

Horologica

Contributors this issue Bob Frishman, FNAWCC (MA), Fortunat Mueller-Maerki, FNAWCC (NJ), Ray Comeau (MA), and Robert Gary (CA)

Share reviews and announcements of new and interesting books, websites, digital media programs, periodicals, exhibits, and all else pertaining to horology. Send contributions to Editor Therese Umerlik at tumerlik@nawcc.org or mail to NAWCC, Inc., Publications Department, 514 Poplar St., Columbia, PA 17512-2130.

Coloring Book Explores Dream World of Clocks

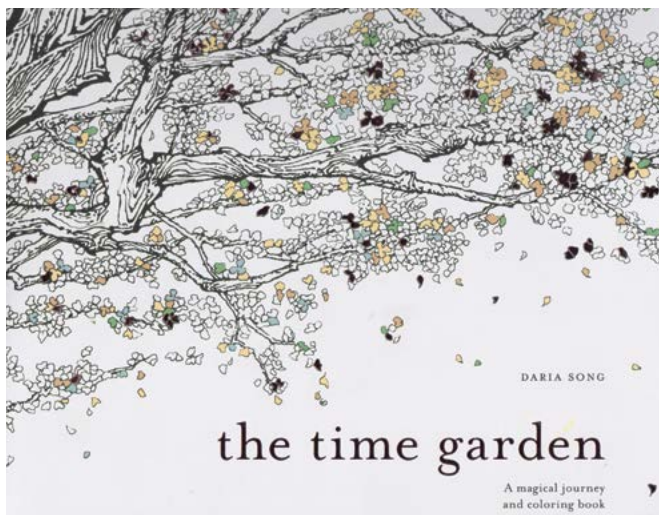
Daria Song, a young artist in South Korea, draws her inspiration from clocks. “Clocks are my biggest interest when I draw and create artworks since I ever started drawing,” she wrote in an email response to me after I purchased her wonderful 2015 coloring book, *The Time Garden: A Magical Journey and Coloring Book*.

I am certainly not her only fan. This fantasy story, in which a cuckoo clock is the mediator for time-travel back to childhood emotions and memories, sold more than 60,000 copies in Korea and has been published in 22 other countries. Her US publisher, Penguin Random House, paid her an advance of more than \$20 million, the largest amount offered to a Korean author. Two coloring-book sequels also now are available from this talented artist who, for five years during her own childhood, lived in San Francisco.

The Time Garden is a “magical journey” of a little girl whose father one day brought home an antique cuckoo clock. A red-haired fairy lives within and leads the girl

on nighttime visits to dream worlds before returning her home to morning reality. The book’s many pages—most including clocks—portray these visions in line drawings of great detail. I have not approached a coloring book in decades, but my Sharpie pen multipack now is strongly beckoning me to begin.

Daria Song has also produced many stand-alone colorful artworks, all with clock and time themes. Studying those may guide our youngsters—and us—to color her drawings in ways she would envision. I suggested that our Museum Store stock this softcover book.



Editor's note: Daria Song's second coloring book titled The Time Chamber can be ordered from the Museum Store. Please see the ad in the July/August 2016 issue of the Mart & Highlights.

The Time Garden: A Magical Journey and Coloring Book, by Daria Song. ISBN

978-1607749608. Published by Watson-Guptill, 2015. 80 pages. Softcover book.

—Bob Frishman, FNAWCC (MA)

Everything You Ever Wanted To Know about British Industrial Clock Making in the Twentieth Century

When US-based clock collectors think of clocks made in England and Wales, they imagine mainly clocks made in traditional workshops, by masters, journeymen, and apprentices, and for many centuries that image was correct. However, by the late nineteenth century the British market was flooded with much cheaper, foreign-factory made clocks produced with interchangeable components originating from Germany, France, and the US. By the turn of the nineteenth century into the twentieth century, as the craftsmen clockmakers were disappearing in the UK, there

emerged a British clock-making industry, which supplied a significant number of the domestic mechanical clocks bought by the British from about 1890 to 1970.

Virtually no one studied and documented this industry while it existed, in spite of its significant volume of production and its diverse output. It is only very recently that two authors have tackled the subject. To their credit the scholarly curators at the horological department of the British Museum embraced a proposal by John Glanville and William M. Wolmuth, the authors of the book under review, to systematically collect and

document this period of horological history. As a result, the British Museum now has in store, and viewable on special request, the carefully assembled and comprehensive collection of domestic mechanical clocks made by the English and Welsh factories concerned.

The publication under review is the ink-on-paper embodiment of this multiyear research project and contains an extraordinary amount of never-published-before information on the subject. The authors were diligent in not only studying the collected artifacts but also in piecing together the history of each company by tracking down the few, long retired people who worked in and managed those twentieth-century English clock factories and their descendants.

The book has seven chapters (one introductory and six for “families” of companies):

1. Introduction
2. British United Clock Co. (BUCC), Tame Side and Newbridge, (115 images)
3. Williamson, English Clock & J. J. Watch Manufacturers (up to 1932), Rotherham and Mercer (130 images)
4. Elliot, Grimshaw, Gillett & Johnston and FW Elliott (190 images)
5. Smiths, ECWM (1932 onward), Enfield and UKCC (191 images)
6. Garrard, Norland, Clarion (128 images)

History and Inner Workings of the Harvard Coop Clock

It is pronounced “coop”—as in where chickens live—but it is the iconic Harvard Square store of the Harvard Cooperative Society (Figure 1). One of America’s largest college campus retailers, it serves Harvard students and the public with books and general merchandise, much of it donning the distinctive logo of this top-echelon university.

The society began in 1882 in a student dorm room; then it built and occupied its brick edifice in 1925. Within the top triangular pediment are counterweighted hands on a round marble and slate clock dial, the inspiration for Ray Comeau’s poem printed at the end of this article. Comeau encouraged me to discover and share the clock’s history.

7. Perivale, Davall, Newport and Francis (176 images). The number and quality of the countless photographs are essential parts of the value of this book, for the practical horological repairer and restorer at the bench and for the historian who will be able to trace when which feature was implemented and how.

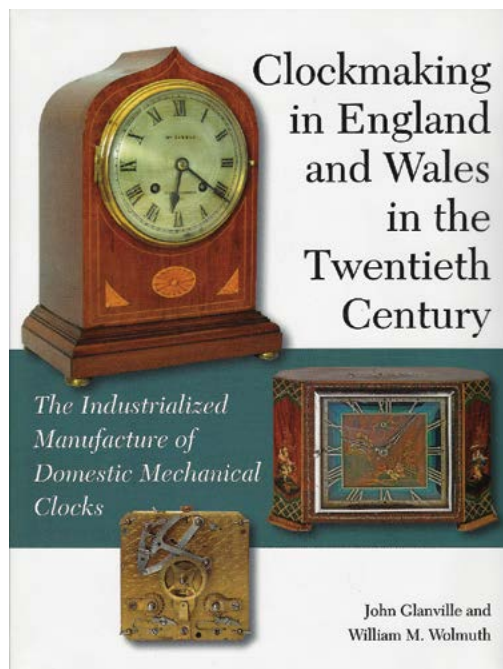
This book is an essential reference and research tool for collectors and restorers dealing with any twentieth-century English and Welsh domestic mechanical clock because it will help them identify the maker, the approximate date of manufacture, and the history of the clock’s movement.

Given its unique coverage of the subject area, this book is a must-have for every serious student of horological history, and any professional clock repairer dealing with mass market British clocks made in the twentieth century.

Clockmaking in England and Wales in the Twentieth Century: The Industrialized Manufacture of Domestic Mechanical Clock by John Glanville and William M.

Wolmuth. Forewords by Neil MacGregor and David Thompson. ISBN 978-1-84797-895-0. The Crowood Press, Ramsbury, Wilshire, UK, 2015. 368 pages and 1,016 images with the majority in color. Glossary and index of subjects, people, and brands.

—Fortunat F. Mueller-Maerki, FNAWCC (NJ)



On a sunny June 1, 2016, I connected with John Ciancio, the society’s facilities manager. In his office was a large copy of the original building plan by Boston architects Perry, Shaw & Hepburn, showing the dial in its place of honor. Not shown is the weathertight shed behind that dial and pediment, home of the Howard weight-driven electrically wound deadbeat escapement movement. Ciancio led me across a flat rubber roof to the shed’s door, opened the padlock, and allowed me to view the Howard at work (Figure 2).

Ciancio is a 40-year Coop employee, who took over the clock’s care around three years ago when his colleague retired. He oversaw the rewinding of the coils of the original electric motor when the motor failed, no doubt after drive shafts seized. He also refurbished those shafts and occasionally lubricates the movement’s

bearings. Regularly, he makes slight adjustments to the pendulum length, understanding that temperature changes affect the rate. He reported that the clock is entirely reliable, except when New England snowstorms stop it dead, probably because of ice and snow buildups on the hands.

While unsigned and no longer in its original and distinctive Howard green and gold paint, the movement clearly matches the illustration of the “small size Tower Timepiece” in the Howard catalog I own from those same years (Figure 3). That image shows additional attachments and accessories not needed on the Coop’s movement, which drives just a single pair of hands.

The Harvard Cooperative Society’s membership fee is \$1, the same as in 1882. I would gladly have paid that fee just for this chance to visit a landmark Harvard Square timekeeper.

—Bob Frishman, FNAWCC (MA)

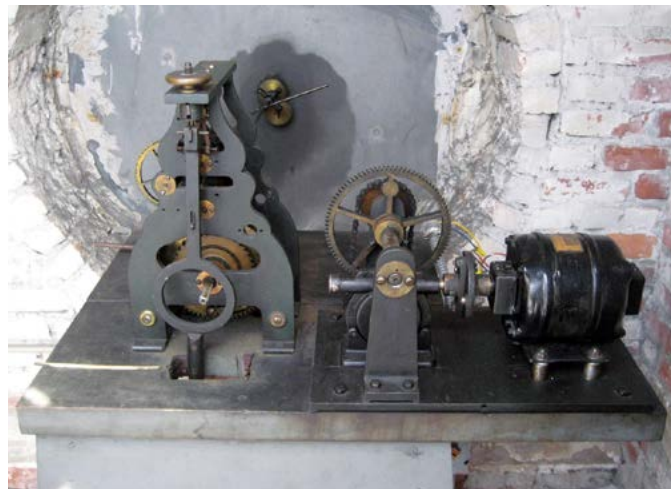


Figure 3. View through the roof shed door of the Howard movement, winding motor, and rear of stone dial.



Figure 1. Front facade of the Harvard Coop building in Harvard Square in Cambridge, MA.

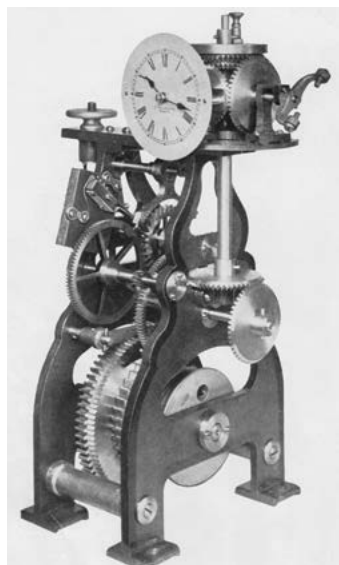


Figure 2. The “small size Tower Timepiece” as shown on page 20 of E. Howard Clock Co.’s Tower and Street Clocks catalog, ca. 1925.

The Ancient Harvard Square Clock

It’s a circle
 Within a triangle pediment
 Atop the Harvard COOP
 As if the Greeks
 Had built a temple there
 So high and almost
 Invisible
 That you wonder if any
 But pigeons have sensed
 Hands turning
 The spirit of Zeus

Although Ray Comeau has worked in Harvard Square for nearly 40 years, it was only recently, while sitting on the second floor in Starbucks, that he noticed an old clock high up in the center of the square and was inspired to write this poem. He is a former dean and current lecturer in Harvard University’s Division of Continuing Education and a loyal member of Chapters 8 and 87 in Massachusetts. His email is comeau@hudce.harvard.edu.

© Raymond Comeau

200th Anniversary of Lemuel Curtis Patent

On July 12, 1816, Lemuel Curtis (1790-1857) was granted a patent for “improvements on Willard’s time-piece.” Because of the 1836 fire that destroyed the US Patent Office in Washington, DC, the details of his patent are not known.

Thanks to information about Curtis in Paul Foley’s book titled *Willard’s Patent Timepieces* (Norwell, MA: Roxbury Village Publishing, 2002) we can make some assumptions. After completing a Willard apprenticeship, Curtis set up shop in Concord, MA. He was the first to attach banjo clock movements with a bolt through the case back, securing the movement far better than Willard’s through-bolts. His pendulum suspension improvements reduced the problems of pendulum dislodging and refitting.

Curtis is best known for developing and producing his girandole wall clocks, an elegant banjo clock variant that many have called America’s most beautiful clock design. Not a financial success, however, original Curtis girandoles number fewer than a hundred and command huge prices when available for purchase. His 1816 patent, however, does not seem to apply to this case design. One proof, perhaps, is my recent photo of a repair customer’s standard gold front banjo clock with the “L. Curtis Patent” throat glass (Figure 1). I also include a photo of the grand Curtis girandole clock on display in the Art of the Americas Wing of the Boston Museum of Fine Arts (Figure 2), the location for the 2017 Ward Francillon Symposium. For more information on that event, visit www.horologyinart.com.

— Bob Frishman, FNAWCC (MA)



Figure 1. Throat glass detail of Lemuel Curtis banjo clock.



Figure 2. Girandole wall clock by Lemuel Curtis, Concord, MA, ca. 1816-1821, with accession number 1991.241. COURTESY OF BOSTON MUSEUM OF FINE ARTS.

Clocks and Papers at the Connecticut Historical Society

June 12, 1816, was the date of an Eli Terry patent for “Improvement in the thirty hour brass and wooden clocks.” Exactly 200 years later, an exhibit of clocks by Terry and Seth Thomas was ending at the Connecticut Historical Society (CHS) in Hartford, 25 miles from Plymouth where Terry began factory production of wooden clock movements with interchangeable parts.

Headlining that exhibit was the society’s most recent clock acquisition, a rare variant of Terry’s pillar and scroll design. Made around 1819, acquired in 2015, and now returned from conservation, it features a tiger maple case and ivory rosettes on unusual top fretwork. Its visible outside escape wheel dates it to the early days of this style, not later than 1822 (Figure 1).

Also on display was the likely prototype for this innovative shelf clock design. The 30-hour box clock, made around 1814, is believed to be a Terry patent model (Figure 2). The correct but replaced clear glass door, with a circle of painted hour numbers, permitted a full view of the wooden movement. Owners also could easily see when the weights had descended to the case bottom and needed rewinding.

Ilene Frank began her job as CHS chief curator just over a year ago. She toured the exhibit with me and explained that when she determined that the focus would be solely on the Terry family and Seth Thomas, selecting examples from the society’s collection was straightforward. One tall clock by Eli Terry, circa 1795-1800, was in the room. In a cherry case and behind its brass dial was an 8-day wooden-works, weight-driven movement made before the Porter contract.¹ All of the other clocks were shelf clocks, also with wooden movements and various Terry and Thomas labels from the subsequent years of mass production.

On April 29, 2016, the society hosted a Clock Study Day. Tom Manning, curator of clocks at the American Clock and Watch Museum in Bristol, CT, was joined by two experts from Nathan Liverant and Sons. They presented an in-depth program on the art and technology of early nineteenth-century Connecticut clock making, complete with an examination of a wooden-g geared movement that Manning brought.

On the day of my visit, Frank also led me into the society’s on-site storage areas. An online database can provide a virtual tour, but seeing in person the tall, shelf, and mantel clocks is far more rewarding. Perhaps more exciting to students of technology history is the CHS’s unique collection of clock-making tools, fixtures, and parts. In Donald Hoke’s groundbreaking book, *Ingenious Yankees: The Rise of the American System of Manufactures in the Private Sector* (New York: Columbia



Figure 1. An Eli Terry, ca. 1819, pillar and scroll tiger maple shelf clock with accession number 2015.92.0. While rare and mostly original, its hands were incorrect and not replaced, the newer glass tablet is of the appropriate style, and the unusual ivory rosettes were remade from period piano keys. This photograph was taken in April 2016 at the Connecticut Historical Society in Hartford, CT.

University Press, 1990), he devotes a long and highly detailed chapter to wooden movement clock manufacturing. Much of his research was based on his study there of innovative Seth Thomas gauges for marking, checking, and locating parts, and of fixtures for making, forming, and drilling them.

Upstairs in the longer-running *Making Connecticut* exhibit, Daniel Burnap’s wheel-cutting engine is on display. It highlights the contrast between a clockmaker’s laborious hand-fabrication of movements and the bulk-production methods pioneered in Plymouth.

CHS has more Burnap material. My next stop was its Waterman Research Center where I spent several hours poring through a trove of clock-related papers and

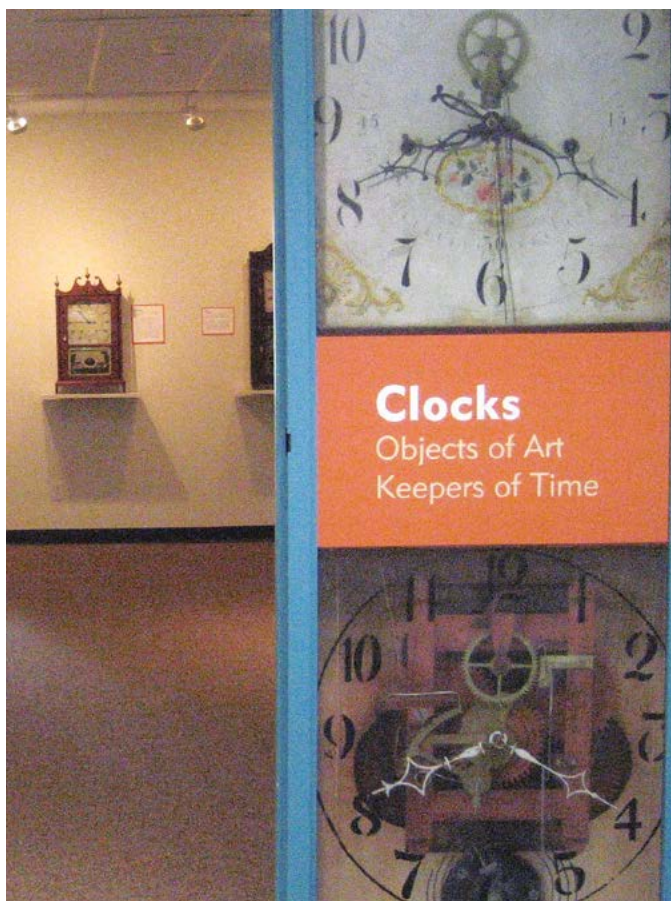


Figure 2. The exhibit entrance sign in the foreground features print enlargements of the box clock movement and a painted wood dial with outside escapement. This photograph was taken in April 2016 at the Connecticut Historical Society in Hartford, CT.

ephemera, ably guided by archivist Barbara Austen. The Burnap file included handwritten family and business documents and his account books. But boxes of letters, broadsides, catalogs, price lists, deeds, wills, and magazines, among other items from many clockmakers, researchers, and manufacturers offered a true bonanza (Figures 3-5).

Some of my time was spent reading through the 1890s issues of *The Waterbury*, a magazine published by that company. I skipped over the sentimental human interest stories and some surprising xenophobic pitches, but I enjoyed the statistics, anecdotes, cartoons, instructions, and illustrations. I learned that olive oil was used from the earliest days of watch lubrication and was the “most perfect non-drying oil known.” Humor included such quick jokes as “First Convict: You don’t mean to say you’ve got a watch. What did it cost you? Second Convict: Two years.”

As usual when reading old periodicals, the advertisements often were the most interesting and relevant to today’s collectors and scholars. I viewed ads for O’Hara watch dials, some with Hebrew and Chinese hour

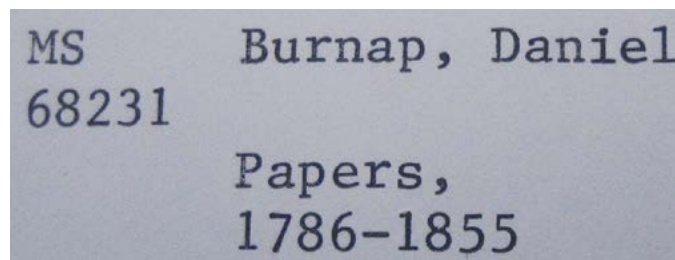


Figure 3. The Daniel Burnap file label succinctly states the treasures found within. This photograph was taken in April 2016 at the Connecticut Historical Society in Hartford, CT.

markers, and that maker’s line of political campaign buttons. I saw ads from Hipp, Didisheim & Bro. of New York offering its Swiss chronographs and 8-day watches. William Barthman of New York regularly advertised his service of copying portraits onto watchcases. Riggs & Bro. of Philadelphia offered used marine chronometers, \$30-\$100. Waterbury, of course, advertised its own products, including a Trump watch for \$2.50.

The papers of Penrose Robinson Hoopes are there. I perused many letters relating to his researching, writing, and publishing of *Connecticut Clockmakers of the Eighteenth Century* (Hartford, CT: E. V. Mitchell, 1930). He also authored *Shop Records of Daniel Burnap, Clockmaker* (Hartford, CT: Connecticut Historical Society, 1958). I read his correspondence with American horological luminaries, such as Jesse Coleman, Amos Avery, George Eckhardt, Arthur Rawlings, John Bowman, Edward Ingraham, Albert Partridge, Edwin Battison, Lockwood Barr, and Brooks Palmer. Some letters provided insights into the earliest days of the NAWCC and the founders’ uneasiness with commercial inroads into the Association’s academic and scholarly mission.

There is a 1930 letter from James Conlon of Boston, a maker and dealer of Willard clock reproductions, some of which have been accidentally or purposefully represented as the real thing. A “Simon Willard” lighthouse clock at Winterthur, for example, now is attributed to Conlon. In his letter, Conlon revealed that he owned three old wheel cutters: two Swiss and one from an eighteenth-century Connecticut clockmaker. Conlon probably used these when making his reproductions. He adds that “none of these tools are for sale.”

Perhaps most poignant to me was viewing an original Eli Terry “Letters Patent,” complete with the signature of John Quincy Adams. I saw other early hand-inked documents and letters, with signatures of Thomas, Terry, Burnap, and others. We may sense the hand of Terry and Thomas on their clocks, but being inches from the famous names, carefully signed with a quill pen, somehow evoked far stronger feelings.

Although the CHS’s special clock exhibit has concluded, the collection may be viewed by request and appointment. Arrangements are also easily made to ac-

BROAD-SIDES
Small
1841
S518s

Accession #
86769

**SALE OF FINE GOLD PATENT
LEVERS, LEPINES,
ANCHOR ESCAPEMENTS, & FINE SILVER
WATCHES,
GOLD GUARD CHAINS, &C.,
AT
AUCTION,
AT 226 MAIN-ST.,
On Thursday, Dec. 9th,
At 11 o'clock, A. M.,
And at half-past 6 in the Evening.**

—

WILL be sold a splendid invoice of finest Watches, of all kinds; among which are --- full Jeweled English Levers, Gold Case and Dial --- also with Enameled Dials; fine Anchor Levers, 13 Jewels, with fine Gold Cases and Dials, Ladies and Gentleman's size. Gold Lepines, and small Gold Vertical Watches, for Ladies, Silver Anchors; Lepines, and English Silver Levers, plain and extra Jeweled.

ALSO, — A large assortment of best quality common Silver Watches, warranted fine time-keepers, and two fine Gold Levers, double timed, and Independent Seconds, with 21 Jewels.

Gentlemen wishing articles of the kind, will find a splendid stock to select from, and well worthy their attention.

The sale will be positive. Every article put up will be sold to the highest Bidder.
A true representation will be given of every Watch, and guaranteed to be correct.
The Stock can be examined from 8, A. M., until the commencement of the Sale.

HARTFORD, Dec. 9th, 1841.

SEXTON & SEYMOUR, Auc'trs.

Figure 4. A broadside shows that Hartford area residents in 1841 could attend watch auctions. This photograph was taken in April 2016 at the Connecticut Historical Society in Hartford, CT.

cess and view the kinds of documents and publications I have described. The society may be reached at www.chs.org and by calling 860.236.5621. To help support their mission and activities, they welcome new members.

— Bob Frishman, FNAWCC (MA)

References and Notes

1. See these articles in the July/August 2016 issue, No. 422, of the *Watch & Clock Bulletin*: Andrew H. Der- van, "Overview of Connecticut Wooden Shelf Clock Movements: Terry, Groaner, and Torrington," 337-341; and Mary Jane Dapkus, "Conceptual Model of Eli Terry's Porter Contract Gear-Cutting Engine Proposed by George Bruno (CT)," 342-346.

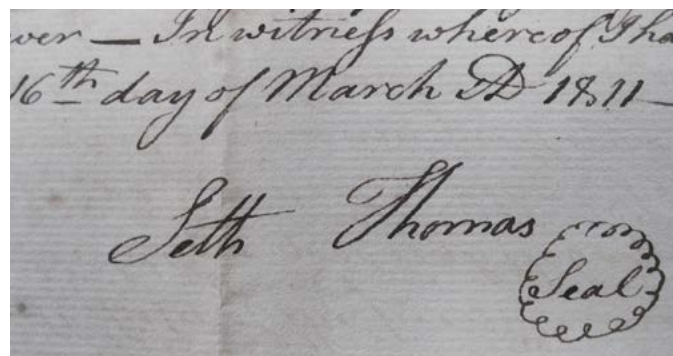


Figure 5. An 1811 legal document concluded with an important signature and "seal." This photograph was taken in April 2016 at the Connecticut Historical Society in Hartford, CT.

NAWCC Makes Appearance at World Watch Market

The NAWCC participated in the US watch industry's consumer show, the World Watch Market, in June 2016 in Las Vegas. This premiere showing of modern watches was open to the trade and the buying public.

The market donated a table, permitting the NAWCC to attend as an exhibitor, a first for the Association. My wife Susan and I volunteered to staff the table for the Association (Figure 1). This event provided a unique opportunity for the NAWCC to introduce the Association to the modern watch industry and seek members.

More than 25 manufacturers and retailers of modern watches were represented. Watches retailing from \$300 to more than \$150,000 were on display and for sale.

Watches on display include those from Vortic Watch Co., which specializes in repurposing Waltham, Illinois, and Elgin pocket watch movements orphaned from their cases over the years. Vortic never separates a movement from its original case. These watches are to be worn as a wristwatch using special cases of Vortic's design. *(Editor's note: One of the Vortic watches, a special Lancaster piece, was inducted in July 2016 into the National Watch and Clock Museum in Columbia, PA.)*

Some of the more unusual designs included the Sablier line of watches with its unique concave dial and crystal to eliminate reflections and to prevent scratches and damage to the crystal. Designed by a medical device engineer, the case is uniquely shaped with all rounded edges, creating an incredibly comfortable watch to wear.

Bausele, of Australia, displayed a watchcase and dial made by using a proprietary material similar to ceramic, while Christophe Claret displayed a ladies' watch with



Figure 2. Sablier watch. PHOTO BY WORLD WATCH MARKET AND USED WITH PERMISSION.

a delicately carved flower-shaped carousel of colors displaying, in French, "He loves me . . . He loves me not".

Susan was the proud winner of a watch drawing held by the Zinvo company featuring a one-second turbine in place of a seconds hand. The watch is an automatic with open back and a rose gold case.

Interest in the Association was high. At future events the NAWCC will use its resources to ensure secure on-site registration to recruit new members and renew current members. The World Watch Market event this year was no cost to the Association.

For a complete list of the watch brands and additional information about the event, visit www.worldwatch-market.com.

—Robert Gary (CA)

Figure 1. Robert Gary, in the background in the white shirt, and Susan Gary, in the black shirt, met with attendees at the World Watch Market in June in Las Vegas. PHOTO BY WORLD WATCH MARKET AND USED WITH PERMISSION.



Figure 3. Terre Australis watch. PHOTO BY BAUSELE. REPRINTED WITH PERMISSION.

