William H. Keith, past president AWCo. (1861-1866), *A Family Tale*, 1883; 270 handwritten page document on *History of American Watch Making*, that includes letter from Edward Howard writing about events during period 1842 to 1857. Document currently in private ownership.
  95. Waltham Weekly Record, April 5, 1883, page 5; *Timely Topics, The Father of American Watch-Making, Aaron L. Dennison*. It was this glowing newspaper article on Dennison's contributions to watch-making that prompted Keith to write his paper (above) to refute the claims made in the newspaper.
  96. Dr. Percy Livingston Small, *The Pitkin Brothers*, NAWCC Bulletin, Whole # 55, Oct. 1954, pages 251-260.
  97. Jim West, *Dennison's Eight-Day Watches - The Titanic Connection*, NAWCC Bulletin, Oct. 1997, pages 563-570.
  98. Joseph E. Brown, *Extract From "Record of Watches made by the American Watch Company"*, NAWCC Bulletin, April 1999, pages 230-231.
  99. Clint B. Geller, "The Origin and Evolution of the E. Howard & Co. Divided-Plate Keywind Movement", NAWCC Bulletin, February 2000, pages 17-45.

**100. Serial Number Ledger:**

Lucky for us, the American Watch Company (AWCo) prepared a serial number ledger of all watches they made “*Record Of Watches*” [r1]. Although an occasional movement shows up that does not match exactly with the entry in the ledger, the ledger is amazingly accurate.

This ledger was likely derived from production ledgers which contain entries in chronological order by date when groups of identical movements were completed. The serial number ledger is in order by serial number. It has the same organizational structure and handwriting from beginning to end just as though it were a single assigned task, in which case it probably was compiled in late 1880s after its last entry (S/N 1,500,000). It is the first of two known volumes [r98].

Three production ledgers are in “Waltham Watch Co. Collection” of documents at the Historical Collections Department, Baker Library, Harvard Business School, Catalog items: L-1, v.934 (1867-1868); L-2, v.935 (1869-1872); L-3, v.936 (1915-1917). Author was able to correlate several sample entries taken at random from the 67/68 production ledger with the serial number ledger.

At least two master hand written serial number ledgers exist with identical line-for-line data, but written in different handwriting. There is a very good possibility that additional ledgers existed that were used in different departments in the factory. If so, and even if they are copies of the original master (handwritten or photocopied), their owners might have made useful notes on them in the margins or covers. Author would appreciate being notified of any such records.

*Record of Watches*

1

*Made by the American Watch Co.*

<i>Date</i>	<i>Number</i>	<i>Name</i>	<i>Size</i>	<i>Manner of Jeweling</i>	<i>Bal. no.</i>
<i>Nov. 1857</i>	<i>1001 to 1400</i>	<i>Chas Parker</i>	<i>18</i>	<i>Plain</i>	<i>Steel Bal.</i>
<i>Dec. "</i>	<i>1401 " 1500</i>	<i>P. Bartlett</i>	<i>"</i>	<i>"</i>	<i>" "</i>
<i>Jan. 1858</i>	<i>1501 " 1550</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>" "</i>
<i>" "</i>	<i>1551 " 1650</i>	<i>"</i>	<i>"</i>	<i>4 holes</i>	<i>" "</i>
<i>" "</i>	<i>1651 " 1800</i>	<i>"</i>	<i>"</i>	<i>Plain</i>	<i>" "</i>
<i>Jan + Feb "</i>	<i>1801 " 2050</i>	<i>"</i>	<i>"</i>	<i>4 holes</i>	<i>" "</i>
<i>Feb "</i>	<i>2051 " 2100</i>	<i>"</i>	<i>"</i>	<i>Plain</i>	<i>" "</i>
<i>" "</i>	<i>2101 " 2200</i>	<i>"</i>	<i>"</i>	<i>4 holes (11?)</i>	<i>Gold &amp; Steel</i>
<i>March, 1856</i>	<i>2201 " 2600</i>	<i>Not Made</i>	<i>"</i>	<i>"</i>	<i>"</i>
<i>May, 1857</i>	<i>2601 " 5000</i>	<i>Daniels, Howard &amp; Davis</i>	<i>18</i>	<i>4 1/2 Pairs</i>	<i>Gold &amp; Steel Bal.</i>
<i>July, 1857</i>	<i>5001 " 5100</i>	<i>A. J. &amp; Co.</i>	<i>7 P.</i>	<i>"</i>	<i>" "</i>
<i>Aug. 1857</i>	<i>5101 " 5200</i>	<i>Tracy &amp; Kaiser &amp; Appleton &amp; Tracy</i>	<i>"</i>	<i>"</i>	<i>" "</i>
<i>Aug + Sept 1857</i>	<i>5201 " 5500</i>	<i>A. J. &amp; Co.</i>	<i>7 P.</i>	<i>"</i>	<i>" "</i>
<i>Oct "</i>	<i>5501 " 5510</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>" "</i>
<i>" "</i>	<i>5511 " 20</i>	<i>"</i>	<i>"</i>	<i>Plain Centers</i>	<i>Steel</i>

The Serial Number Ledger [r1] lists DH&D watches with serial numbers 1744, 1747, 1793, and 2601 - 5000 (with production date “March, 1856 to May, 1857”). See the first few entries in the Serial Number Ledger illustrated above. This handwritten record of movements by serial number might be a copy of Hauptman’s [r16] reference #1 furnished to him in 1958 by Mr. George R. Watts, an executive of the WWC Co since 1903. Mr. Watts refers to this ledger as “two very old handwritten books” in a letter dated June 14, 1957; see reference [r105].

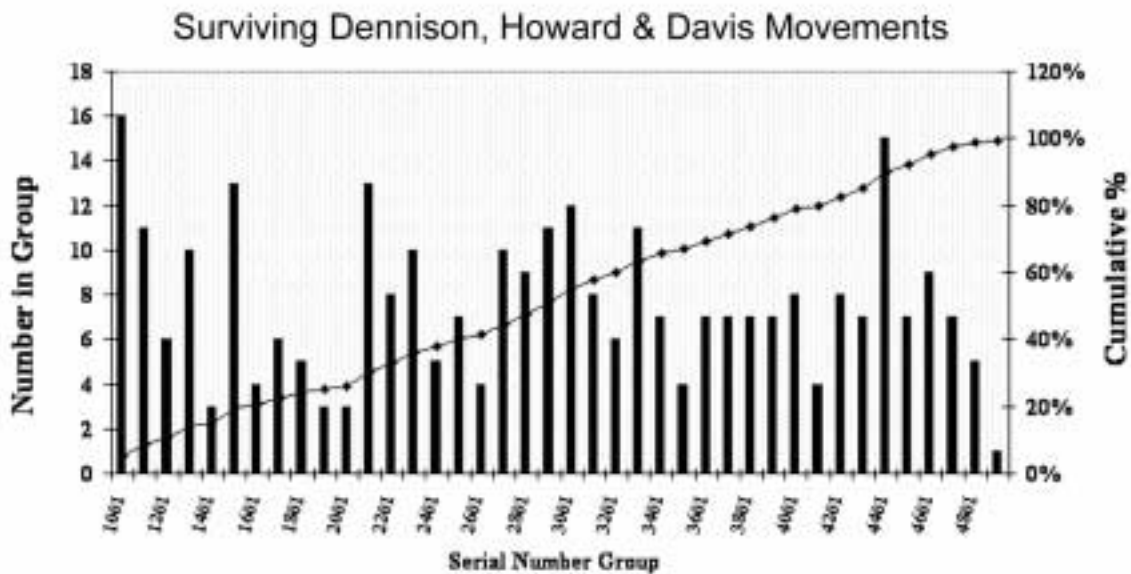
Also see the note in reference [r1] illustrated above that says, “The Dennison, Howard & Davis Co. finished work on this last hundred” which implies that the last 100 DH&D movements were actually made by BWCo., or did the scribe misinterpret a document in the files that was written 30-some years earlier. Perhaps Howard & Rice was intended; there is evidence that some of these movements were cannibalized for Howard & Rice movements (see [r103]).

One has to wonder if there is any significance for the DH&D entry 2601 - 5000 if AT&Co did not possess these movements. On the other hand, perhaps the scribe simply dutifully logged an old BWCo document (and/or made an educated guess based on the date the new company started), and filled in numbers 2201-2600 as “not made” to complete the serial number sequence. Based on other supporting evidence herein, author gives no significance to this entry.

**101. Statistical Analysis:**

A list of serial numbers of surviving DH&D movements is summarized in table on next page. This list is 7.6% of the original production, if indeed all 4,000 movements between 1001 and 5000 were actually made and sold. One would think the surviving watches would be uniformly distributed over the full range, and they appear to be according to an analysis of the data performed by contributor Hans Dahlke. See Hans’ histogram chart below. If the original production were complete over the serial number range, then the cumulative uniformly distributed survival would be a straight line over the range, as it nearly is in the chart. This analysis indicates that DH&D movements were not cannibalized for other signature movements (at least not in large numbers, although the last group of 100 movements is conspicuously small).

NAWCC’s research committee chairman, Snowden Taylor, points out that the recorded DH&D survival rate (306/4000 = 7.7%) is consistent with the Samuel Curtis survival rate (61/900 = 6.8%). We would expect the survival rates to be nearly equal because the process of obtaining these serial numbers is the same. Therefore, if a large number of DH&D movements were not made, we would be seeing a much smaller apparent survival rate. In addition, the survival rate of DH&D S/Ns 1001-2600 (124/1600 = 7.7%) is consistent with the range 2601-5000 (182/2400 = 7.6%). If the latter range were in possession of Royal Robbins, Mr. Robbins did not cannibalized many. As noted in the next reference, Sales Records [r102], sales records of the AWCo exist that list about 120 DH&D movements starting at S/N 4081. Again, Taylor points out the survival rate of the range 4081-5000 (66/920 = 7.2%) is consistent with the prior range (240/3080 = 7.8%), which leads one to conclude that large numbers of DH&D watches were not cannibalized by the AWCo, although the last 100 group is suspicious.



**TABLE 1.**  
**Surviving Dennison, Howard & Davis Movements**

1002	1003	1006	1007	1009	1011	1014	1016	1034	1035
1038	1053	1065	1072	1073	1089	1105	1107	1109	1131
1136	1148	1184	1185	1187	1188	1190	1205	1235	1245
1263	1268	1276	1306	1316	1322	1351	1357	1359	1369
1375	1379	1385	1445	1478	1483	1517	1525	1532	1534
1540	1543	1546	1547	1551	1557	1559	1591	1598	1633
1646	1662	1690	1701	1718	1719	1724	1751	1757	1813
1832	1850	1855	1876	1924	1970	1975			

1st 1,000 total = 77 --> 7.7%

2053	2068	2078	2117	2126	2148	2149	2150	2153	2155
2158	2171	2174	2186	2193	2196	2201	2233	2231	2254
2259	2279	2289	2299	2301	2304	2305	2325	2361	2363
2368	2383	2385	2386	2439	2443	2458	2471	2491	2497
2521	2525	2553	2565	2568	2583	2600	2619	2647	2657
2673	2725	2736	2737	2739	2756	2761	2772	2776	2796
2798	2801	2829	2836	2855	2857	2880	2884	2886	2894
2929	2938	2940	2941	2942	2943	2954	2964	2976	2982
2993									

2nd 1,000 total = 81 --> 8.1%

3003	3006	3020	3027	3036	3060	3066	3074	3078	3085
3092	3094	3135	3141	3147	3156	3164	3169	3199	3200
3210	3222	3254	3265	3275	3276	3306	3311	3314	3315
3330	3337	3369	3376	3384	3392	3400	3422	3429	3436
3443	3475	3482	3486	3508	3515	3528	3589	3631	3632
3648	3649	3691	3694	3700	3703	3708	3730	3733	3741
3770	3772	3773	3801	3803	3823	3826	3830	3858	3883
3914	3949	3953	3956	3960	3976	3985			

3rd 1,000 total = 77 --> 7.7%

4021	4054	4058	4060	4076	4082	4090	4098	4108	4118
4190	4198	4227	4240	4242	4252	4258	4267	4278	4286
4332	4348	4356	4359	4370	4377	4381	4407	4410	4412
4420	4423	4425	4431	4443	4445	4448	4454	4459	4460
4482	4483	4523	4527	4533	4535	4546	4550	4594	4607
4617	4621	4627	4634	4642	4645	4660	4673	4702	4713
4714	4747	4749	4754	4762	4810	4841	4849	4855	4887
4915	5000								

4th 1,000 total = 71 --> 7.1%

[total = 306 --> 7.7% (not counting 5000)]

Calling the above a “Survival List” is a bit of a misnomer. One entry, for example, is known to have been accidentally destroyed. Entry #1235 is just the top plate with center wheel & pinion, and the conspicuous entry #4915 is just barrel bridge and cock only. But for our analysis, we just need to have credible modern evidence that the watch was actually made.

Serial number 5000 is a special divided-plate movement and should not be considered part of the DH&D population, although it carries the DH&D signature. It might have been Howard’s model for next series of watches if the Boston Watch Company had survived [r99 pages 21-23]. See picture next page.



Above photo by Jim Michaels of Bob Ravel's Dennison, Howard & Davis (note comma) #5000 courtesy of The Watch and Clock Museum of The NAWCC.

**Data from Watch Cases:**

Although not a reliable source of information, cases in which Dennison Howard & Davis movements are mounted might tell us something about their origin. DH&D S/N 2673 is in the range recognized by the AWCo Serial Number Ledger [r100]. It is interesting in that it is in an Appleton Tracy & Co case. This case does not appear to be the movement's original,<sup>1</sup> but if it is, then the new company had in its possession 2673 and sold the watch in the company's own case. Other examples like this would be helpful.

Many DH&D movements with serial numbers above 2600 exist in Boston Watch Company cases. Does this mean the BWCo sold them or did the AT&Co, including the cases? This might not be helpful data unless sales records become known that show either the BWCo selling such a serial number or the AT&Co selling a BWCo case (or both).

About 70% of the DH&D movements listed in Table 3 on page 11 (Sales Records) were sold with cases. Although the Sales Ledger does not specifically say the cases were Company made, the inference is that they were. Recorded BWCo cases are listed in Table 2 below. Note the correlation between BWCo case serial numbers with DH&D movement serial numbers. These data imply (1) that the BWCo made perhaps as many as 4,000 cases, and (2) that all 4,000 DH&D movements were actually made by the BWCo., even if not all were completely finished by the BWCo. Also implied is that Howard had some BWCo cases to sell with his H&R movements.

We also have surviving DH&D movements with Tracy Baker & Co and AT&Co dials (see S/Ns 3823, 4082, & 4198 in data table at end of this monograph). Were these movements sold with these dials or are the dials replacements? S/Ns 4082 and 4198 were sold by AT&Co; see Table 3 on page 11 (Sales Records [r102]).

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1. Author would appreciate being notified by anyone knowing the history of this movement and of AT&Co case #5805.

**TABLE 2. DH&D Watches with Factory Cases**

Mvt.	Mvt. No.	Case #	Comments
SC	418	101	OF W.H.W. w/ eagle & anchor hallmarks (BWCo. ?)
SC	924	8xx	eagle & anchor hallmarks
SC	925	8xx	eagle & anchor hallmarks
DHD	1089	2271	HC with eagle hallmark (no mention of anchor)
DHD	1190	1151	eagle & anchor hallmarks, no initials
DHD	1306	1062	eagle & anchor hallmarks, no initials
DHD	1483	1333	HC w/BWCo. initials and eagle hallmark; no anchor
DHD	1517	1380	HC w/BWCo. initials and eagle & anchor hallmarks
DHD	1690		w/BWCo. initials (case data not provided)
DHD	1718	1613	HC w/BWCo. initials and eagle & anchor hallmarks
DHD	1832		w/BWCo. initials (case data not provided)
DHD	1970	1684	HC initials & eagle hallmark (no mention of anchor)
DHD	2053	2018	OF w/BWCo. initials and eagle hallmark
DHD	2117	1675	HC w/BWCo. initials and eagle & anchor hallmarks
DHD	2149	1715	HC initials and eagle & anchor hallmarks dated 1856
DHD	2193	1810	HC w/BWCo. initials and eagle & anchor hallmarks
DHD	2233	1751	HC w/BWCo. initials (other markings not provided)
DHD	2583	2188	HC w/BWCo. initials and eagle & anchor hallmarks
DHD	2739	3183	HC initials & eagle hallmark (no mention of anchor)
DHD	2929	1786	HC w/BWCo. initials and eagle & anchor hallmarks
DHD	2942	2123	HC w/BWCo. initials and eagle & anchor hallmarks
DHD	2954	2639	HC initials & eagle hallmark (no mention of anchor)
DHD	2993	3329	HC initials & eagle hallmark (no mention of anchor)
DHD	3156	2521	OF w/BWCo. initials, no eagle hallmark
DHD	3265	2661	HC initials & eagle hallmark (no mention of anchor)
DHD	3276	2531	OF w/BWCo. initials, no eagle, dated Oct. 22, 1856
DHD	3589	3377	OF w/BWCo. initials, no eagle hallmark
DHD	3708	3268	HC initials & eagle hallmark (no mention of anchor)
DHD	3730	3136	HC initials & eagle hallmark (no anchor hallmark)
DHD	3883	3479	HC w/BWCo. initials (no mention of hallmarks)
DHD	4258	4171	HC initials & eagle hallmark (no anchor hallmark)
DHD	4348	3529	HC initials & eagle hallmark, dated 1857
DHD	4621	3712	HC initials & eagle hallmark (no mention of anchor)
DHD	4714	3927	OF w/BWCo. initials, no eagle hallmark
DHD	4810		HC initials & eagle hallmark (no mention of anchor)
H&R	6238	4020	HC initials & eagle hallmark (no mention of anchor)
H&R	6424	3473	HC initials & eagle hallmark (no mention of anchor)



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The BWCo watch cases illustrated below and on the next page are especially interesting because they date approximately when the DH&D movements which they encase were made. The case illustrated below which holds DH&D S/N 2149 dates the watch by virtue of an amateur inscription “1856” on the inside front cover. This watch was most surely sold by the BWCo.



The second frame, below, shows the inside back cover. Quoting Hauptman [r16pages 931-932], “On the inside of the back lid is stamped the typical American Eagle, which though not mandatory was used by many of the early American silversmiths to denote that the article was American made. Under this mark is an anchor mark. This symbol was adopted by a large number of the Rhode Island smiths presumably from the Rhode Island seal “Anchor and Hope.” It is assumed that the anchor mark appears in the case because Cabel Westcott [...] carried on his trade in Providence before he [was hired by] the Boston Watch Co. [to make pocket watch cases.]”



Photo of Boston Watch Company silver hunting case S/N 1715 housing DH&D S/N 2149 permission of owner.

Movement #4348 is encased in BWCo HC #3529 which has presentation date of 1857. Unfortunately the month isn't engraved in presentation and we are unable to conclude much from this case.

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The next BWC Co case holds DH&D S/N 3276. It was awarded to an officer in the British Army during the Crimean war on Oct. 22, 1856. This movement and case were very likely made seven months or more before the May 9, 1857, insolvency. If the watches were made and sold in order by serial number, and at the rate of 250 per month (see [r23] and estimate in [r105]),  $3276 + (250 \text{ watches/month} \times 7) = 5026$ ; this calculation, even at a little lower production rate, does not leave many finished or nearly finished DH&D watches for Royal Robbins.



**Double sunk Turkish dial on DH&D #3276**



**Inscription reads:**

**1st Prize  
Awarded to  
E.C. Johnson  
by the  
Honorary Members  
of the  
Watson Light Guard  
at Target Practice  
Oct. 22, 1856.**

Boston Watch Company silver OF case S/N 2531 housing DH&D S/N 3276 which saw duty during the Crimean War, immortalized by poet Lord Alfred Tennyson's Charge of the Light Brigade. Photos courtesy of owner.

## 102.Sales Records:

The Historical Collections Department in the Baker Library at the Harvard Business School has a collection of documents on the Waltham Watch Company. One such document is the ledger, "Sales Records T.B.&Co, June 1857 - December 1858" [r62]. This ledger lists the sales of about 120 DH&D movements beginning with S/Ns 1282, 2329, & 4081 and ending with S/Ns 4199 & 4223 (see table below). These data are also listed in [r55] with some errors. The Sales Ledger (according to [r55]) accounts for nearly all of the new production through December 1858 (last serial number 14065); at least there are no large blocks of missing numbers. Although not compiled in [r55] nor herein, the Sales Records do show a number of silver cases with serial numbers below 5000 which might have been BWCo cases sold without movements.

Although other sales ledgers are in the Library, records for the period between December 1858 and August 1865 are missing. This is unfortunate because as documented during the depression of 1857/58, "Many a time, Mr. Robbins deposited with his own hands in Boston Banks large boxes of watches as collateral security for his notes discounted at eighteen percent." [r47 page 741] These notes were cleared and the watches sold in about 1859 [r48 page 24] & [r49 page 20], for when the sales records are missing.

TABLE 3. Dennison Howard & Davis movements from Sales Ledger<sup>a</sup> [r62]

1282-15	2329-15	4081-07	4082-07	4083H07	4084-07	4085H07	4086H07	4087-07	4088H07
4089-07	4090-07	4091-15	4092-15	4093-15	4094-15	4095-15	4096-15	4097-15	4098-15
4099-15	4100-15	4101-07	4102-07	4103-07	4104-07	4105-07	4106-07	4107H07	4108-07
4109-07	4110-07	4111H07	4112H07	4113H07	4114H07	4115H07	4116H07	-----	4118H07
4119H07	4120H15	4121-15	4122H15	4123H15	4124H15	4125H15	4126H15	4127H15	4128H15
4129H15	4130H07	4131H07	4132H07	-----	4134O07	4135H07	4136H07	4137O07	4138H07
4139H07	4140H07	4141-15	4142H15	4143H15	4144H15	4145H15	4146H15	4147H15	4148H15
4149H15	4150H15	4151H15	4152H15	-----	4154H15	4155H15	4156H??	4157H15	4158H15
4159-16	4160H15	4161H16	4162H16	4163H16	-----	4165-16	4166-16	4167-16	4168-16
4169-16	4170-16	4171H07	4172H07	4173O07	4174H07	4175H07	4176H07	4177O07	4178H07
4179O07	4180H07	4181H07	4182H07	4183H07	4184O07	4185H07	4186H07	-----	-----
4189H07	4190H07	4191H07	4192H07	4193H07	4194H16	4195H07	4196H07	4197H07	4198H07
4199H07	-----	4223H16							

Hawkins in [r55 page 117] also lists 7J DH&D #4037 and 15J DH&D #1954 in a 12/31/1858 inventory report.

a. H = Silver Hunting case    O = Silver Open Face case    - = w/o case  
jewel count follows case type using [r55] data; however, author believes jewel count entries of 16 are suspect because DH&D movements are typically listed in the actual records with group of AT&Co movements which were 16J ("4 1/2 pairs"), but the 4 1/2 pairs designation probably didn't apply to the DH&D movements.

Robbins' deal with the Waltham Improvement Company in the merger to form the American Watch Company included keeping his "stock" of watches for himself. Robbins made a personal profit from the "pawned" watches [r48 page 24], and considering the dollars involved, the number of watches in question could have been substantial.

Moore documents the appraisal of the AT&Co property and the terms of its sale by Royal Robbins to the Waltham Improvement Company in [r51 page 38]. Robbins was to receive \$125,000, of which \$100,000 was payable in stock of the new company and \$25,000 in notes. This amounted to a \$20,000 bonus over the appraised value of the AT&Co Company. Robbins' "stock" of watches was in addition. Moore further documents that on September 1, 1858, when the new company took over operations of the plant, the inventory of finished watches was worth \$83,770; Robbins sold \$52,714 worth of this inventory through the rest of the year (four months) and the remaining inventory to the new company on December 30, 1858; the new company took over sales on January 1, 1859 [r51 pages 316-318].

One could conclude from this scenario that the September 1, 1858, inventory of watches was Robbins' "stock". Moore makes this connection and claims Robbins profited from it [r51 page 32]. On the other hand, perhaps Robbins was just carrying out the duties of a sales agent until the new company took over on January 1, 1859, as agreed. This author does not believe the directors of the Waltham Improvement Company would give Robbins the output of the factory after paying him for his entire investment in the factory which produced the output (plus a bonus). However, this author can believe that the directors allowed Robbins to keep the watches he pawned and invested the money so derived into the company.

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When Moore conducted his research in late 1930s [r51 page xxii], he did not have the wealth of information now readily available. Perhaps a different conclusion would be reached if we reviewed Moore's references today, which include records of stockholder meetings of the Boston Watch Company and records of director meetings of the Waltham Improvement Company. The whereabouts of these historical documents are currently unknown to this author.

### 103. Serial Number Under Top Plate:

All Dennison, Howard & Davis movements appear to have their full serial number stamped horizontally on the underside of their top plates. This is a serialization of matched parts. The last two significant digits are stamped on the pillar plate and on the underside of the balance cock. The minute and hours wheels have the last significant digit.

How convenient of the BWCo to do this. So, if we find movements with non-matching numbers, we can conclude that some salvage work had taken place. Aside from the possibility of modern day reconstructions, we do see Howard & Rice movements and early AT&Co movements with differing numbers. A listing is given in Table 4 on next page.

Except for very early AT&Co movements (e.g., up to 6377) and possibly the first C.T. Parker movements, all Model 57 movements have only a portion of the serial number stamped on the underside of the top plate and on other subassemblies (e.g., AT&Co S/Ns 6534, 6590, & 6669 have only '34', '90' & '69', respectively, stamped under their top plates). The number of significant digits stamped on the subassemblies was probably based on the size of the batch.

Clearly a change in the custom of stamping the undersides of top plates was made, but we do not know whether the change had something to do with the manufacturing process or as a result of changing owners. Maybe the top plates with the full serial number stamped on them were left over BWCo material; at least the numbers are consistent with DH&D S/Ns.

Howard stamped the underside of many of his Howard & Rice top plates with five digits. See examples in Table 4. Was this a serialization, and if so, what was the pattern? These H&R plate numbers are too high to be BWCo serial numbers, and they are inconsistent with the numbers found on AT&Co movements. Possibly the four right most digits are the original BWCo serial number; entries in Table 4 support such a hypothesis. It is interesting to note that all of the H&R "4-digit" numbers are lower than the AT&Co numbers.



The 5-digit number, 14983, under H&R 6011's top plate appears to have an alignment scribe mark under the full set of digits (above left photo). This would indicate that all of the five digits were stamped at one time to make a single number. However, this mark might be a coincidental scratch. Movements H&R 6006, 6112, and 6252 do not have such a mark. All five digits do seem to have been made with the same style of punch as indicated by comparing H&R 6252's digits 15157 in above right photo with left photo.

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**TABLE 4. Serial Number under Top Plate**

<b>name of movement</b>	<b>No. on barrel bridge</b>	<b>No. under top plate</b>
Howard & Rice	6003	14930
Howard & Rice	6006	14927
Howard & Rice	6011	14983
Howard & Rice	6037	15022
Howard & Rice	6047	16
Howard & Rice	6060	15048
Howard & Rice	6112	14865
Howard & Rice	6128	15217
Howard & Rice	6161	14977
Howard & Rice	6214	15115
Howard & Rice	6217	15116
Howard & Rice	6238	15137
Howard & Rice	6252	15157
Howard & Rice	6264	15163
Howard & Rice	6300	23
Howard & Rice	6343	17
Howard & Rice	6424	94
E. Howard & Co	6482	40
TB&Co	5012	5012
AT&Co	5084	5884
AT&Co	5158	5958
AT&Co	5221	5921
AT&Co	5332	5332
AT&Co	5341	5341
AT&Co	5404	5404
AT&Co	5760	5760
AT&Co	5823	5823
AT&Co	5901	5901
AT&Co	6085	6085
AT&Co	6377	6377
AT&Co	6534	34
AT&Co	6590	90
AT&Co	6669	69

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#### 104. Pay Rolls:

In 1859 and 1860 P.S. Bartlett was paid over \$300 per month whereas A. Dennison received only \$125 per month [r92]. Bartlett's entries in the pay roll ledger are listed as "job rate" (as are several other peoples). Although Bartlett's entries are not the highest, at these high rates, he was probably being paid to run a crew or something like that, perhaps at piece rate (the figure was different each month); this might have been something like a modern day contractor. In any case, this information does not fit well with the image of a young, bright, popular employee upon whom the honor of a trademark was bestowed. There must be a story here waiting to be told.

The May 1, 1859 payroll shows 135 entries (individuals and others at "job rate"). Individual entries calculate out to 6-day weeks, 10 hours per day [r92].

It is also interesting to note that Charles Parker had a larger labor rate than other employees in the insolvency records [r106 Case 116, Sheet 51].

#### 105. Franklin Dennison's Collection:

There is a strange note of possible historical significance in the catalog describing Franklin Dennison's collection of antique pocket watches. This collection was displayed by the Waltham Watch Company in the 1940s. It was bequeathed to the Waltham Watch Company in 1934 by Franklin Dennison, son of Aaron Dennison, and president of the Dennison Watch Case Company in England [r51 page 261]. The catalog is titled: "Historic Horology Being a Catalogue of a Collection of Antique Watches belonging to the Franklin Dennison Collection and exhibited by the Dennison Watch Case Company at the Jewellers' Exhibition, 1913." The note in question is in item #504 which actually was part of a "Supplement 1914 Containing recent additions to the Franklin Dennison Collection of Antique Watches", Dennison's Exhibit, Jewellers' Exhibition, 1914. (copy of Catalogue provided by NAWCC Library)

Item #504 reads: "This is the ninth Waltham watch that was numbered, the first thousand having been sold without numbers. Manufactured about 1854."

Unfortunately the "ninth Waltham watch" is not described so we are unable to date precisely when the statement applies, assuming the statement has any authenticity. Indeed, it is hard to believe there could have been any period between the spring of 1853 to late 1857 when an additional 1,000 movements could have been produced that have not already been accounted for. That is, could there really have been 1,000 Warren movements made? Or 2,000 Samuel Curtis movements? Or 5,000 DH&D movements? If so, presumably they would have also been un-named because there is of yet no highly published record of such a movement without a serial number.

Perhaps an unmarked early pre-M57 movement could have gone unnoticed all these years because it would look of English origin, but 1,000 of them does not seem plausible. DH&D S/N 1009 (which might have been Aaron Dennison's personal watch - see listing) could be the "ninth Waltham watch" in question because it was the 9th watch made at the Waltham factory; the previous 1,000 movements being made in Roxbury. The cataloger might not have known the history of the Company and recorded an incorrect conclusion. Similarly, if the watch in question was C.T. Parker 1009, the cataloger might not have known that the numbers started at 1001.

{Maybe someday details on #504 will surface that will clear up this mystery. NAWCC Library searched for articles on the Jewellers' 1914 Exhibition in the in the British *Horological Journal*; *Jewelers Circular* might also be worth trying.}

Nevertheless, there was some confusion/misunderstanding at the factory on this matter even as late as 1957. Contributor Leslie Nesky found copies of letters in the "Waltham Watch Company" collection at the Charles River Museum Of Industry from George R. Watts, Manager, Material Sales Department, dated in 1957. These letters were responses to inquiries about early "Waltham" watches that people had written to the factory. In these letters Mr. Watts writes, "The first thousand watches were not numbered and were made in Roxbury. When the manufacture was started in Waltham in 1854, #1000 was used."

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## 106.Relevant Documents

### **Boston Newspapers at the Boston Public Library, Microtext Department:**

- Boston Post, Tuesday, April 14, 1857, Page 1: ad for “The American Watch” on sale by principal dealers through out the country; manufactures Dennison, Howard & Davis.
- Boston Daily Advertiser, Thursday, April 16, 1857, Page 2: four ads announcing the insolvency of Howard, Davis, Curtis and Dennison, and a meeting of their creditors to be held at the Court of Insolvency in the Boston Court House at 10AM on April 29, 1857. (Same ad was run in the Boston Daily Courier.)
- Boston Daily Advertiser, Tuesday, May 5, 1857, Page 3: ad by assignee Nathan W.C. Jameson announcing the auction sale of the Boston Watch Company estate (about 2 acres), large buildings, machinery, tools and stocks in the process of manufacture at 10AM on Saturday, May 9, 1857, on the premises. (Same ad was run through Saturday May 9; ditto in the Boston Daily Courier.)
- Boston Herald, Tuesday, May 12, 1857: small article on the sale of “The American Watch Company” in Waltham on Saturday last by Boston auctioneer N.A. Thompson. Purchaser, Royal S. Robbins in behalf of a New York company, for \$37,500. The company is said “will carry on the watch making business on an extensive scale as soon as the present lease expires.”
- Boston Evening Transcript, Wednesday, May 13, 1857, Page 1: a little larger article than the Herald’s on the sale of “the property of the American Watch Company”, upon the lands of the Waltham Improvement Company. Charles Rice is mentioned as having the lease.
- Boston Daily Advertiser, Tuesday, May 19, 1857, Page 2: assignee Jameson advertises (4 ads) second meeting of creditors of Curtis, Howard, Davis and Dennison at 1PM on May 28, 1857. (Same ads were run in the Boston Daily Courier.)

### **Insolvency Records at the Massachusetts Archives in Boston:**

**Case No. 116 of Samuel Curtis** containing 205 so-called “sheets” (often many pieces of paper).

- Sheet 1: April 15, 1857, Debtor’s Petition of insolvency
- Sheet 2: missing (probably order for Sheriff to take possession and call 1st meeting of creditors)
- Sheet 3 missing (probably list of creditors as known to Curtis)
- Sheets 4 & 5: oaths Rice owed \$26, 870.19
- Sheet 30: April 29, assignee Nathan W.C. Jameson accepted (merchant in Antrim, NH) at first meeting of creditors
- Sheet 34: May 8, order for second meeting of creditors on May 28
- Sheets 29, 96, 120, 147, 158, 162, 178, 188: Lists of debts proved at creditors meetings totaling \$41,617.74 as individual, \$101,309.75 as BWCo, \$30,577.95 as member BWCo, all total \$173,505.44
- Sheet 51: May 26, oath Charles Parker owed \$127.23 for labor (oaths #43-#95 all similar labor debts, typically much less)
- Sheet 98: June 16, petition by William B. Fessenden owed \$14,913.16 in 18 short term notes (6-14 months), plus mortgages on the two H&D Roxbury properties; Insolvency Judge made Fessenden assignee of the Roxbury properties.
- Sheet 110: June 23, oath Fellows & Schell owed \$1,636.84
- Sheet 121: June 27, order for third meeting of creditors on July 16
- Sheet 139: July 16, Jameson recorded received from sale of real estate and personal property of the Waltham Watch Factory \$37,500; also \$491.90 from “collections”. Author cannot explain the \$4,000 difference that Robbins recorded paying for the factory, \$41,500 (\$8,500 real estate & \$33,000 for contents) [r51 page 314] although Jameson transferred the deed to Robbins for \$8,500 [see Reg. of Deeds, Middlesex, Book 768, Page 176]. Also see Sheet 202 below.
- Sheets 141 & 142: August 1, more oaths Rice owed \$4,835.50
- Sheet 150: Court orders Howard and Rice to appear Aug. 14 to answer Tracy & Baker complaint
- Sheet 153: filed Aug. 25, Interrogatories (23 questions) to Rice regarding removing property from factory; e.g., did Rice have contract with company about Feb 1, 1857, in writing, where is it, what was lease, did Rice remove stock, tools and fixtures from the factory and what right did he have to do it, was the attached listing of inventory “A” the inventory of the factory on Feb 2, did Rice remove part of this inventory, at the night before the sale, or before, did Rice remove movements numbered 4891 - 4910 inclusive and other movements, and so on. Of interest of the inventory in Attachment A (“account of stock in workmen’s hands Feb 2, 1857) is 100 movements 1/2 to 7/8 done, 1170 frames (pairs of plates), long list of parts in various stages of completion, with total value including case room \$7,510.49.
- Sheet 164: Sept. 15, order for first distribution of dividends \$14,935.50 at 20 cents on the dollar.
- Sheet 175: Sept. 15, another oath Rice owed \$26,556.60
- Sheet 176: Sept. 21, another oath Rice owed \$7,607.23
- Sheet 179: Oct. 15, creditors assent to discharge (including Rice and Fessenden)
- Sheet 180: Oct. 15, Curtis’ affidavit: “Until sale of some of my property... pledge security within three weeks of filing petition [insolvency]... had reasonable cause to believe I should be able to continue to do business and that I could pay

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all my liabilities.”

- Sheet 183: Oct. 15, order for second distribution of dividends \$7,261.94 at 20 cents on the dollar.
- Sheet 185: Nov. 11, 1857, oath Jameson said Curtis as individual owed him \$15,353.83 in notes.
- Sheet 193: Dec. 4, 1858, order for 4th meeting of creditors on Dec. 13
- Sheet 202: Dec. 13, 1858, Assignee’s Account, recorded receiving \$275 for sale of Curtis lot in Charlestown (not home) and \$800 for sale of debtor’s furniture; list of expenses including advertising and legal fees; \$900 for services of Jameson and \$109.75 for services of auctioneer N.A. Thompson.
- Sheet 203: Dec. 13, 1858, order for third distribution of dividends \$12,413.32 at 20 cents on the dollar. Total of the three distributions is \$34,610.76, divide by 20% is \$173,053.80 which is close to total proved debts, difference in part to small privileged payments not recorded here; see sheet 29, etc., above
- Sheet 205: May 25, 1859, Assignee’s Account, balance \$8.00 after expenses.

**Case No. 117 of David P. Davis** containing 16 “sheets”.

- Sheet 1: April 15, 1857, Debtor’s Petition
- Sheet 2: April 15, Sheriff to take possession and call 1st meeting of creditors
- Sheet 3: April 29, list of creditors as known to Davis (10 names, including Jameson)
- Sheets 6 & 13: Lists of three debts proved at creditors meetings totaling \$1,005.76 as member of firm H&D and \$791.27 as member BWCo, all total \$1,797.03
- Sheet 15: July 16, Assignee’s account; nothing received.
- Sheet 16: Oct. 6, creditors assent to discharge (three signatures)
- Sheet 17: Oct. 15, Davis affidavit: “... I left the [BWCo] and firm of [H&D] three years before the filing of ... [insolvency and therefore not liable] “for subsequent transactions of [BWCo]”.

**Case No. 118 of Edward Howard** containing 62 “sheets” (no oaths by Rice nor Fessenden).

- Sheet 1: April 15, 1857, Debtor’s Petition
- Sheet 2: April 15, Sheriff to take possession and call 1st meeting of creditors
- Sheet 3: April 29, list of creditors as known to Howard (including Rice \$650 cash, Curtis \$16,549.25) totals over \$90,000.
- Sheets 22, 31, 41, 53, 62: Lists of debts proved at creditors meetings totaling \$52,937.18 as individual, \$2,497.46 as Howard & Davis, \$8,515.02 as member BWCo; all total \$63,949.66.
- Sheet 35: Petition of American Sewing Machine Co. owed \$736.32 for tariff on sold machines & \$342.60 in notes
- Sheet 52: July 16, Assignee’s account; nothing received except \$7.13 from “collections”
- Sheet 56: filed Aug. 27, Interrogatories (19 questions) to Howard regarding contract with Rice, Rice’s lease of factory, and removing “stock, materials, tools & fixtures” from factory (similar to Rice’s in Curtis Sheet 153 above).
- Sheet 57: missing; only one in this case 118 [could it have contained the answers to the interrogatories?]
- Sheet 58: Oct. 15, creditors assent to discharge
- Sheet 59: Oct. 15, Howard’s affidavit: in essence Howard’s property would have covered his own debts if Curtis hadn’t failed with notes endorsed by Howard.

**Case No. 119 of Aaron L. Dennison** containing 29 “sheets”.

- Sheet 1: April 15, 1857, Debtor’s Petition
- Sheet 2: April 15, Sheriff to take possession and call 1st meeting of creditors
- Sheet 3: April 29, list of creditors as known to Dennison (11 names including the Waltham Improvement Co.)
- Sheets 10, 25, 22: Lists of debts proved at creditors meetings totaling \$14,821.03 as member BWCo
- Sheet 23: July 16, Assignee’s account; nothing received.
- Sheet 27: Oct. 15, 15 creditors assent to discharge
- Sheet 28: Oct. 29, Dennison’s affidavit: in essence sold his interest in company to Curtis more than 6 months prior to insolvency and therefore not liable

**Registry of Deeds, Norfolk County, MA** (below is subset of 58 examined records)

- Book 169, Pgs 211& 222: Jun. 1, 1846, Howard, Davis & Stephenson purchase property (23,225 Sq. Ft.) between East & Yeoman streets from Sumner & Williams for the Clock & Balance factory with \$4,243 mortgage from Sumner & Williams (East is now Hampden; Yeoman is now Norfolk at location of property)
- Book 175, Pg 154: Apr. 1, 1847, Luther Stephenson backs out
- Book 182, Pg 66: Jul. 15, 1848, Howard purchases property on Eustis Street for home (about 7,000 Sq. Ft.) from David Simpson for \$1,500 and assumes Simpson’s mortgage of \$978.77 with A.D. Williams
- Book 188, Pg 211: Jul. 15, 1848, Howard sells about half (4/7ths) of Eustis property to Davis for \$10 + 1/2 mortgage
- Book 198, Pgs 119 & 120: Nov. 1, 1850, Howard & Davis purchase property (6,250 Sq. Ft.) on corner of East & Prescott Streets from Sumner for the Boston Watch Company factory with \$1,845 mortgage from Sumner
- Book 203, Pg 248: Oct. 16, 1848 (not recorded till ‘51), Howard adds lot (about 1,138 Sq. Ft.) to his Eustis home for \$300



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- Book 231, Pg 177: Oct. 11, 1854, Howard & Davis re-mortgage the East & Prescott property with William B. Fessenden (a jeweler in Lowell, Mass) for \$6,000
  - Book 232, Pg 99: Nov. 24, 1854, Howard mortgages his Eustis St. property for \$5,100.45 with Nathan W.C. Jameson, merchant in Cambridge, MA.
  - Book 241, Pg 117: Dec. 4, 1855, Howard mortgages Eustis St. property with Curtis for \$2,500 in addition to the mortgages with Williams (split with Davis) and Jameson
  - Book 241, Pg 118: Sept 15, 1855, Howard & Davis mortgage the East & Yeoman property with Horace Barnes for \$6,000 in addition to mortgage with Sumner & Williams
  - Book 245, Pg 42: May 1, 1856, Howard & Davis sell the East & Yeoman property to John T. Ellis (lumber dealer) for \$1,000 plus mortgages to Sumner & Williams and Barnes
  - Book 245, Pg 54: May 1, 1856, Howard sells his Eustis Street property to Ellis for \$1,000 plus mortgages
  - Book 246, Pg 28: May 29, 1856, Barnes sells East & Yeoman mortgage to William B. Fessenden for \$6,000
  - Book 253, Pg 220: Mar 14, 1857, Ellis sells the East & Yeoman property to William B. Fessenden for \$1,000
  - Book 257, Pg 173: Jul. 1, 1857, Fessenden sells Rice the East & Prescott property with its mortgages for \$5,000 with provision that Rice can return it with 30 days notice
  - Book 257, Pgs 173-175: Jul. 16, 1857, Fessenden agrees to sell Rice the East & Yeoman property plus shares in the Waltham Improvement Co. and East Boston Iron Co. with 3 payments, last one due Nov. 16, '58, totaling \$11,626.43
  - Book 274, Pg 211: Apr. 16, 1857 (recorded Mar 26, 1859), insolvency of Howard & Davis (clock makers)
  - Book 274, Pg 212: Mar 9, 1859, the East & Yeoman property with mortgages transferred to Rice
  - Book 274, Pg 258: Mar 9, 1859, Fessenden releases the East & Prescott property to Rice
  - Book 276, Pg 101: Feb 14, 1859 (recorded May 10), Jameson, Howard & Davis release rights to East & Prescott to Rice
  - Book 276, Pg 102: Mar 31, 1859, Fessenden and Davis formally transfer rights to the East & Yeoman property to Rice
  - Book 296, Pg 142: Oct. 1, 1860, Howard purchases additional property (9337 Sq. Ft.) from William H. Sumner adjacent and south of the East & Prescott property for \$11,750 mortgage from Sumner
  - Book 298, Pgs 92 & 93: Apr. 30, 1861, Howard purchases the original East & Prescott property from Rice with \$6,200 mortgage plus the Sumner & Williams mortgage
  - Book 298, Pg 94: May 1, 1861, Howard sells the East & Prescott addition to the Howard Clock & Watch Company
  - Book 299, Pg 95: Jun. 14, 1861, Rice sells the East & Yeoman property to Merchants Bank of Boston
  - Book 299, Pg 187: Jun. 19, 1861, Rice sells Howard's East & Prescott mortgage to Freeman's Bank of Boston
  - Book 311, Pg 204: Sept 16, 1862, Davis sells his Eustis Street property for \$500.

**Registry of Deeds, Middlesex County, MA** (below is subset of 20 examined records)

- Book 678, Pg 44: Mar 31, 1854, George Lawton sells 5 acres of land to the WICo; Lawton holds mortgage
- Book 698, Pg 465: Nov. 20, 1854, the WICo sells 61,000 Sq. Ft. of property on Charles River (lot #1) to Curtis, Howard & Dennison (BWCo) for \$1,400.36
- Book 698, Pg 468: WICo holds \$7,380.57 mortgage on above; recorded WICo took possession of property on Mar. 3, '57
- Book 718, Pg 489: Nov. 20, 1854, Curtis, Dennison & Howard (BWCo) takes 2nd mortgage, \$15,000 from William B. Fessenden; recorded Fessenden discharges mortgage on May 22, 1857, having received full payment
- Book 729, Pg 9 & Book 736, Pg 371: Nov. 1, 1855, WICo sells BWCo 2nd parcel of land (9,000 Sq. Ft.) & holds mtg; foreclosed Mar 3 '57
- Book 749, Pgs 52 & 54: Jul. 15, 1856, WICo sells BWCo 3rd parcel of land (12,000 Sq. Ft.) & holds mtg; foreclosed Mar 3 '57
- Book 768, Pgs 7, 8 & 9: Apr. 16, 1857, Dennison, Howard & Curtis assign their property to assignee Jameson
- Book 768, Pg 176: May 9, 1857, Jameson transfers the BWCo property (but only the first 61,000 Sq. Ft. parcel) to Royal Robbins for \$8,500 plus its incumbencies
- Book 799, Pg 15: Aug. 13, 1858, Robbins sells watch factory to WICo for \$8,500 and outstanding BWCo mortgages
- Book 817, Pg 69: Jameson transfers the above 2nd & 3rd parcels of land to the American Watch Company for \$32 "in pursuance of a sale at public auction of said premises May 24, 1859"

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107. Aaron Lufkin Dennison Epitaph:

No article on the first “Walthams” would be complete without a commentary on Aaron Lufkin Dennison. Many commentaries have already been written; the best this author has seen was not in a book about Aaron, but rather in a book about his brother, Eliphalet Whorf Dennison.

Before his watch making endeavors, Aaron saw an opportunity to make and sell boxes to the jewelry trade. He established such a business venture with his father and family. The business expanded to include tags. Years later Eliphalet bought out his father and eventually turned the box and tag business into a very successful enterprise. His building still stands as the Dennison Manufacturing Company, in Framingham, Mass.

The Dennison Company commissioned a memorial book to be written on Eliphalet [r50]. In it the author describes Aaron in the following manner: “*Mr. A.L. Dennison was a man of most attractive and interesting personality. He was tall and slender, with a full beard except that the upper lip was shaven. His face wore a severe expression, but his smile was very sweet. Meeting him for the first time, one would not suspect the persistence and patience that had carried him so far and so long against overwhelming difficulties. It was easy to see that he was a dreamer, but not so easy to see that he had the courage of his dreams.*”

*“In every way a simple man, he loved plain and comfortable ways of living and had no taste for luxury. He was particular about his own dress, that it should be neat and suitable, and had an especial liking, in his own case and others, for a good hat. He was a vegetarian, though, as he said, not a bigoted one”.*

Eliphalet looked up to his brother and felt indebted to him, as should the world, he said as he wrote of Aaron’s accomplishments. In a letter to Aaron, January 14, 1874, Eliphalet wrote: “*Your brow is crowned with laurels of success as a great inventor; as a man of indomitable courage, push, and industry, and of incorruptible integrity; one who has sacrificed his life to the science that he was early wedded to, -- sacrificed home, country, and all that selfish men surround themselves with, called comforts, for your love of that science, and your love of mankind.*”

108. Edward Howard Epitaph

For a commentary on Edward Howard, author would like to mention 12 significant medals Howard received for his and his partners achievements in various fields. Note the dates; Howard was a busy man. These medals are documented in [r13 page 7].

*Quote [...] the first four were awarded by the Massachusetts Charitable Mechanic Association to Howard and Davis, the first, in 1847, for “Regulator Clocks;” the second, in 1850, for “Clocks;” the third, in the same year, for “Gold Standard Balances;” and again, in the same year, for “Fire Engines.” The fifth and sixth were awarded by the Maryland Institute for the Promotion of Mechanic Arts, in 1852, for “Bankers’ Scales,” and in 1855, [...], for “Sewing Machines.” In 1855 the Metropolitan Mechanics Institute awarded Dennison, Howard and Davis a medal for “Watches,” while, in 1856, the Massachusetts Charitable Mechanic Association awarded two medals to Howard and Davis, one for “Eyelet Sewing Machines,” and another for “Hand Sewing Machines.” The Metropolitan Mechanics Institute gave Howard and Davis a medal in 1858, for “Sewing Machines for Tailors’ Use.” [...] Again, in 1860, the Massachusetts Charitable Mechanic Association cited Edward Howard and Company for “Superior Watches and Watch Movements.” The last medal was from the same association, in 1869, at their eleventh annual exhibition. End Quote.*