BULLETIN

Mar/Apr 2026
Vol. 68
No. 480

Journal of the National Association of Watch & Clock Collectors, Inc.



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March, April & June 2026



Patek Philippe
Skeleton Ellipse
18k Gold Wristwatch
$36,000.00



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No. 68 Astronomical
Floor Regulator
$277,300.00



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Floor Regulator
$254,100.00



Howard & Davis
Astronomical
Floor Regulator
$161,000.00



Aubert &
Klaftenberger
Portico Clock
$31,500.00



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Astronomical
Hanging Regulator
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E. Howard & Co.
No. 46 Astronomical
Floor Regulator
$230,100.00



E. Howard & Co.
No. 57 Wall Regulator
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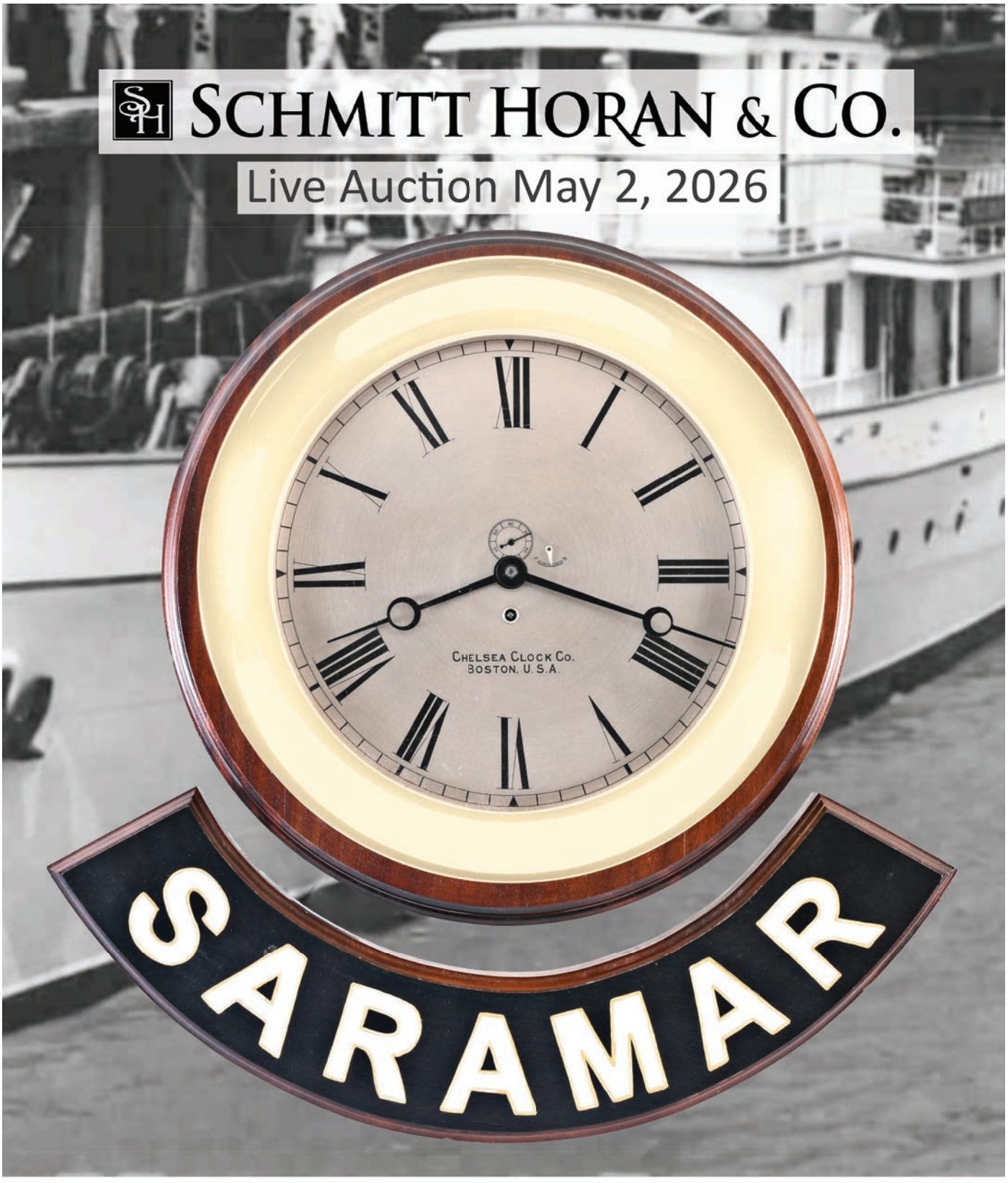

A rare Chelsea Clock Co. Pilot House marine clock with 12in dial and ship's bell striking, sold to Fisher Body Co. founder Charles Fisher for his yacht the Saramar III

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Clocks & Timepieces - Thursday, March 19th



French Empire Mantel Clock



Louis XVI Lyre Clock



Skeleton Clock,
Evans of Handsworth



Claude Galle "Allegory of Meditation"



Giant Carriage Clock,
Paul Garnuer



Lepaute Mantel Clock



Aaron Willard (Bridal)



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French Mystery Clocks



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National Association of WATCH & CLOCK Collectors, Inc.

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BULLETIN

Journal of the National Association of Watch & Clock Collectors, Inc.
March/April 2026 | Vol. 68 | No. 480

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The *Watch & Clock Bulletin* (ISSN 2152-4858), the peer-reviewed journal of the NAWCC, is published in January, March, May, July, September, and November for members. Subscription cost is included in membership.

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Statements of opinion made by authors in the *Bulletin* are accepted as the author's own. The Association assumes no responsibility for the accuracy or correctness of any statements of its contributors or advertisers.

Periodicals postage paid at: Lancaster, PA 17604-9998 and additional offices.
POSTMASTER: Send address changes to the National Association of Watch & Clock Collectors, Inc., at the address above.
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ABOUT THE COVER

The story of a 1950 Gruen Veri-Thin wristwatch and its return to the family of civil rights attorney Willis Graves Jr. is presented by Bob Stokes on p. 164. The circa 1946 Veri-Thin on the front cover is from the Museum's collection, catalog no. 85.18.43. *Photo by Rory McEvoy.*

WHERE IS TOMMY TICKER?

In each *Bulletin,* Mr. Ticker is hiding. If you find his image as shown here, email editor@nawcc.org with your name and the page number and his location. Mr. Ticker's location in the January/February issue is revealed on page 221. Entries are due by the 1st of the month before publication. Good luck!



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MESSAGE FROM THE BOARD CHAIR

As the newly elected Chairman of the Board, it is an honor and a privilege to introduce myself to my fellow members of the NAWCC. My passion for horology and this remarkable organization runs deep, and I am committed to bringing the NAWCC's mission into sharper focus as we seek to grow our membership and celebrate the very best of what we have achieved together—and what we can and will achieve moving forward.

I am proud to be a 13-year member of the NAWCC, where I have earned the distinction of Fellow and Life Member. I am primarily focused on watchmaking and watch collecting, but I like clocks, too, and I collect them as well. I repair and restore modern and vintage watches as much as my free time allows.

By way of introduction, my day job is the Global Head of Information Security/Human Risk Management for a Fortune 500 company. I have a wealth of experience in safeguarding organizations against evolving digital threats. My professional journey has been shaped by a commitment to building resilient cultures and empowering individuals to make informed security decisions.

Over the years, the NAWCC has accomplished so much: our financial stewardship remains strong, the School of Horology continues to inspire and educate future generations, the Library and Research Center provides access to a huge archive of horological knowledge, and our Museum stands as a beacon for horological history and innovation.

None of this would be possible without the commitment and dedication of our NAWCC headquarters staff, led by our gifted Executive Director Rory McEvoy. The School of Horology team is surging ahead with more workshop offerings—visit and take a class when you can! Add in the tireless efforts of our Museum, Library, and administrative staff, and with our dedicated Board of Directors, from my perspective the NAWCC is unstoppable! I extend my heartfelt gratitude to each and every one of you.



Looking ahead, it is essential that we continue to support the NAWCC and fellow members, ensuring that our organization not only thrives but creates a bright future for all who share our passion. Let's work together to welcome new members, embrace new ideas, and celebrate the legacy of excellence that defines the NAWCC today.

If we haven't met yet, I hope you'll introduce yourself at the National Convention in Lexington, KY, or at one of the Regionals I'll be at this year. For me, the NAWCC is just as much about collecting new friends as it is about collecting horological treasures.

Geoffrey S. Parker

GEOFF PARKER
GPARKER@NAWCC.ORG

ERRATA

In "Royal E. Robbins: Father of the American Watch Industry" (Jan/Feb 2026 *Bulletin,* p. 10), Figure 3 should be the 1872 Riverside model and Figure 6 should be the 1883 P.S. Bartlett model designed by Duane H. Church. In the same issue in "The Hamilton Watch Co.: Mass-Producing Excellence," the correct year for the Hamilton Piping Rock model in Figure 8 (p. 15) is 1948. The digital *Bulletin* at nawcc.org/publications/watch-clock-bulletins has been corrected.

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Among all of the ongoing projects at HQ, the installation of the nearly 19-foot-tall Quincy is a focus of keen interest to many. As you will have seen in recent publications, we are pushing to complete this project in the coming months. The space adjunct to the Public Time gallery is almost complete, and we are very keen to remove the protective sheeting so that visitors can explore the new space (Figure 1).

Thus far, our contractor has completed the partitioning of the area and has cut into the floor where the clock will ultimately be installed. There was an unexpected hitch when we discovered that the subsoil comprises spent casting sand, ash, and clinker—century-old refuse from a local iron foundry. There is some irony (pun intended) that this excavation is preparation for installing our cast iron street clock.

On the advice of our structural engineers, the digging continued until we hit firm ground 10 feet down (Figure 2). With the engineer's approval, we were able to fill the hole with concrete prior to damp proofing and installing the structural support for the column of the clock (Figure 3). By the end of February, the space should be ready to receive the clock and the associated interpretation.



This was a major project but is not the only one. Earlier in the year, I collated the changes that have occurred in our Museum since the publication of the five-year plan in 2024. This update highlights some of the planned as well as unexpected changes that have occurred recently. All of the improvements were made possible by state-sponsored funding to modernize our HVAC, which has given the Museum a new lease on life.

Please do take time to look through the changes that are highlighted in the update, available online at nawcc.org/about/document-library in the Museum Committee documents. If you would like to get involved and support our work, please contact us directly. And, please, if you are willing and able to support the costs of the Quincy installation and/or other projects, contact our Director of Philanthropy, John Paolini.

RORY MCEVOY
RMCEVOY@NAWCC.ORG



Figure 1. Dust sheeting protects the gallery and piques visitors' curiosity.



Figure 2. Structural engineers confirming solid ground.



Figure 3. Once the engineers were safely above ground, concrete was poured.

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Bulova Celebrates America's 250th Anniversary

By Carl E. Rosen (NY)

In celebration of the 250th anniversary of American independence, we're pleased to present this new series throughout 2026. Each article—published in the order received—provides a very brief overview of a key American clockmaker, watchmaker, or manufacturer who played a critical role in horology. These snapshots remind us of the incredible craftsmanship and entrepreneurship fostered by a spirit of independence.

Bulova is as much an American story as the United States is a Bulova story. Beginning with the company's founding in 1875 by Czech immigrant Joseph Bulova in New York City, the firm has impacted how people tell time for over 150 years. Bulova's technical and marketing innovations helped the US be a leader on the world stage, and even beyond this planet with advances in space exploration.

Joseph Bulova (Figure 1) has been called the "Henry Ford of watchmaking" with his focus on standardization of parts, not only for efficient manufacturing, but also for reducing the number of components needed to repair a watch. With almost 400 patents, his impact has been far-reaching. For instance, the 1927 patent for the movement dust cover represented a major improvement in watch reliability (Figure 2).

In 1927, Bulova began producing Miss America watches for presentation to the winner, as well as offering it to the American public (Figure 3). The inaugural Miss America watch became the best-selling ladies' sports watch in 1927.

When I give tours of one of Bulova's museums, I often tell visitors that one can view the history of the United States through the lens of Bulova. While it was and remains on the forefront of horological technology, the designs, marketing, and even packaging represent a journey over

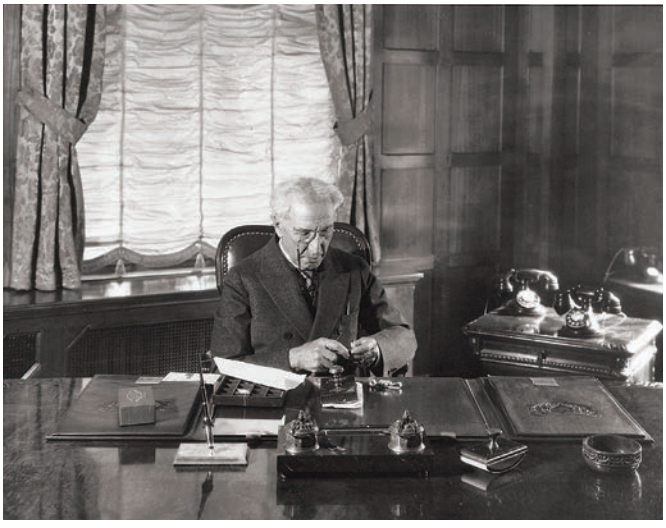

Figure 1. Joseph Bulova. COURTESY OF BULOVA.

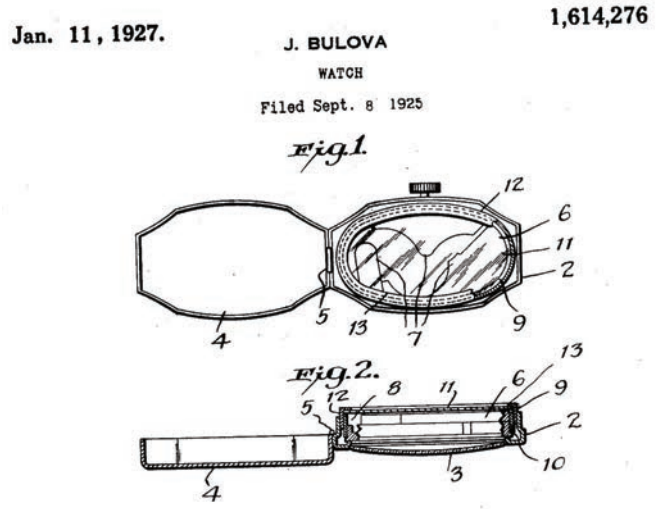

Figure 2. Joseph Bulova's 1927 patent for a movement dust cover.

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Figure 3. The 1930 *Saturday Evening Post* ad for the Miss America model. COURTESY OF BULOVA.

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the last 150 years. During and after World War II, Bulova was as much of a precision instrument company as it was a watch and clock manufacturer (Figure 4). The company manufactured aviation and navigation instruments, telescopes for tanks, fuzes, ordnance devices, jewel bearings, and even missile guidance systems.

Bulova was chosen to be one of the few watch manufacturers to produce a watch with the US A-11 specifications with a hack mechanism that is referred to as "the watch that won the war," because it enabled the synchronization of military operations (Figure 5). With five-star General Omar Bradley as its chairman from 1958–74, the company was also a key timekeeper supplier to 46 NASA missions (Figure 6).

Bulova also supported those who served during the war by opening the Joseph Bulova School of Watchmaking in 1945 (Figure 7). Over the years, technical training was provided to over 2,000 disabled veterans; it gave them a profession, dignity, and a way to care for their families. Today, Bulova supports the Veterans Watchmakers Initiative, founded by a graduate of the Bulova School and dedicated to the same principles.

Besides making the timepieces themselves, Bulova provided a mechanism for Americans to set their watches to the correct time. In 1926, it became the first company to advertise nationally on radio. The famous "time checks"—"It's 8 p.m. B-U-L-O-V-A, Bulova Watch Time"—aired on radio stations across America every hour. (By the



Figure 4. Pages from the 1944 Bulova Annual Report describing its war effort. COURTESY OF BULOVA.

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Figure 5. The 1944 A-11 Hack Watch. COURTESY OF BULOVA.



Figure 6. The 24-hour Bulova Accutron GMT clock used in the Gemini VI spacecraft, 1965. COURTESY OF BULOVA.

mid-1950s, these time checks had aired 5 billion times!) Radio was an essential medium for entertainment, and families huddled around their set to listen to radio shows.

In 1928, Bulova created the first clock radio, which combined two technologies into a piece of furniture that resembled a grandfather clock (Figure 8). In the 1950s, Bulova's Electronic Division produced bedside and kitchen clock radios, transistors, phonographs, and even ladies' electric razors.

In 1941, Bulova became the first company to advertise on television. The ad ran before a Brooklyn Dodgers and Philadelphia Phillies game. Bulova was ubiquitous on television (Figure 9), sponsoring shows such as the *Frank Sinatra Show*, also known as the Bulova Hour, and the *Jackie Gleason Show*.

Launched in 1960, the Accutron was the first revolution in timekeeping in over 300 years. Powered by a battery, a tuning fork vibrated at 360 times per second and provided the beating heart of a timepiece with just 12 moving parts and accurate to within 1–2 seconds per day. The Accutron became the official Presidential Gift of State as a showcase of American technology and design, was the clock on Air Force One (Figure 10), and was the official issued watch to all X-15 pilots.



Figure 7. The Joseph Bulova School of Watchmaking in Woodside, NY, opened in 1945 and closed in 1993. COURTESY OF BULOVA.

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Figure 8. Photo taken in 1964 of Bulova president Harry B. Henshel (left) and Bulova chairman General Omar Bradley (right) with a 1929 Bulova clock radio. COURTESY OF BULOVA.



Figure 9. Iconic image from a 1940s Bulova television ad. COURTESY OF BULOVA.

▼ **Figure 10.** An Accutron clock on Air Force One, 1969. COURTESY OF BULOVA.



In the 1970s, during the Equal Rights Amendment (ERA) debate, Bulova advertised its new Accutron ladies watch with an advertising campaign in support of the ERA: "Equal Pay. Equal Time" (Figure 11). In the 1980s, Bulova was an American Olympic sponsor and ran the "One Great Face Deserves Another" campaign that featured many celebrities, including Muhammad Ali (Figure 12).

Bulova's consumers were very attached to the brand, even to the point of naming favorite models. In 1970 Bulova introduced the generically named "Chronograph C"—because it was the third in a sequence—but the public instead referred to the watch as "Stars and Stripes" due to its bold, patriotic design in red, white, and blue (Figure 13). When Bulova launched the Archive Series in 2016 to reintroduce its most historically significant timepieces to 21st-century consumers, Chrono C was the first to be released, based on a survey of Bulova collectors' preferences. The Lunar Pilot, Super Seville, Miss America, American Girl, Jet Star, Parking Meter, Computron, Surfboard, and Oceanographer are no longer just names from the past; they are reincarnations with the latest technologies to enhance functionality. These watches inspired by the past have earned Bulova a reputation as a collectible brand. The company has reinvigorated existing watch aficionados and motivated others to become collectors.

In 2025, the Accutron tuning fork movement made its return with the launch of the Spaceview 314 collection (Figure 14), an evolved and reimagined successor to the original 214 caliber.

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Figure 11. 1974 Bulova Accutron ad. COURTESY OF BULOVA.

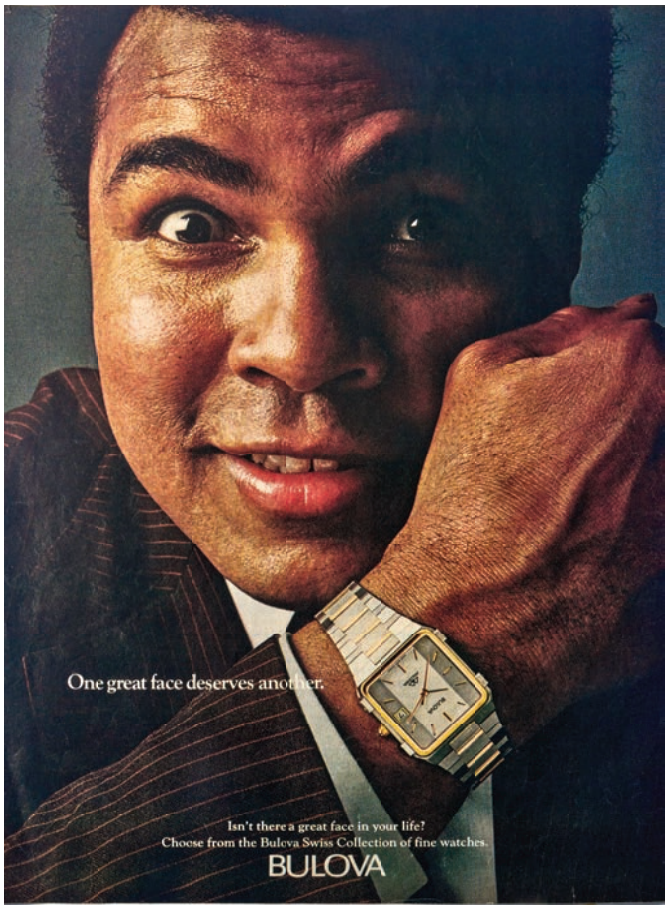

Figure 12. The 1982 "Great Faces" ad featuring Muhammad Ali. COURTESY OF BULOVA.

Bulova is a sponsor of Sail4th 250, a celebration of America's 250th birthday in 2026, with the largest-ever flotilla of tall ships from around the world gathered in the harbor of the Port of New York and New Jersey. The event will create a majestic nautical spectacle and an unforgettable once-in-a-generation event on land, sea, and air. This partnership brings the brand full circle, as one of Bulova's early jewelry stores was on Maiden Lane near the seaport. Bulova, as a proud American brand, will introduce a limited-edition red, white, and blue Snorkel model created especially for the event.

Bulova has been operating in New York City since 1875. Its current headquarters is fittingly located in the Empire State Building, a fellow American icon.



Figure 13. The 1970 Chrono "C" known as the Stars & Stripes. COURTESY OF BULOVA.

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In 2025, Bulova dedicated an exhibit at the National Watch & Clock Museum in Columbia, PA (Figure 15). It is not only a display of horological innovations, but also a walk down America's memory lane. Happy 250th!

About the Author
Carl E. Rosen has been the Bulova historian since 2016. He served as chief operating officer and president of Bulova Swiss, S.A., during his Bulova career, which spanned 30 years. He was also the chief information officer of Loews Corporation, Bulova's former parent company. He has a BS in civil engineering from Tufts University and an MBA from the Wharton School of the University of Pennsylvania. He has appeared in many watch-related videos, podcasts, and television programs, including the History Channel's *Modern Marvels*.

Figure 14A. The 1960s Accutron Spaceview caliber 214. **B.** The 2025 Accutron 314.
COURTESY OF BULOVA.



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Figure 15. The Bulova gallery at the National Watch & Clock Museum. COURTESY OF THE NATIONAL WATCH & CLOCK MUSEUM.

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Quincy Update

By Mark Mayerchak (NC)

Editor's note: The Public Time gallery is being expanded to include the massive, two-dial Ansonia street clock (nicknamed Quincy since it was first installed in Quincy, IL). The project is well underway, largely thanks to volunteer assistance, particularly from Tower and Street Clock Chapter 134. Mark Mayerchak, a Chapter 134 member, shared the following description of his work to prepare Quincy's saddle.

I made a template from Quincy and bent a pipe to hold the pieces while brazing (Figure 1). Instead of cleaning up the piece that had fallen off Quincy when the bolt was removed (Figure 2), I picked up a piece of 3/4 steel plate and cut it to the proper width. The broken piece was steel and not cast iron, so it was not original to the clock as it was the wrong thickness—5/8"—and was a basic hack job with a cutting torch. I cut it with a band saw to ensure a straight edge—it was very slow going (Figures 3 and 4).

Then I started heating the piece (Figure 5) and bending the curve to match. I made the final bend for the curve, cut it to fit, and clamped it to the form (Figure 6).

It's hard to tell in Figure 5, but that's the heating process with a propane torch prior to brazing. I wrapped it in canvas after brazing so it would cool slowly (Figure 7). The brass was ground smooth, and the new piece was cut to length. I was able to remove the remainder of the original bolts and clean the 5/8-11 threads (Figure 8A). Then I primed it (Figure 8B), ready to fit the saddle to the head when work continues at the Museum in Columbia, PA.

Learn more about the Quincy Project and how you can show your support by visiting nawcc.org/ansonia-project. Restoration of this special clock will continue at the Museum this spring. Tasks will include painting, assembling, and so on. Please contact Don Bugh at donbugh@gmail.com if you are interested in helping.

With your help, we can have Quincy standing tall in the National Watch & Clock Museum in 2026!



Figure 1. A template from Quincy and a pipe to hold the pieces while brazing. AUTHOR'S PHOTO.



Figure 2. The piece on the floor fell off when the bolt was removed. AUTHOR'S PHOTO.



Figure 3. Slowly cutting the steel plate with a band saw. AUTHOR'S PHOTO.



Figure 4. The steel plate cut to width. AUTHOR'S PHOTO.

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Figure 5. Propane torch work prior to brazing. AUTHOR'S PHOTO.

Figure 6. Clamping the curve to the form. AUTHOR'S PHOTO.



Figure 7. Wrapped in canvas after brazing to slowly cool. AUTHOR'S PHOTO.



Figure 8A. Cleaned; **B.** Primed and ready to travel to Columbia. AUTHOR'S PHOTOs.





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GALLERY EXPANSION

December 2025–February 2026 saw a transformation in the Museum, as the Public Time gallery space was extended to make room for Quincy. Here are a few shots showing the progression as of press time.



▲ **Figure 9.** The future home of Quincy. The ductwork was redirected and walls built to separate the new space from the collections storage area. The windows on the right peer into the conservation workshop, where visitors may see makers in action. PHOTO COURTESY OF THE NATIONAL WATCH & CLOCK MUSEUM.

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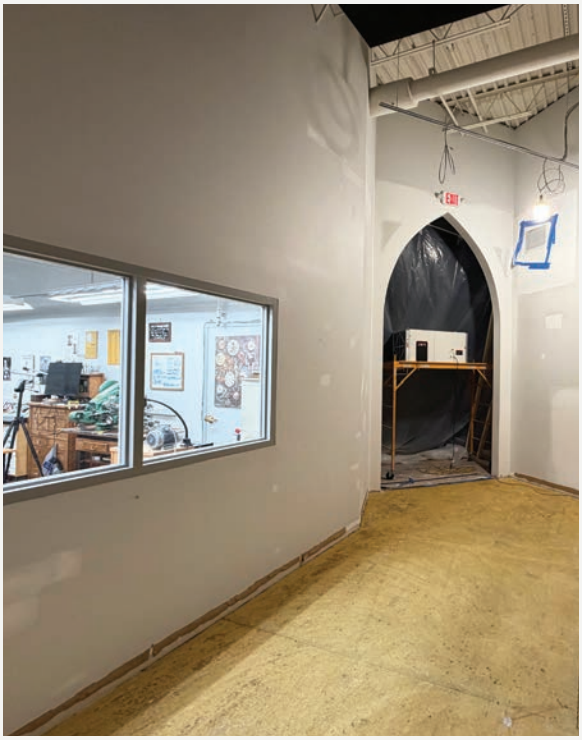
◀ **Figure 10.** Looking from the collections storage area into the Quincy space. PHOTO COURTESY OF THE NATIONAL WATCH & CLOCK MUSEUM.



▶ **Figure 11.** The new archway viewed from the Quincy space. PHOTO COURTESY OF THE NATIONAL WATCH & CLOCK MUSEUM.



◀ **Figure 12.** The view from the Public Time gallery. PHOTO COURTESY OF THE NATIONAL WATCH & CLOCK MUSEUM.



▶ **Figure 13.** Excavation to accommodate the nearly 19′ tall clock. PHOTO COURTESY OF THE NATIONAL WATCH & CLOCK MUSEUM.

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The Mystery of the Clock with Two Dials

By Harold Cherry (NY)

INTRODUCTION

If you look at Figure 1, you will see a clock with two dials. If you look closely, you will see that the upper dial has Japanese characters. The upper dial tells temporal time, which was used in Japan before 1873 and will be explained in the next section. The lower dial tells the traditional fixed-hour time that we are all familiar with.

This clock abounds with mysteries. Who made it? When? Where? For whom? Why are there two dials? Do any other clocks like this one still exist?

I have answers to some of these questions, and only partial answers at that. Some are just guesses on my part. I am hoping that the publication of this article will tap the collective knowledge of NAWCC members to help solve the mystery of the clock with two dials.

TEMPORAL TIME AS USED BY THE JAPANESE BEFORE 1873

We measure time in fixed units: an hour has the same length whether it's an hour of day or night, whether it's an hour in January or June, and so on.

Temporal time uses a different approach.[1] Before 1873, the Japanese system divided both the day and night into six equal parts. Each of the six equal parts was called a *toki*; on the average, a *toki* was equal to two traditional hours. The lengths of day and night vary with the seasons.[2] You can see what a terrible mess this creates for temporal time! Each of the six divisions of day (each *toki*) grows longer from December to June, and shorter from June to December. The situation is reversed for the night. How in the world could a Japanese horologist make a clock that would tell temporal time?

Not only do the subdivisions of time change with the seasons, they are different for day and night. An example should make all of this clear.

The latitude of Nagasaki is 32.76°N, about the same as Dallas, TX. I am using Nagasaki for this example because a clock discussed later, a Japanese pillar clock with what is known as a *namagata* dial, could very well have been made for use in Nagasaki or its vicinity.

On the longest day of the year, the summer solstice, Nagasaki sees about 14 hours and 19 minutes of daytime, making nighttime only 9 hours and 41 minutes.[3] This means that a Japanese clock showing temporal time would have to show six equal divisions of about 2.39 hours during the day (14 hours and 19 minutes divided by 6), and six equal divisions of about 1.61 hours during the night. If we add up these hours, we account for the entire day: 6 x (2.39 + 1.61) = 24.

Now let's consider what happens on the shortest day of the year, the winter solstice. Daytime lasts about 10 hours

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Figure 1. The clock with two dials. COURTESY OF COTTONE AUCTIONS.

and nighttime about 14 hours in Nagasaki. A Japanese clock showing temporal time would have to show six equal divisions of about 1.67 hours during the day and six equal divisions of about 2.33 hours during the night (6 x (1.67 + 2.33) = 24).

We can see that, as the seasons progress from the longest to the shortest day, each of the six equal daytime subdivisions decreases from 2.39 to 1.67 hours in length, while each of the six equal nighttime subdivisions increases from 1.61 to 2.33 hours in length.

In the next section, we will see how Japanese horologists made clocks that could vary the daytime and nighttime hours and change with the seasons.

Temporal time seems very odd to our Western minds. Why would someone invent such a complicated timekeeping system? But consider one of the earliest timekeepers: the sundial! Whether just a stick in the ground or a more sophisticated instrument with a gnomon and a dial, the sundial's shadow showed different lengths of daytime as the seasons changed. This makes temporal time as a system more observationally accurate, so to speak. That is, a temporal clock, like the sundial, follows the sun rather than counting equal hours with no relation to the heavens.

Also, consider the fact that agriculture was the most important activity in many early civilizations. Sunrise and sunset, and the length of the day, were very important to

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Figure 2. Japanese bracket clock (*makura-dokei*). COURTESY OF DELANEY ANTIQUE CLOCKS.

tillers of the soil. Temporal time made much more sense than a system based on fixed hours. It was therefore quite natural that temporal time systems evolved.

If you search the Internet for "sundials and temporal time," you will find the following:

> **Sunrise to Sunset Division:** Temporal time divides the daytime and the nighttime into 12 hours each, so the length of a temporal hour changes with the length of the day.
>
> **Variable Hour Length:** In summer, when days are longer, temporal daytime hours are longer than temporal nighttime hours. The opposite is true in winter.

Note that the Japanese temporal time system differed from the above only by the fact that the Japanese divided daytime and nighttime into *six* subdivisions each, rather than *twelve*.[4]

THE CHALLENGE FOR JAPANESE HOROLOGISTS[5]

In the 16th century, European mechanical clocks were taken into Japan by missionaries and merchants as gifts to Japanese nobility. In 1591, four Japanese envoys returned from Europe after an audience with the pope and presented a striking mechanical clock to a high official in Japan. There are additional reports of mechanical clocks arriving in Japan as gifts for nobility in the 17th century.

The Japanese used temporal time during the entire Edo period, from 1603 to 1868, and a little bit beyond that.[6] They didn't adopt Western time and calendars until 1873.

Of course, none of the European clocks taken to Japan told temporal time; they showed fixed hours and were controlled by a pendulum or balance wheel. Clockmakers in Japan had to figure out how to adapt these fixed-hour clocks to show unequal hours.

Think for a while about how you might go about altering a fixed-hour clock to show unequal divisions of time. Does anything come to mind? You may have thought of one or both of these methods employed by Japanese horologists:

1. An adjustable dial
2. An adjustable pendulum or balance wheel that can be made to go faster or slower

Let's first consider the adjustable dial. Figure 2 shows a Japanese bracket clock (*makura-dokei*) and Figure 3 provides a close-up of the dial. You may be able to tell that the dial plates are movable: they can be slid closer together or farther apart. Note that there are Japanese characters on the plates. (The blank plates are used to mark the halfway points between the Japanese "hours.") The characters represent numbers, to be explained later. As you look around the dial, note that there are six different Japanese characters, which are then repeated. These correspond to the six equal divisions of day and night.

In the summer, when the days are longer, the daytime characters are slid farther apart and the nighttime characters closer together. As the seasons change, the dial plates have to be gradually adjusted. The usual practice was to adjust them every 14 days.[7] If you could afford it (and most owners of these clocks were wealthy enough to afford it), you hired a "clock doctor" to take care of adjusting the clock for you.

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Now, about the characters on the dial plates. Robertson notes that the numbers 1, 2, and 3 were used for religious purposes by Buddhist temples, and this sacredness made them off limits for clock faces.[8] This left 4–9 to represent the six subdivisions of day and night. The Japanese used these numbers in reverse order, so the subdivisions were numbered 9, 8, 7, 6, 5, and 4. Also, since the number 9 was believed to have magical properties, it was assigned to noon, the one invariable moment of the day when the sun was directly overhead.

On the equinoxes, when day and night are equal lengths, the numbers 9 to 4 would correspond to our fixed, even-numbered hours: midnight/noon, 2 a.m./p.m., and so on.

In addition to Japanese characters, zodiacal signs could also represent the numbers 9 to 4. Some Japanese dials showed both the numbers and the astrological signs, while others showed only the signs. The clock in Figure 2 shows only the zodiacal signs.

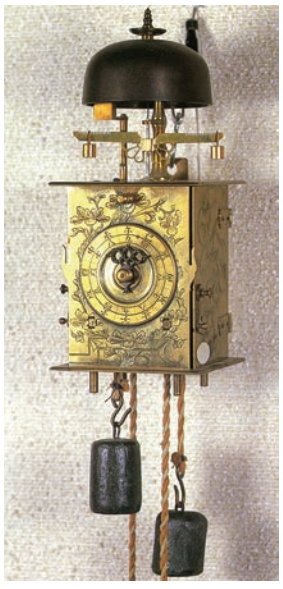
Figure 4 shows another type of pre-1873 Japanese clock, called a pillar clock or stick clock (*shaku-dokei*[9]). Note the vertical dial plates on the left-hand side of the clock case. (Again, the blank plates are the halfway points between the Japanese hours.) These dial plates can be slid up or down to adjust for the varying lengths of day and night. There is a weight inside the case that powers the balance wheel or pendulum at the summit of the clock. As the weight descends, a pointer, affixed to the weight, shows the temporal time on the movable dial plates. In Figure 4, the pointer has descended to the bottom.

Now let's consider striking clocks. For the bracket clock shown in Figure 3, this would not be a problem. There are pins affixed to the movable dial plates that project into the case. As the dial rotates (in this clock, as in many Japanese clocks, the single hand stays fixed), the pins engage with the strike train, so striking accords with temporal time. Of course, the count wheel (almost all pre-1873 striking Japanese clocks used a count wheel) would be designed to strike from 9 to 4, and then to repeat this pattern.

What about a striking pillar clock like the one in Figure 4? Normally, the strike train would be placed alongside the time train. However, the pendulum or balance wheel at the summit of the clock keeps constant time. So, with that arrangement (i.e., with the strike train controlled by the isochronal time train), the clock would strike constant



Figure 3. Close-up of the dial of the Japanese bracket clock in Figure 2. COURTESY OF DELANEY ANTIQUE CLOCKS.



◄ Figure 5. Japanese lantern clock (*wadokei* or *kake-dokei*) with a single foliot. FROM MATSUMOTO TIMEPIECE MUSEUM'S CATALOG, *WORLD OF ANTIQUE CLOCKS,* 115, FIG. 221.



► Figure 4. Japanese pillar clock (*shaku-dokei*). COURTESY OF FONTAINE'S AUCTION GALLERY.

hours. How in the world could we get the pillar clock to strike the temporal time shown by the pointer?

Here is how the Japanese horologists solved the problem: the strike train is not at the summit of the clock, where it would be triggered by the isochronal time train. Instead, the strike train (complete with a bell) is the *weight itself*! As the weight descends, the strike train is triggered by pins affixed to the movable dial plates. Truly ingenious!

Now let's consider the second method of adjusting for temporal time: an adjustable pendulum or balance wheel.

Figure 5 shows a Japanese lantern clock, known as a *kake-dokei* in Japanese (a style of lantern clock hung by a loop on the frame) Note that it has a verge and foliot

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Figure 6. Japanese lantern clock with a double foliot. FROM MATSUMOTO TIMEPIECE MUSEUM'S CATALOG, *WORLD OF ANTIQUE CLOCKS*, 100, FIG. 202.



Figure 7. Japanese lantern clock with automatic switchover (front view). AUTHOR'S PHOTO.

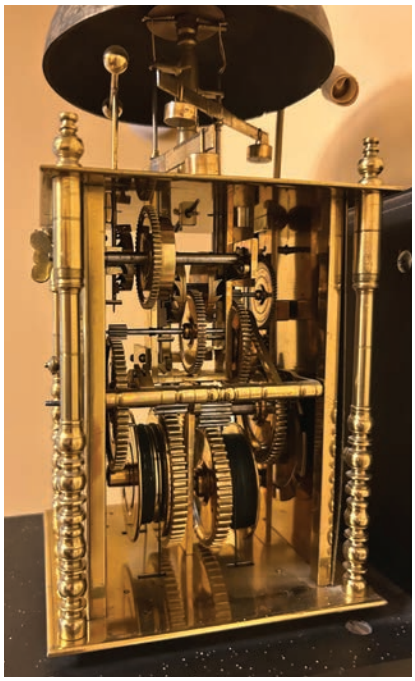

Figure 8. Movement of the clock in Figure 7. AUTHOR'S PHOTO.



Figure 9. Japanese pillar clock with a *namagata* dial. The movement at the summit is controlled by a pendulum. COURTESY OF DELANEY ANTIQUE CLOCKS

escapement. There are small weights on the foliot that can be moved to make the oscillator go faster or slower. The weights would have to be moved at sunset each day to show nighttime hours, and again at sunrise to show daytime hours. This would be quite a headache, to put it mildly.

But the inventive genius of Japanese horologists simplified the necessary adjustments considerably. They made lantern clocks with *two sets* of a verge and foliot. Figure 6 shows such a clock. All that had to be done was to switch the control from one set to the other at sunset or sunrise. The weights would be moved every 14 days, as in the case of the movable dial plates on a bracket or pillar clock.

As a further step toward what we might call "automation," the Japanese made lantern clocks that *automatically* switched from the daytime to the nighttime escapement, and vice versa. Figure 7 shows the front view of such a clock, and Figure 8 shows the movement. There are two crown wheel escapements, one for day and the other for night.

Finally, I would like to describe another pillar clock that greatly simplified the adjustments necessary to show temporal time. Figure 9 shows this type of clock. The first thing you will notice is that, instead of the usual vertical dial plates that can be slid up and down, the dial of this clock is a wide brass plate with wavy lines going across it. This kind of dial has been referred to as a *namagata* (wave shape) dial.

At the extreme right of the brass plate, you will see that there are equal distances between the wavy lines as you move down vertically. Your first thought might be that the extreme right represents the spring or autumn equinox, when day and night are 12 hours each. But here we have to consider note 3, which explains that the Japanese added about two hours to the length of the day because a printed character held in the hand could be read before sunrise and after sunset.[10] So, the extreme

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right on the brass dial actually represents the winter solstice, when the time from sunrise to sunset is about 10 hours, and from sunset to sunrise is about 14 hours at Nagasaki's latitude. Adding two hours to daytime, we get 12 hours, which leaves 12 hours for nighttime.

This clock was wound each day at midnight. This moved the weight, together with the attached horizontal bar, to the top of the case. (In Figure 9, the bar is at the bottom.) Let's say it's the winter solstice, so we are starting with the pointer (which can be slid back and forth along the horizontal bar) at the extreme right. The pointer was often in the form of a bird, as in this clock. We do not have to make any adjustments for night or day as the weight descends, because the wavy lines show that all 12 subdivisions of day and night are equal. Every 14 days, we move the pointer to the left, to gradually adjust for the change in seasons. There is no sliding of dial plates up or down: the wavy lines take care of that. The only adjustment you have to make is to move the pointer every 14 days.

After six months, the pointer will have moved to the extreme left. Note the vertical distance between the wavy lines. As the pointer descends, the six nighttime subdivisions are very short, followed by the six daytime subdivisions, which are the longest for the entire year. This is the summer solstice.

After the summer solstice, we move the pointer back to the right every 14 days, reaching the winter solstice again in six months and completing one year.

This is another ingenious Japanese innovation: a clock showing temporal time, day and night, all year long, that requires only a movement of a pointer every 14 days!

THE CLOCK WITH TWO DIALS

Let us return to the clock with two dials shown in Figure 1.

A word about the case. It is about 14″ high not including the handle, 8 3/8″ wide at the waist, and 5 1/2″ deep at the narrow part. My good friend Noboru Miyadera at the Seiko Museum Ginza sent me a photo of a Westminster chime clock with a very similar case. This is a clock that was made by Phillipp Haas & Sohne in St. Georgen, Germany, probably in the late 19th or early 20th century. I am sure there are many other European clocks with cases of similar design and proportions.



Figure 10. Close-up of upper dial of the clock in Figure 1. COURTESY OF COTTONE AUCTIONS.



Figure 11. Close-up of lower dial of the clock in Figure 1. COURTESY OF COTTONE AUCTIONS.

The Japanese characters on the plates of the upper dial (Figure 10) are the astrological symbols that stand for the numbers 9 to 4. Note that these symbols are repeated; the entire 24-hour day is accounted for by the six subdivisions each for day and night. There is a winding hole near the lower righthand side of the upper dial. This is for winding the alarm, coordinated with Japanese temporal time. The alarm is set by a slide along an arc-shaped track that runs from what would be about 9:30 to 2:30 on a Western clock. You can also see two apertures outside of 10:30 and 2:30. These show the characters for the date using the Japanese calendar.[11] There is also an arc-shaped aperture above the dial. This is for displaying the faux pendulum, an extension of the real pendulum that controls the movement below. The hand on the upper dial is fixed; the dial itself rotates, powered by the movement in the lower part of the case.

Now let's look at the lower dial in Figure 11. Note that there are two winding holes outside of 11 and 1 on the dial. These are for winding the time and strike trains.

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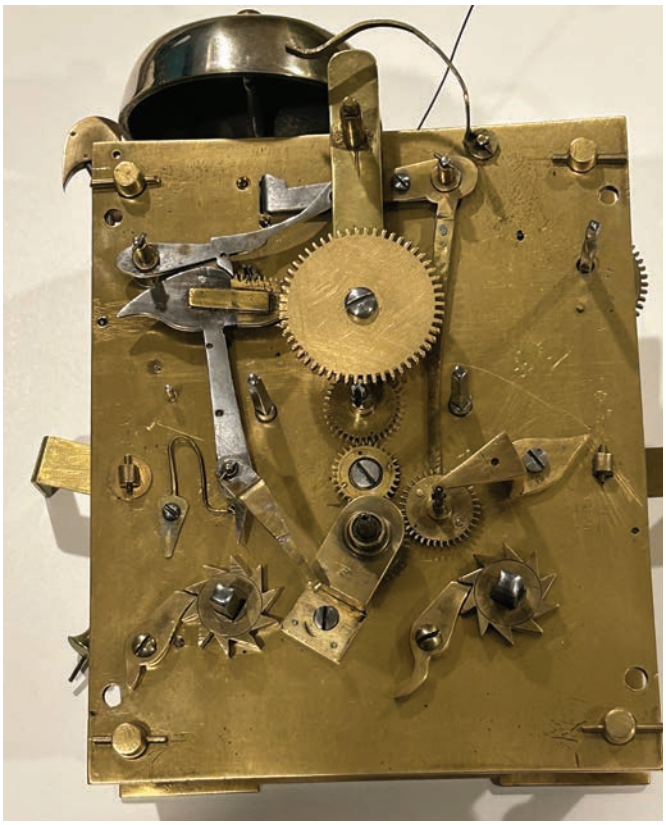

Figure 12. Front view of movement of the clock in Figure 1. AUTHOR'S PHOTO.

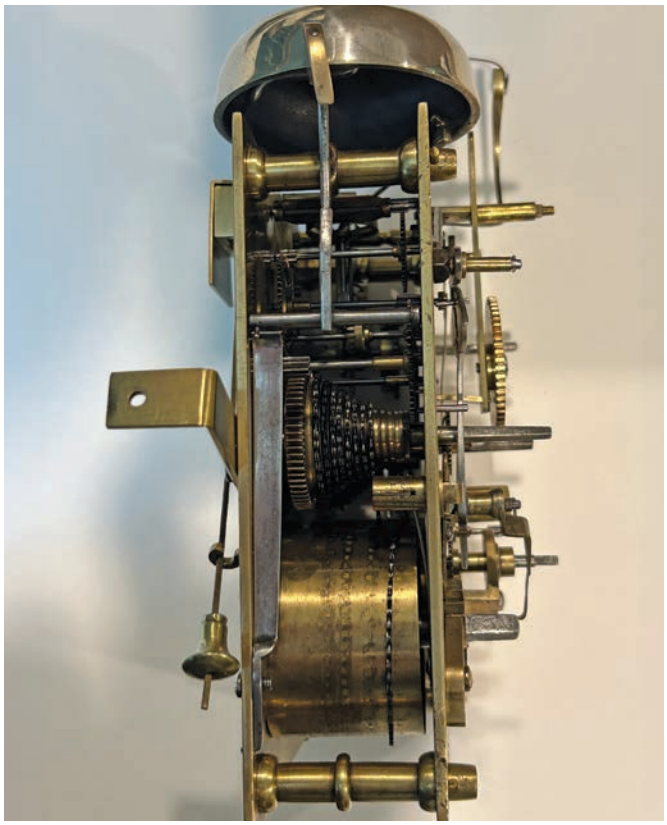

Figure 13. Side view of movement of the clock in Figure 1. AUTHOR'S PHOTO.

Figure 12 shows the front plate of the movement; Figure 13 provides a side view. This appears to be an English-style 8-day time-and-strike movement with twin chains and fusees. As the movement runs, it rotates the upper dial to show temporal time. Figure 14 shows how the movement is linked to the upper dial.

Figure 15 is a photo of the front brass frame, which has cutouts for the two dials and the apertures. There is a signature in the lower-left area of the brass frame. Figure 16 is a close-up of the signature, which is barely legible. It consists of three vertical Japanese characters, which Noboru has translated as "made by Genji". However, he and his associates have not been able to find any record of a clockmaker with that name.

Was the clock made by a Japanese or European clockmaker? Here is the evidence for these two possibilities:

Japanese Clockmaker?

1. The clock has a Japanese signature.
2. The rotating upper dial, with its movable dial plates, is a typical pre-1873 Japanese dial.
3. The alarm is synchronized with Japanese temporal time.
4. A Japanese calendar is shown in the two apertures on either side of the dial.

European Clockmaker?

1. The clock has an 8-day European-type movement. Almost all pre-1873 Japanese clocks ran for only one day.
2. The case is European in style.
3. Striking is controlled by a rack and snail. Japanese makers almost always used a count wheel.
4. The faux pendulum suggests a European maker.

On balance, I would say that a Japanese clockmaker made this clock, especially since it has a Japanese signature. While the movement is European in style, Japanese horologists had been familiar with European clocks since the 1500s. Also, it is possible that a Japanese clockmaker "borrowed" the movement and case and altered the clock by adding the upper Japanese dial, alarm, and calendar. The clock was probably made in the mid-19th century, but before the adoption of Western time in 1873.

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Figure 14. Linkage between the movement and the upper dial. Note the two wheels behind the upper dial. The lower wheel, powered by the movement, causes the upper wheel to rotate clockwise once every day, rotating the dial along with it. AUTHOR'S PHOTO.



Figure 15. Front brass frame of the clock in Figure 1. AUTHOR'S PHOTO.

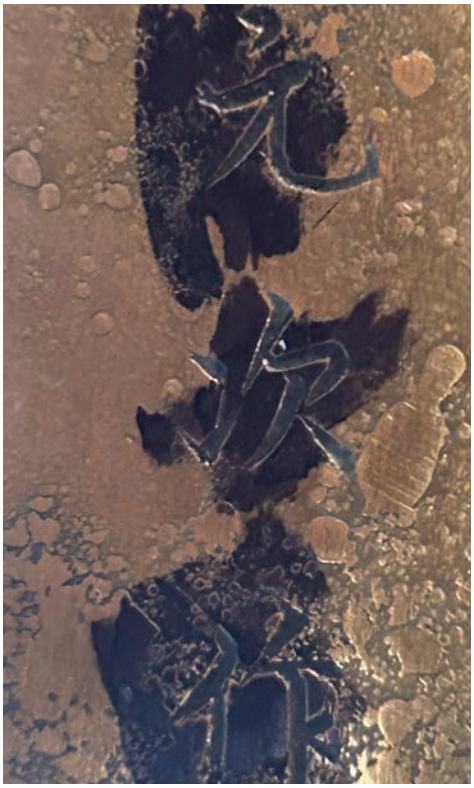

Figure 16. Close-up of the signature on the clock's brass frame. The background has been blackened to better show the characters. AUTHOR'S PHOTO.

Why was this clock made, and for whom? My guess is that it was made for a businessman or diplomat working in Japan, where temporal time governed everyday life. I believe that the clock was made for a Western, rather than a Japanese, person: the lower dial shows fixed hours and the striking train strikes fixed hours. This is something that a Westerner would want to know, even though he was working in a foreign country that used temporal time.

IS THE CLOCK WITH TWO DIALS UNIQUE?

My short answer to this question is yes, until another one like it is found. I have been searching for a clock with the features of the clock in Figure 1, but so far without success.

Noboru Miyadera at the Seiko Museum Ginza checked with his colleagues concerning clocks that showed both temporal and fixed-hour time. While they have read about such clocks, this was the first time that they had actually learned of one (i.e., the clock in Figure 1).

I also reached out to Ashley Strachan, a well-known collector of Japanese clocks in the UK. He has visited

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Figure 17. Japanese pillar clock with European dial and hands added at the summit. FROM MATSUMOTO TIMEPIECE MUSEUM'S CATALOG, *WORLD OF ANTIQUE CLOCKS*, 111, FIG. 214.

Japan several times, has friends in the horological community there, and maintains the website wadokei.org. Ashley searched his extensive collection of books and other reference materials and found two clocks that showed both temporal and fixed-hour time. They are pictured in Yamaguchi's *The Clocks of Japan*.

Yamaguchi's Figure 44 shows a Japanese pillar clock with a European dial and hands added at the summit. There is a much better photo of a similar clock in the Matsumoto Museum catalog, shown in Figure 17. Yamaguchi's Figure 45 (Figure 18 of this article) shows a Japanese bracket clock with a European dial and hands added to the Japanese dial and single hand.

There is a big difference between the two clocks in Yamaguchi's book and the clock in Figure 1. The former are much less complex. All that's been done in the case of the simpler clocks was to add a dial and pair of hands to a Japanese clock showing temporal time. This permitted the reading of fixed-hour time controlled by the isochronal oscillator, while temporal time was told by the movable dial plates.

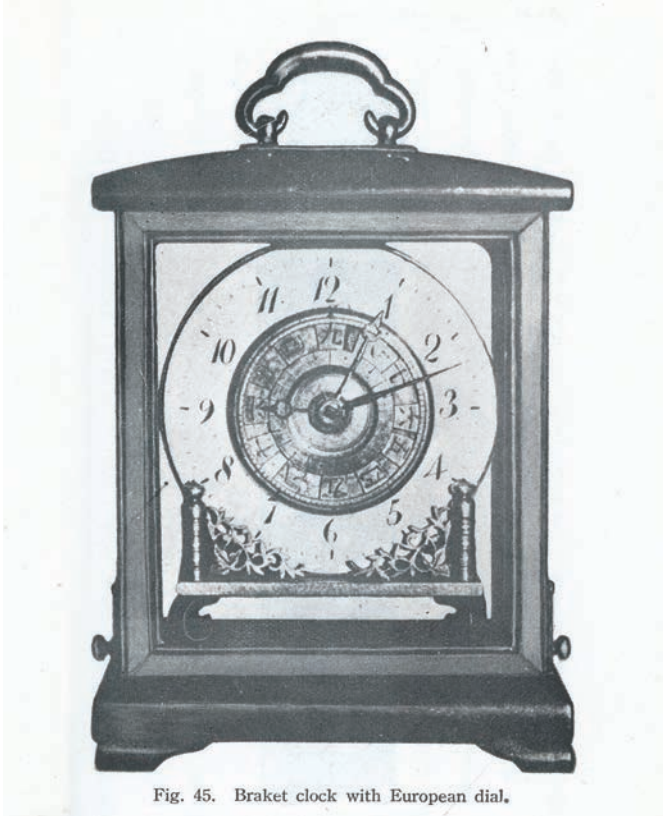

Figure 18. Japanese bracket clock with added European dial and hands. This is Figure 45 in Yamaguchi's *The Clocks of Japan*.



Figure 19. A clock with two dials from the November 2, 2013, Skinner auction, lot 343. COURTESY OF BONHAMS & BUTTERFIELD AUCTIONEERS CORP.

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So, I have learned that there are, indeed, other Japanese clocks that tell both temporal and fixed-hour time. However, they are much simpler and do not have most of the features of the clock that is the focus of this article.

My conclusion is that, at least as of press time, the clock in Figure 1 is unique. But time will tell.

EPILOGUE

A funny thing happened just before publication: I was doing an internet search for the Japanese word *namagata* because I thought I might have misspelled it in the original draft of this article. While doing this search, for some unknown reason an unrelated web page suddenly popped up. It was a page from a November 2, 2013, Skinner auction, lot 343. Figure 19 is a photo of this lot. The following is the catalog's description:

> **Japanese Makura Dokei with Two Dials,** late 19th century, arched acid-etched dial surround with false pendulum and two calendar apertures, 4-in. traditional Japanese fixed hand with rotating dial above the 3-in. silvered western-style Roman numeral dial, chain fusee movement with verge escapement and rack and snail striking, spring-powered alarm is set on the Japanese dial, fully engraved backplate with signature (in Japanese), all in a hardwood bracket clock case with brass carrying handle on top, fabric backed pierced brass sound frets on sides and brass ogee feet, ht. with handle extended 17 in.[12]

If you compare Figure 19 with the photos of the clock that is the subject of this article (Figures 1, 10, 11, and 15), you will see that they are virtually identical. The dials, the apertures for the Japanese calendar, the faux pendulum, the alarm setting, the placement of the winding arbors, and so on, are the same in both clocks. The dimensions of the dials and the height of the clock in the Skinner description match the dimensions of the clock in Figure 1. Both clocks have a chain fusee movement and rack-and-snail striking. The only differences between the two clocks that I can discern are that the Skinner clock has four brass finials and brass ogee feet. There is no evidence that the clock in Figure 1 ever had those brass additions.

The description of the Skinner clock says there is a Japanese signature on the engraved backplate. Unfortunately, I was not able to obtain a photo of the signature, but I'm willing to make a small wager that the same clockmaker made both clocks. And if there are two almost identical clocks like this, who knows how many more there are?

I had originally ended this article by saying, "My conclusion is that, at least as of press time, the clock in Figure 1 is unique. But time will tell." Time—the concept that brings us together in the NAWCC—has told, sooner than I ever expected.

Acknowledgments

I would like to thank Noboru Miyadera at the Seiko Museum Ginza for his invaluable assistance in preparing this article, for his translations of several Japanese passages into English, for providing me with the catalogs of clock museums in Tokyo, and for his general encouragement to write this article. I would also like to thank Ashley Strachan for his exceptional efforts in searching for other clocks that tell both Japanese temporal time and Western fixed-hour time, and for maintaining his website wadokei.org, which contains a wealth of information about Japanese pre-1873 clocks. My thanks also go to the anonymous reviewer of a draft version of this article. Their comments helped very much to improve the technical aspects of the article, as well as its general exposition.

Notes and References

1. Temporal time is also referred to as unequal hours, temporal hours, seasonal hours, biblical or Jewish hours, or ancient or Roman hours. See the Wikipedia article on unequal hours, en.wikipedia.org/wiki/Unequal_hours.
2. In the Northern Hemisphere, daytime increases (and nighttime decreases) from about December 22 (the winter solstice) to June 22 (the summer solstice). Conversely, daytime decreases (and nighttime increases) from about June 22 to December 22. We all enjoy those longer hours of daytime as winter ebbs and summer approaches, but not so much those shorter hours of daytime as summer ebbs and winter approaches.
3. It's a little more complicated than that. As pointed out by Robertson on pages 276 to 278 (see the reference to Robertson in note 5), the Japanese regarded the duration of daytime to be longer than from sunrise to sunset. There is a period before sunrise when a printed character held in the hand can be read, and a period after sunset when the same is true. For purposes of illustration, Robertson takes each of these periods to be about one hour, so about two hours should be added to the duration of daytime. In the examples in this section, I have ignored this adjustment for simplicity. However, in the discussion of the Japanese pillar clock with a *namagata* dial in the section "The Challenge for Japanese Horologists," I will take this adjustment into account.

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4. In researching temporal time, you will also find that before the year 1400, some populations used six hours for each of the day and night periods.
5. For readers who would like to go deeper into the subject of Japanese clocks and temporal time, I recommend the following references: J. Drummond Robertson, *The Evolution of Clockwork* (1931; repr. S.R. Publishers Ltd., 1972); N. H. N. Mody, *Japanese Clocks* (North Clarendon, VT: Charles E. Tuttle Co., 1967); Ernest L. Edwardes, *Weight-Driven Dutch Clock & Their Japanese Connections* (Mayfield, UK: Mayfield Books, 1996); Ryuji Yamaguchi, *The Clocks of Japan* (Tokyo: Nippon Hyoran-Sha Publishing Co., Ltd., 1950). Some of these books may be difficult to find, but they are available at the NAWCC Library & Research Center, nawcc.org/research. See also Ashley Stachan's website, wadokei.org.
6. Edo was the ancient name for Tokyo.
7. Generally, there were 26 adjustments every year, so that the total number of days covered by the adjustments was 364 (26 x 14). There occasionally had to be small corrections to conform the adjustments to the solar year.
8. Robertson, *The Evolution of Clockwork*, 200.
9. *Shaku* is the traditional measure of length in the Edo period that is approximately equal to 12″. So a *shaku-dokei* was a 12″ clock.
10. The extreme right-hand scale indicates equal hours between dawn and dusk, and dusk and dawn. The Japanese did not use *sunrise* and *sunset* with regard to timekeeping, perhaps largely due to there being few locations on a mountainous island where the horizon could be viewed.
11. Robertson gives a great deal of detail about the Japanese pre-1873 calendar on pages 204 to 215 in his *Evolution of Clockwork*.
12. The catalog description is courtesy of Bonhams & Butterfield Auctioneers Corp.

About the Author
Harold Cherry is a retired actuary. He has been a member of the NAWCC for over 50 years. He is a past president of Long Island Chapter 88 (since merged with New York Chapter 2). His primary horological interest until 2023 had been collecting skeleton clocks, when he and his wife, Maida, donated their collection to the National Watch & Clock Museum. He related the story of this donation in the September/October 2023 *Bulletin*. Another of his horological interests has been researching the clockmaker, inventor, and entrepreneur Joseph Eastman and his associated companies (Harvard, Boston, Eastman, Fairhaven, Vermont, Derry, and others). The results of his research appeared in the article "Joseph Eastman and the Boston Tandem Wind: The 100th Anniversary" in the June 1986 issue of the *Bulletin*. Recently, his collecting interest has turned to watches with painting on enamel. He can be reached at halcherry1@gmail.com.

Vincent's Time

(Remembering Vincent van Gogh)

You lived among miners
Preaching the Gospel
And giving away your clothes
Failing again
As you had as a dealer of art
But you did more
By striving for color and luck
In Provence
Inviting Gauguin and having dreams
Maybe an artist refuge of sorts
But again failure came
As you carried your ear lobe
To a prostitute friend
And Gauguin jumped ship
And your mind no longer worked
Yet you did more
(Despite a single painting sold)
In the asylum once
A painting a day
For 18 days straight
Then you shattered yourself
Leaving shards of staggering
Colors and hues
Always more

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Time and mood are twins in the sense that your mood shapes your experience of time. What might the experience of time have been for a painter like Vincent van Gogh? Ray Comeau is past associate dean of management studies and director of foreign language instruction at Harvard Extension School, where he currently serves as a lecturer in courses dealing with the intersection of management, philosophy, and literature. He is a member of Chapters 8 and 87 in his native Massachusetts. His email is comeau@fas.harvard.edu.

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March 28–29: Using the Micro Lathe for the Beginner — *Filled!*

April 10–12: Introduction to Wristwatch Servicing

April 10–12: Introduction to the Anniversary, or 400-Day, Clock

April 24–26: American-Style Time/Strike Movement — *Filled!*

May 9: American Shelf Clock Tablets with Stenciled Borders

May 22–24: Rack-and-Snail Striking and Introduction to the Tall Case Clock

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John Fairbanks: The Clockmaker-Scholar

By Damon Di Mauro (MA)

It was an exceptional thing for a young man in colonial or Federal-era America to receive a liberal education.[1] It was more exceptional still for a young man to emerge from the artisanal class to do so. Such was the case with John Fairbanks (1777–1814), who not only worked his way through Harvard by repairing and making clocks, but eventually studied law and passed the Massachusetts bar exam as well. Yet another exceptional fact about Fairbanks, if he is to be rendered his full tribute here, is that he was among the very few early New England clockmakers to have experimented with a quarter-hour striking system.[2]

APPRENTICESHIP TO SIMON WILLARD AND MATRICULATION AT HARVARD

John Fairbanks was born in Grafton, MA, on August 13, 1777, the third child of Isaiah Fairbanks (1743–1832), a Revolutionary War veteran and a prominent farmer.[3] He was schooled locally and must have shown academic promise, for he was sent to study for a year at Framingham Academy,[4] founded in 1792 as part of Benjamin Franklin's "academy movement" (Figure 1).[5] However, since John Fairbanks had also manifested from a tender age "a taste for mechanics," he was "placed as an apprentice with Simon Willard"[6] (1753–1848), the foremost clockmaker of the young nation's foremost clockmaking clan. Somehow, during his apprenticeship to Willard, by dint of "his own *unaided* [original emphasis] exertions,"[7] he managed to prepare himself for college. This was no mean feat since preparation for college usually required three or more years in a leading academy, if not tutoring by a distinguish mentor, and it would have entailed a prerequisite knowledge of classic studies and experience in public speaking. When Fairbanks's apprenticeship with Willard ended in 1798, he passed Harvard's entrance examinations and was admitted to the class of 1802.

There were 66 students enrolled in Fairbanks's freshman class. At age 21, he was probably more determined and worldly wise than most of his peers.[8] His class boasted a number of upwardly mobile sons of New England's upper crust, including Leverett Saltonstall (1783–1845), the future mayor of Salem, member of the Massachusetts House of Representatives, president of the Massachusetts Senate, and US Congressman.[9]

While at Harvard, Fairbanks is said to have excelled in the study of mechanics. Not only did he help to defray the expenses of his education by making and repairing clocks, but he was prevailed upon for his technical know-how at the institution as well, for "he devised some important philosophical instruments, and whatever repairs or improvements were beyond the reach of ordinary talent, were generally bestowed upon him."[10] Indeed, in the Collection of Scientific Instruments at Harvard University, there exists today a set of drawing and ellipsograph pieces signed by a "J. Fairbanks," which are almost certainly his[11] (Figure 2). Fairbanks also financed his education by teaching school during the winter break during his sophomore, junior, and senior years.[12] At the

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Figure 1. "A View of the Centre Common of Framingham," Captain Daniel Bell, 1808. The Academy is the yellow brick schoolhouse on the right. COURTESY OF FRAMINGHAM HISTORY CENTER, 2003.208.

time, meritorious students were accorded a special "dispensation" to be excused for three weeks following the Thanksgiving recess, thereby extending their winter vacation to 10 weeks, in order to teach in district schools.[13] It has not been ascertained where Fairbanks served three winter terms as schoolmaster.

Fairbanks himself seems to have been a serious student, as evidenced by the list of books he borrowed from the Harvard library, with a heavy emphasis on history, both classical and modern, but also displaying an interest in literature with Shakespeare and Joseph Addison. He took out only one science book, Nathaniel Hammond's *The Elements of Algebra in a New and Easy Method*.[14] Otherwise, while his classmates were often fined for a host of infractions, most notably for absence at chapel or indecorous behavior at lectures, Fairbanks had a virtually unblemished record throughout his career. Even class favorite Leverett Saltonstall was fined several times "the sum of 50 cents for whispering at the time of public worship" and at one point "1 dollar for indecent and



Figure 2. Ellipsograph piece signed "J. Fairbanks." AUTHOR'S PHOTO.

irreverent behavior."[15] Only in his final year did Fairbanks let his guard down, when he was ostensibly in the throes of what in contemporary jargon is termed "senioritis." On March 29, 1802, he and a group of companions were each fined 50 cents "for going out of town without leave" and, on July 6, 1802, he was fined 39 cents for his absence from public prayers.[16]

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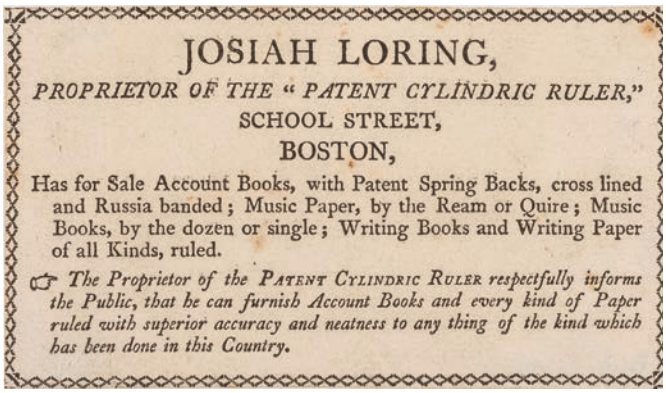

JOSIAH LORING,
PROPRIETOR OF THE "PATENT CYLINDRIC RULER,"
SCHOOL STREET,
BOSTON,

Has for Sale Account Books, with Patent Spring Backs, cross lined and Russia banded; Music Paper, by the Ream or Quire; Music Books, by the dozen or single; Writing Books and Writing Paper of all Kinds, ruled.

☞ *The Proprietor of the* PATENT CYLINDRIC RULER *respectfully informs the Public, that he can furnish Account Books and every kind of Paper ruled with superior accuracy and neatness to any thing of the kind which has been done in this Country.*

Figure 3. Advertisement for Josiah Loring's stationery produced using the cylindrical ruling machine patent he had acquired from Fairbanks. COURTESY OF THE AMERICAN ANTIQUARIAN ASSOCIATION.

EARLY CAREER AND INVENTION OF THE CYLINDRICAL RULING MACHINE

Upon graduation with a Bachelor of Arts, while most of his classmates pursued careers in the clergy, law, or medicine, John Fairbanks returned to "the employment which had supported and distinguished him."[17] On that score, there exists at the Massachusetts Historical Society a letter written by William Minot to Leverett Saltonstall in November 1802 stating, in chatter about former classmates, that "Fairbanks is going to England to buy watches for Willard."[18] Given Fairbanks's previous relationship with Simon Willard, it was most likely on his behalf. Nothing further about Fairbanks's business travel is known. And while Willard's involvement in the watch trade has not been highlighted, it was certainly part of his business model. Indeed, he advertised as early as 1784 that at his shop "watch work of all sorts is done in the neatest manner."[19]

The year 1803 proved momentous for John Fairbanks. In February, he wedded Hannah Rayner Dench (1778–1831) of Hopkinton.[20] She was the daughter of Capt. Gilbert Dench, an officer in the Revolutionary Army, town selectman, member of the Massachusetts House of Representatives, and delegate to the Massachusetts Constitutional Convention, where he became known for his anti-Federalist maneuverings.[21] On the professional front, sometime in early 1803, Fairbanks formed a partnership with Roxbury watchmaker Nathaniel Richardson (1780–1812),[22] though the firm known as Richardson & Fairbanks was dissolved within the year.[23] However, it was in November 1803 that Fairbanks patented his cylindrical ruling machine, an invention for which he was to earn his relative renown. Until the early years of the 19th century, it was the practice of schoolmasters to designate the more mature boys to rule the copy-books for the entire school, using a special leaden writing instrument beaten from a bullet and a wooden cylindrical ruler.[24] No doubt Fairbanks's own experience teaching school impressed upon him the usefulness of a machine to do the same task, which he invented and patented.[25] In 1808, however, while in the employ of bookbinder Josiah Loring (1775–ca. 1840), Fairbanks found himself in financial straits, so "Loring bought out his patent, probably for a song, and doled out to him as his necessities and desires warranted."[26] The late-19th-century commentator here makes Loring sound predatory in his proprietorship, though he was to maintain an avuncular relationship with the family for many years, as will be seen. In any event, the blank books produced by Loring would also be useful for banks, insurances companies, and merchants.[27] It was said at the time that "this invention has probably been the means of encouraging the paper manufactures of our country more than any other circumstance."[28] Loring held the patent for 14 years, until 1822, which he could have renewed again for seven more years, yet the horizontal ruling machine soon supplanted Fairbanks's invention and was itself improved by successive inventors (Figure 3).[29]

In 1805, the degree of Master of Arts was conferred by Harvard upon Fairbanks, as it was upon most, but not all, of his 1802 classmates.[30] On taking his BA, the graduate, following the practice of English universities, was called "Sir." On taking his MA degree, the graduate was denominated "Mr."[31] Beyond honorifics, it is not clear what students actually did to earn the second degree. In principle, it was awarded for "three years of undirected study."[32] In practice, it came to be known as "the first-dollar master's degree," for the sole requirements in the early 19th century were "'keeping out of jail for three years and paying five dollars.'"[33] The so-called bargain degree was finally discontinued at Harvard in 1872. In Fairbanks's case at least, it cannot be said that he had been idle since graduation. As evidence thereof, in January 1806 he submitted a proposal to the American Academy of Arts and Sciences for a new approach to teaching astronomy. For decades, the Academy had issued a call for papers from the "ingenious in every profession" for consideration by its fellows with a view toward publication. What Fairbanks proposed was "a projection of the Solar System exhibiting at one view

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Figure 4. Fairbanks's only remaining extant clock. COURTESY OF DELANEY ANTIQUE CLOCKS.



Figure 5. The back of the movement of the clock in Figure 4. COURTESY OF DELANEY ANTIQUE CLOCKS.

the proportional magnitudes of the planets & satellites with the sun, their relative distances, their orbits [original emphasis], & other circumstances attending them." Fairbanks noted that the pedagogical method had been "delineated by the author in his senior year at Harvard College in 1802" and claimed that the study of the solar system would be rendered more intelligible to the learner "than all the orreries and planetary instruments now in use."[34] Fairbanks's proposal was never published, and it is not known if the Academy ever encouraged him to pursue the matter further.

According to the 1805 *Boston Directory*, John Fairbanks resided at 32 Orange St. in the city's south end, and he is specifically denominated a "clock maker."[35] In 1807, he moved his young family to a house at 117 Orange St.[36] The Hollis Street Church neighborhood, as it was known, was also professionally propitious to Fairbanks since it was strategically placed between the artisanal hub on Boston Neck and in Roxbury Village toward the south and the large economic market of Boston proper to the north.[37] A critical mass of other skilled artisans happened to dwell in the neighborhood as well, most notably John Ritto Penniman (1782–1841), who resided at 40 Orange St.[38]

Since Fairbanks was still devoted to horology, it might be postulated that his only remaining extant clock dates from this period (Figure 4). It features a brass eight-day, three-train movement, rack-and-snail strike system, with deadbeat escapement. The movement is housed in a cherry New England case. The door is fitted with a contrasting oval-shaped inlay of mahogany, with a lightwood border. It is signed on the back of the movement, where it is also numbered "N 61" (Figure 5). Oddly, the final "s" in Fairbanks is missing. Whatever the reason, there was no other clockmaker named J. Fairbank or Fairbanks working in early 19th-century America.[39] The dial appears to be English in origin, but the manufacturer is not known. It has an additional arbor, as it is a quarter-hour striker, though somewhat indecorously arranged (Figure 6). The striking sequence is thus: the hour on the hour as usual on its own bell. As for the third train, one blow on the first quarter on its own bell, which is slightly higher in pitch than the hour strike, then two blows on the half hour, and three blows on the three-quarter hour. The third train does not strike on the hour. Suffice it to say, Fairbanks was ahead of his time, since the third train does not become a common feature in American horology until after the 1870s (Figure 7).[40]

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Figure 6. The dial has an additional arbor, as it is a quarter-hour striker. COURTESY OF DELANEY ANTIQUE CLOCKS.

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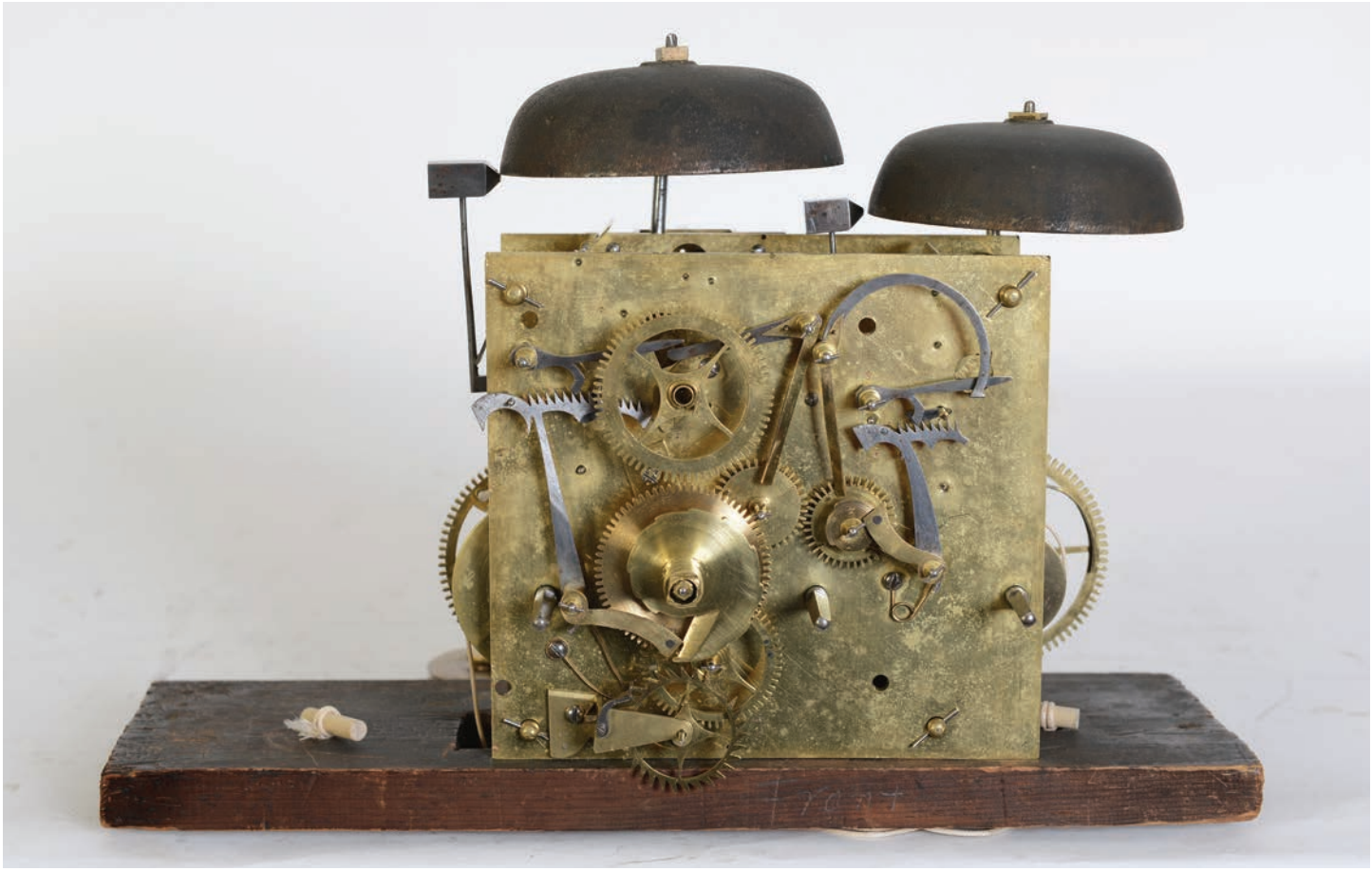

Figure 7. Fairbanks's third train was ahead of its time. COURTESY OF DELANEY ANTIQUE CLOCKS.

PASSING THE BAR AND ADVOCACY FOR PATENT LAW

At some point, perhaps around 1807, Fairbanks became actively engaged in the study of law and began serving in the office of Benjamin Whitman, esq. (1768–1840).[41] Fairbanks is said to have relied once again on "his industry and ingenuity in the clock-making business for the payment of his expenses and support of his family."[42] By July 1808, he was admitted as an attorney at the Court of Common Pleas.[43] By March 1809, he was admitted as an attorney at the Supreme Judicial Court.[44] In 1810, his principal occupation in the *Boston Directory* was listed as "attorney" and he had his own office in the Tudor's Building.[45] The three-story granite structure was built by Frederick Tudor, also known as the "Ice King" for shipping New England ice the world over. It sat at 20 Court St., directly adjacent to the courthouse, and thus it was a prime site for attorneys to have offices.[46]

Fairbanks dabbled some in real estate law. However, if he managed to obtain "a respectable share of business" as an attorney, it was chiefly "in cases involving patent rights."[47] No doubt Fairbanks had developed an interest in the issue as a patentee himself from his own experience with the cylindric ruling machine. In 1810, he also took out a patent on what is described as an "eccentric roller machine" for making nails.[48] As early as 1807, Fairbanks joined the New England Association of Inventors and Patrons of Useful Arts and became its corresponding secretary.[49] The NAUA was founded by printer and inventor Benjamin Dearborn (1754–1838) as a forum where innovators could display their new technologies, solicit advice from fellow technologists, and establish relationships with patent lawyers, potential financial backers, and would-be manufacturers.[50] Eventually, the NAUA morphed into the Massachusetts Association for the Encouragement of Useful Inventions, whose president and secretary were again Benjamin Dearborn

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and John Fairbanks. The organization was incorporated by the Commonwealth in February 1809.[51] Fairbanks's old master, Simon Willard, who had his own well-chronicled struggles with "Spurious Patent Timepieces" related to his famous 1802 design,[52] was a founding member, as was the proprietor of his ruling machine, Josiah Loring. The most eminent charting member, however, was Jacob Perkins (1766–1849), known, among other things, as the "father of the refrigerator." While the stated purpose of the association was to promote cutting-edge technology that reduced physical labor and enhanced quality of life, the primary objective loomed large in the background, namely to strengthen the rights of patentees and the proprietors of patents.[53] For when the US Congress in December 1810 set about to revise patent laws to shield inventors from the surreptitious pirating of specifications, drawings, or models and transmitting them to Europe, Dearborn and Fairbanks sent a lengthy petition on behalf of the society to support the reform measures.[54]

ADDRESS BEFORE THE MASSACHUSETTS CHARITABLE MECHANIC ASSOCIATION

In 1812, Fairbanks became a member of the Massachusetts Charitable Mechanic Association, founded in 1795, whose first president was Paul Revere, for the purpose of heightening awareness of the mechanical arts and providing pecuniary support for members' families in time of need. It is noteworthy that Fairbanks entered the organization as a "clockmaker."[55] In spite of being a "newly appointed member," he was selected to give the address to the Triennial Festival in December that year. After a business meeting at Faneuil Hall, members of the MCMA then repaired in full procession to First Church at Chauncey Place, where Fairbanks delivered his oration.[56] It was his day in the sun. At a special meeting of the MCMA the following week, a committee was appointed to direct the printing of 300 copies of Fairbank's discourse.[57] His was a long homage to the mechanic as the catalyst for progress throughout history, with technological leaps forward punctuated by the printing press and the mariner's compass, for "mechanical ingenuity has multiplied the blessings of life, civilized mankind, given power to the weak, preserved and adorned society; introduced rational liberty, and enabled man to live as becomes the dignity of his nature."[58] While Fairbanks celebrates the impressive American achievements over the previous decades (i.e., mills, turnpikes, and canals, as well the inventions of his fellow patentees, including his own cylindric ruling machine), he laments the continued dependence on Great Britain: "The various articles of clothing, furniture, arms, and ammunition; tools and materials for mechanics, glasses for the aged, telescopes, marine instruments, watches, books, charts, and a multitude of other articles of manufacture, have been the constant importation from that country to America."[59] Fairbanks ends with a call to arms, arguing that "the gentleman and scholar should consider his education incomplete, without a knowledge of the mechanical arts."[60] In his estimation, Nature has "declared that America was her last and most perfect work,"[61] given the abundant resources available. The sum is that without industry, not only do the arts and civilization not flourish, but there can be no economic prosperity or political independence. This is why "the ingenious mechanic holds an important station in society."[62]

MILITARY SERVICE AND FINAL LEGACY

Fairbanks's discourse to the MCMA was delivered shortly after the declaration of war against Great Britain in 1812—a decision that had not been favored by the Federalists—and Fairbanks is said to have made "a few political allusions that were not relished by some of the members."[63] In fairness, Fairbanks also had some choice words for the Jeffersonians, known for their Francophilia: "The friendship of France has already done you more injury than the open hostility of England. Yes, France presents to your lips the poisoned cup of her affection, says, 'she dearly loves you,' tries to make you believe it, picks your pocket before your face, then like an artful courtezan leaves you in disgrace."[64] To be sure, Fairbanks had a strong patriotic streak. After an association of noncommissioned officers known as "The Soul of Soldiery" held their annual parade in Boston, guests were escorted to Concert Hall for a banquet during which several toasts were drunk, including Capt. John Fairbanks's imprecation against "the enemies of our Country": "May their *guns be crooked*; their powder *wet*; their *rations mouldy*; and the elements compel them to retreat, and leave us in possession of those neutral and independent rights *belonging to Americans*" [original emphasis].[65] Fairbanks served in the Third Regiment of the Third Bridge of the Massachusetts Militia,[66] and commanded two companies.[67] Among the privates under him were three watchmakers and one ornamental painter.[68] According to one testimony, "He was quite celebrated as a drill officer; and, but a few weeks previous to his death,—when it was thought necessary to prepare

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Figure 8. Fairbanks's astronomical clock must have been an item of interest at this large jewelry store in Boston. COURTESY OF THE AMERICAN ANTIQUARIAN ASSOCIATION.

the militia to meet and repel any attack that might be made by the British forces on the soil of Massachusetts, —he was almost daily engaged in exercising various companies in military tactics."[69] In fact, it was claimed that "the disorder of which he died was produced by exposure to which his zeal in the military service subjected him."[70] The malady to which he succumbed was "typhus fever."[71]

The funeral proceeded from Fairbanks's dwelling house on Orange St. on November 23, 1814. It was a large affair by any measure. Representatives of the Massachusetts Charitable Mechanic Association, the Bar Association of Suffolk County, and the Commissioned Officers of the Third Brigade requested that their members attend, while a Light-Infantry Company in full uniform served as an escort.[72] He was interred at the Central Burial Ground.[73] Since his death is recorded in the Hollis Street Church records, he must have attended services there.[74] Fairbanks's widow, Hannah R., became a member of the Hollis Street Church in January 1815 and, shortly thereafter, she had her five children (Hannah Dench, John Phillip, Anna Maria, Antoinette, and Josiah Loring, who was named after the proprietor of the ruling machine patent) baptized together there on the same day.[75] The Massachusetts Charitable Mechanic Association provided assistance to the family from their funeral fund.[76] Leverett Saltonstall and William Minot also didn't forget their former classmate, for the Class of 1802 maintained a trust fund to succor families in time of need.[77] Josiah Loring assumed guardianship for the two minor Fairbanks children, John Phillip and his namesake Josiah Loring.[78] Loring was a confirmed bachelor, and so he took Widow Fairbanks into his home to be his housekeeper and her five children lived under his roof at his expense.[79]

An inventory of Fairbanks's estate was taken almost immediately upon his demise.[80] Among the appraisers were former law partner Benjamin Whitman and clockmaker Aaron Willard Jr. His "Machinery and Mechanics Tools" were valued at $200, "Three Times Pieces" at $170, and a "Silver Watch" at $25.[81] Josiah Loring was appointed administrator of the estate. A year later, in June 1815, he organized an auction of "Valuable Tools for Clock Makers and other Mechanics" at his bookstore at No. 1 South-Row in Boston. He cites in particular in the ad: "A large, elegant Astronomical

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Clock, made by the late Mr. Fairbanks—the workmanship equal if not superior to any in the United States—an Instrument for taking objects in perspective—a Machine for making shoe pegs, which will make 100,000 in a day, of any desired size—a Machine for cutting wood screws, etc."[82] Fairbanks's obituary also claims that "he has also constructed on a new plan a *chronometer* [original emphasis], which is said to have arrived at astonishing accuracy,"[83] although nothing further is known about it. As for Fairbanks's astronomical clock, it was said in 1853 to be still "running at the store of Messrs. Jones, Poor, & Ball."[84] The jewelers who composed the firm specialized in silverware, for which they employed 100 workers, but also engaged in the sale of clocks, watches, and assorted "fancy goods."[85] The inventory was said to be the most extensive in New England, and thousands of customers from across the country were attracted to the store (Figure 8).[86] Fairbanks's astronomical clock must have been something of a conversation piece. After 1853, there is no further trace of it.

As stated earlier, stationer Josiah Loring's proprietorship of Fairbanks's cylindrical ruling-machine patent, due to the latter's impecunious state at the time, has been viewed with a jaundiced eye. His enduring relationship with the family is evidence to the contrary.[87] Even so, there is a kind of poetic justice in the fact that Fairbanks's youngest son, Josiah Loring Fairbanks (1814–75), who began working for his namesake as a lad, would eventually come to head the firm, which then became known as J. L. Fairbanks & Co., providing stationery to Massachusetts government offices and bookkeeping materials to Boston's most illustrious businesses.[88]

Acknowledgments

The author thanks John A. Delaney of Delaney Antique Clocks, Bob Frishman, Sara Schechner, Emily Petermann of the Massachusetts Historical Society, the NAWCC Library & Research Center staff, Anna Tucker of the Framingham History Center, and the Reference Staff at Harvard University Archives for their assistance in composing this article. Special thanks go to the anonymous reviewer for keen insights and information. All infelicities are the author's own.

Notes and References

1. Some early town histories list their native sons who attended a college such as Harvard, Yale, or Dartmouth. See Benjamin L. Mirick and John Greenleaf Whittier, *The History of Haverhill, Massachusetts* (Haverhill: A.W. Thayer, 1832), 216–17; William Barry, *History of Framingham, Massachusetts* (Boston: James Munroe and Company, 1847), 84–85; Gardner B. Perry, *History of Bradford, Mass.* (Haverhill, MA: C. C. Morse & Son, 1872), 18; Frederick Clifton Pierce, *History of Grafton, Worcester County, Massachusetts* (Worcester: Press of Chas. Hamilton, 1879), 376–80.
2. William Claggett (1694–1748) produced a quarter-striking clock in the period under consideration. See Donald L. Fennimore and Frank L. Hohmann III, *Claggett: Newport's Illustrious Clockmakers* (New Haven and London: Yale University Press, 2018), 19, 62, 190–93. Caleb Wheaton (1757–1827), Benjamin Willard (1743–1803) and William Creak (active 1740–75) also produced quarter-striking or quarter-chiming clocks. See Gary Sullivan and Kate Van Winkle Keller, *Keeping Time: Musical Clocks of Early America 1730–1830* (North Grafton, MA: The Willard House & Clock Museum, 2013), 40, 43. For a failed attempt by Thomas Claggett (1730–97), see Donald L. Fennimore and Frank L. Hohmann III, *Claggett*, 112–17.
3. See Lorenzo Sayles Fairbanks, *Genealogy of the Fairbanks Family in America, 1633–1897* (Boston: American Printing and Engraving Company, 1897), 175–76. On Isaiah Fairbanks's war service, see Frederick Clifton Pierce, *History of Grafton, Worcester County, Massachusetts*, 114.
4. Framingham Academy was founded in 1792, and initially enrollment was limited to just 25 pupils. See William Barry, *History of Framingham, Massachusetts*, 79–83.
5. As early as 1747, Benjamin Franklin had called for an English (in contrast to Latin or classical) academy that would inculcate both the sciences and the ornaments: "As to their Studies, it would be well if they could be taught *every Thing* that is useful, and *every Thing* that is ornamental: But Art is long, and their Time is short. It is therefore propos'd that they learn those Things that are likely to be *most useful* and *most ornamental*, Regard being had to the several Professions for which they are intended," in "Benjamin Franklin: *Proposals Relating to the Education of Youth in Pensilvania* (1747)," in Theodore R. Sizer, *The Age of the Academies* (New York: Teachers College, Columbia University, 1964), 70–71.
6. Most of the biographical details concerning Fairbanks derive from a notice appearing in Joseph T. Buckingham, *Annals of the Massachusetts Charitable Mechanic Association* (Boston: Press of Crocker and Brewster, 1853), 133–34. An extracted copy of this biography also exists at the NAWCC Library & Research Center, vertical file 31164.
7. This is according to the writer of his obituary, *Columbian Centinel*, November 30, 1814, 2.
8. The eldest in the class of 1802 was 26, while nine were as young as 14. See *Harvard University. Faculty of Arts and Sciences, Early Faculty Minutes, 1725–1806*, 44–45. Some 60 students ended up graduating in the class of 1802, although there were new admittances along the way. On the graduates, see *Massachusetts Mercury*, August 27, 1802, 2 and *Quinquennial Catalogue of the Officers and Graduates of Harvard University 1636–1890* (Cambridge, MA: Published by the University, 1890), 104–5.

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9. Saltonstall was the first mayor of Salem from 1836–38; a member of the Massachusetts House of Representatives in 1813–14, 1816, 1822, 1829, 1834, 1844; a member of the Massachusetts Senate in 1817–19 and also its president in 1831–32; and a member of the US House of Representatives from 1838–43.
10. *Columbian Centinel*, November 30, 1814, 2.
11. See waywiser.fas.harvard.edu/people/1916/j-fairbanks. Many thanks to Sara Schechner for making these instruments available to the author for examination.
12. See *Harvard University, Faculty of Arts and Sciences, Early Faculty Minutes, 1725–1806*, 92, 143, 207.
13. The practice is described in *Report of a Committee of the Overseers of Harvard College* (Cambridge, MA: University Press, 1825), 37.
14. For instance: Charles Rollin, *The Ancient History of the Egyptians, Carthaginians, Assyrians, Babylonians, Medes and Persians, Macedonians and Grecians* (1730–38); John Moore, *A View of Society and Manners in Italy* (1781); William Robertson, *The History of Scotland* (1759); Edward Wortley Montagu, *Reflections on the Rise and Fall of the Ancient Republics* (1793); William Alexander, *The History of Women, from the Earliest Antiquity* (1779); John Gillies, *The History of Ancient Greece, Its Colonies and Conquests* (1786); William Robertson, *The History of the Reign of Charles the Fifth* (1769); William Gordon, *The History of the Rise, Progress, and Establishment of the Independence of the United States of America* (1786); John and William Langhorne's translation of *Plutarch's Lives* (1770); Oliver Goldsmith, *Roman History* (1769); William Russell, *History of Modern Europe* (1786).
15. *Harvard University, Faculty of Arts and Sciences, Early Faculty Minutes, 1725–1806*, 150–51, 156, 176, 212.
16. *Harvard University, Faculty of Arts and Sciences, Early Faculty Minutes, 1725–1806*, 212–13, 220.
17. *Columbian Centinel*, November 30, 1814, 2.
18. William Minot to Leverett Saltonstall, November 17, 1802, *Saltonstall Family Papers, 1796–1803*, ms. N-2232, box 1, Massachusetts Historical Society. See also Ken Pearson, "Horological Documents in the Massachusetts Historical Society," *NAWCC Bulletin* 26, no. 230 (June 1984): 350. Pearson was the first to point to the existence of the letter at the Massachusetts Historical Society, though he theorized that the Fairbanks in question was Thomas. However, the context indicates that Minot was talking about his Harvard classmates. Saltonstall and Minot frequently discussed the doings of their classmates in their correspondence, such as Harris who "went to England to buy flannels, shirtings &c.," Robert E. Moody, *The Saltonstall Papers* (Boston: Massachusetts Historical Society, 1974), 279; cf. 349, 351, 487.
19. *Independent Chronicle*, February 19, 1784, 1.
20. *Columbian Minerva*, March 8, 1803, 3. See also *Vital Records of Hopkinton, Massachusetts to the Year 1850* (Boston: New England Historic Genealogical Society, 1911), 267.
21. Duane Hamilton Hurd, *History of Middlesex County, Massachusetts*, vol. 3 (Philadelphia: C. W. Lewis & Co., 1890), 784, 786. On Dench's political maneuverings, see Melvin Yazawa, *Contested Conventions: The Struggle to Establish the Constitution and Save the Union, 1787–1789* (Baltimore: John Hopkins University Press, 2016), 118, 129.
22. Richardson is specially called a "watch-maker" in an estate notice: *Columbian Centinel*, June 20, 1812, 2. His probate record, in which clockmaker William Cummens happened to serve as an executor, also denominates him thus; *Norfolk County, MA: Probate File Papers*, 15750: 1–39.
23. *New-England Palladium*, August 19, 1803, 3; August 26, 1803, 4; September 2, 1803, 1; September 9, 1803, 1. Earlier in 1803, while still in Boston, Nathaniel Richardson had been in partnership with his brother John Richardson, also a watchmaker: *Columbian Centinel & Massachusetts Federalist*, June 18, 1803, 3; June 25, 1803, 1; July 2, 1803, 4; *New-England Palladium*, June 24, 1803, 1.
24. See William A. Brewer Sr., "Origin and History of the Ruling Machine," *The American Bookmaker* 7, no. 4 (October 1888): 89–90 and *Facts for the Thoughtful Book-Binder & Paper-Ruler* 1, no. 10 (October 1892): 161.
25. Fairbanks actually had two patents for the cylindrical ruling machine, in 1803 and 1808, respectively. Presumably, he had improved it somehow in the final iteration. See *The American Journal of Improvements in the Useful Arts, and Mirror of the Patent Office of the United States*, vol. 1 (Washington: William Greer, 1828): 109, 263.
26. Brewer, "Origin and History of the Ruling Machine," 89.
27. See "Reminiscences of Old Boston," *Proceedings of the Bostonian Society at the Annual Meeting*, vol. 3 (Boston: Old State House, 1896), 36.
28. Buckingham, *Annals of the Massachusetts Charitable Mechanic Association*, 27.
29. Loring eventually found acclaim as a globe maker, even earning a gold medal. See *The Second Exhibition of the Massachusetts Charitable Mechanic Association* (Boston: Isaac R. Butts, 1839), 66–67.
30. *Columbian Centinel*, September 7, 1805, 1.
31. "Harvard College Records Part I: Corporation Records 1636–1750," *Publications of the Colonial Society of Massachusetts*, vol. 15 (Boston: Published by the Society, 1925), cxl.
32. John T. Bethell, *Harvard A to Z* (Cambridge, MA: Harvard University Press, 2004), 110.
33. Bethell, *Harvard A to Z*, 110.
34. The John Fairbanks proposal can be found on the website of the American Academy of Arts and Sciences: amacad.org/archives/rg-i-c-1-general-records-communications-academy-bound.
35. *The Boston Directory* (Boston: Edward Cotton, 1805), 48.
36. *The Boston Directory* (Boston: Edward Cotton, 1807), 67. Daughter Hannah Dench was born on January 2, 1805, and son John Phillips was born on March 26, 1807. See Sayles Fairbanks, *Genealogy of the Fairbanks Family in America, 1633–1897*, 339.
37. On this subject, see Paul J. Foley, *Willard's Patent Time Pieces* (Norwell, MA: Roxbury Village Publishing, 2002), 18–19.

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38. Among the other painters who resided in the Hollis Street Church neighborhood were Jacob Emmons, William Gregory, Edward Johnson, Neil Jackson, John Phillips, John Pitcher, George Shimitz, Ebenezer Smith, and James Wheeler. Engraver John Norman also lived there, as did cabinetmakers Elisha Adams, Benjamin Bass, Asahel Brown, Lemuel Churchill, Thomas Seymour, George Turnecliff, and Clark Waters. See Carol Damon Andrews, "John Ritto Penniman: An Ingenious New England Artist," *The Magazine Antiques* 120 (July 1981): 152, 161.
39. Across the waters, Dennis Moore does record a clockmaker's apprentice named "John Fairbank," whose Master was Peter Bowyer, but the date (1759) is somewhat early: *British Clockmakers & Watchmakers Apprentice Records 1710–1810* (Mayfield, England: Ashbourne, 2003), 114. Also, in an old issue of *Horological Journal* (120, no. 11 [May 1978]: 19), reference is made to a "small verge timepiece bracket clock by J. Fairbanks."
40. I owe this description to John A. Delaney of Delaney Antique Clocks, delaneyantiqueclocks.com.
41. Whitman graduated Brown University in 1788. He began his legal career in Hanover, MA, and moved to Boston in 1805. He served as a Boston representative to the General Assembly and eventually as Chief Justice of the Boston Police Court. He is best known for his tome, *An Index to the Laws of Massachusetts: From the Adoption of the Constitution to the Year MDCCXCVI* (Worcester, MA: Printed by Thomas, Son & Thomas, 1797). On Whitman, see William Thomas Davis, *History of the Judiciary of Massachusetts* (Boston: The Boston Book Club, 1900), 227. Whitman was known for taking students under his wing, quite successfully. See John Stetson Barry, *A Historical Sketch of the Town of Hanover, Mass., with Family Genealogies* (Boston: Samuel G. Drake, 1853), 97.
42. Buckingham, *Annals of the Massachusetts Charitable Mechanic Association*, 133–34. The writer erroneously states that Fairbanks had begun his law study under Whitman in 1803. This is impossible since Whitman only moved to Boston in 1805.
43. "Mr. John Fairbanks is proposed to be admitted an Attorney of this Court, and after having taken the several oaths by Law required, he is admitted accordingly," *Suffolk County Court of Common Pleas*, July 1808, 472. See also *Merrimack Intelligencer*, July 23, 1808, 3.
44. Hollis Russell Bailey, *Attorneys and Their Admission to the Bar in Massachusetts* (Boston: W. J. Nagel, 1907), 45. See also *Repertory*, April 18, 1809, 2.
45. *The Boston Directory* (Boston: Edward Cotton, 1810), 73.
46. On Frederic Tudor, see Lewis P. Simpson, "Boston Ice and Letters in the Age of Jefferson," *Midcontinent American Studies Journal* 9, no. 1 (Spring 1968): 58–76. On Tudor's Building, see Timothy B. Riordan, *Creating the Boston Police: Francis Tukey and the Invention of Modern Crime Fighting* (Jefferson, NC: Exposit, 2022), 32.
47. Buckingham, *Annals of the Massachusetts Charitable Mechanic Association*, 134.
48. See *The American Journal of Improvements in the Useful Arts, and Mirror of the Patent Office of the United States*, vol. 1:249.
49. As corresponding secretary, Fairbanks placed ads in the newspaper to put out calls for meetings: *New-England Palladium*, December 1, 1807, 3; February 19, 1808, 3; March 1, 1808, 4.
50. See Steven Wilf, *Intellectual Property Law and History* (New York: Routledge, 2012), 937; Eric S. Hintz, *American Independent Inventors in an Era of Corporate R&D* (Cambridge, MA: MIT Press, 2021), 95.
51. *Private and Special Statutes of the Commonwealth of Massachusetts*, vol. 4 (Boston: Wells and Lilly, 1823), 206–7. See also *Essex Register*, April 29, 1809, 1; *Newburyport Herald*, April 25, 1809, 1; *Merrimack Intelligencer*, May 27, 1809, 1.
52. On Simon Willard's struggles with unauthorized timepieces, see Paul J. Foley, *Willard's Patent Time Pieces*, 9–10.
53. This primary proprietary aim is made clear in a treatise accompanying the "Constitution of the Newengland [*sic*] Association of Inventors and Patrons of Useful Arts," whose title is revealing: *Remarks on the Rights of Inventors and the Influence of Their Studies in Promoting the Enjoyments of Life and Public Prosperity* (Boston: E. Lincoln, 1807).
54. *The Journal of the House of Representative at the Third Session of the Eleventh Congress* (Washington, DC: A. and G. Way, 1810), 264. See also *The Debates and Proceedings in the Congress of the United States* (Washington, DC: Gales and Seaton, 1853), 967–70; and John Leander Bishop et al., *A History of American Manufactures, from 1608 to 1860*, vol. 2 (Philadelphia: Edward Young & Co., 1864), 175. However, while protectionism was urged at home, there was also a movement afoot to encourage piracy of British design and machinery, so as to weaken the adversary in a time of outright hostility. See Doron S. Ben-Atar, *Trade Secrets: Intellectual Piracy and the Origins of American Industrial Power* (New Haven: Yale University Press, 2004), 190–91, 259–60.
55. Two watchmakers, Stephen Dutch and Joshua James, were also in his class of initiates: Buckingham, *Annals of the Massachusetts Charitable Mechanic Association*, 125.
56. *Columbian Centinel*, December 19, 1812, 2.
57. Buckingham, *Annals of the Massachusetts Charitable Mechanic Association*, 127.
58. John Fairbanks, *An Address Delivered before the Massachusetts Mechanic Charitable Association, December 7, 1812* (Boston: Joseph T. Buckingham, 1812), 3.
59. Fairbanks, *An Address Delivered before the Massachusetts Mechanic Charitable Association*, 3.
60. Fairbanks, *An Address Delivered before the Massachusetts Mechanic Charitable Association*, 23–24.
61. Fairbanks, *An Address Delivered before the Massachusetts Mechanic Charitable Association*, 18.
62. Fairbanks, *An Address Delivered before the Massachusetts Mechanic Charitable Association*, 23.
63. Buckingham, *Annals of the Massachusetts Charitable Mechanic Association*, 127. Among those most displeased

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was probably Joseph T. Buckingham himself (1779–1861), an ardent Federalist, who had just become chairman of the Massachusetts Charitable Mechanic Association in 1812.

64. Fairbanks, *An Address Delivered before the Massachusetts Mechanic Charitable Association*, 24–25.
65. *The Repertory & General Advertiser*, October 27, 1812, 2; *Philadelphia Gazette*, November 2, 1812, 2.
66. *Yankee*, April 23, 1813, 3.
67. From July 1 to July 30, 1814, and September 28 to October 4, 1814. See *Records of the Massachusetts Volunteer Militia* (Boston: Wright & Potter, 1913), 70, 77.
68. The watchmakers were Thomas Ayling and John Richardson, while the ornamental painters were Spencer Nolan and Samuel Curtis. I owe this observation to Paul J. Foley, *Willard's Patent Time Pieces*, 210, 238, 292, 303–4.
69. Buckingham, *Annals of the Massachusetts Charitable Mechanic Association*, 134.
70. *Columbian Centinel*, November 30, 1814, 2.
71. *Boston Commercial Gazette*, November 21, 1814, 2; *Boston Daily Advertiser*, November 21, 1814, 3; *Repertory*, November 22, 1814, 4.
72. *New-England Palladium*, November 22, 1814, 2; *Columbian Centinel*, November 23, 1814, 2; *Boston Commercial Gazette*, November 24, 1814, 2.
73. Massachusetts, U.S., Town and Vital Records, 1620–1988, Deaths and Interments in Boston, November 20, 1814.
74. *Hollis Street, Boston, Records of Admissions, Baptisms, Marriages, and Deaths 1732–1887* (Boston: The New England Historic Genealogical Society, 1998), 98.
75. *Hollis Street, Boston, Records of Admissions, Baptisms, Marriages, and Deaths 1732–1887*, 98.
76. Buckingham, *Annals of the Massachusetts Charitable Mechanic Association*, 133.
77. Robert E. Moody, *The Papers of Leverett Saltonstall* (Boston: Massachusetts Historical Society, 1978), 6.
78. *Norfolk County, MA: Probate File Papers*, May 19, 1817, 25260:1–3; May 19, 1817, 25261:1–3.
79. Buckingham, *Annals of the Massachusetts Charitable Mechanic Association*, 311.
80. *Suffolk County, MA, Probate File Papers, December 12*, 1814, 24554:1–22.
81. The inventory was signed on March 13, 1815; *Suffolk County, MA, Probate File* Papers, 24554:7.
82. *Boston Commercial Gazette*, June 22, 1815, 3; *Repertory*, June 22, 1815, 4; June 23, 1815, 3; *Boston Daily Advertiser*, June 23, 1815, 3; June 24, 1815, 3.
83. *Columbian Centinel*, November 30, 1814, 2.
84. Buckingham, *Annals of the Massachusetts Charitable Mechanic Association*, 134. The firm of Jones, Ball & Poor had dissolved in 1851 and was replaced by the firm of Jones, Ball & Co.; Paul J. Foley, *Willard's Patent Time Pieces*, 272.
85. The partners of the firm can be identified as George B. Jones, True M. Ball, and Nathaniel C. Poor. See *Portland Weekly Advertiser*, August 17, 1847, 3. As for the number of employees involved in silverware, see *Salem Register*, May 18, 1854, 2.
86. *The Stranger's Guide in the City of Boston* (Boston: Andrews & Co., 1848), 90; George Adams, *Conductor to Attractive Places in Boston and Vicinity* (Boston: Boston Directory Office, 1851), 55–56.
87. The impression he left upon his contemporaries was also quite positive, for while "his constitutional temperament was somewhat eccentric . . . affected by what is proverbially called *absence of mind*," "enemies he had none" and "he was truly benevolent; his ear was ever open to the tale of distress, with a heart and hand ready to devise and afford relief": Buckingham, *Annals of the Massachusetts Charitable Mechanic Association*, 311–12.
88. *Geyer's Stationer* 33, no. 812 (May 29, 1902): 19.

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A Fromanteel Automation Watch

By Richard Newman, NAWCC Silver Star Fellow (IL)

Christiaan Huygens's 1656 application of a pendulum regulator for clocks revolutionized timekeeping, achieving a precision of just a few seconds per day for the first time. Remarkably, the same scientist–inventor's application of a spiral balance spring for watches 19 years later in 1675 was similarly transformative for watchmaking by immediately improving accuracy from 10–20 minutes per day to under 5 minutes. I particularly like this early period of English horology. One can imagine that owners of accurate pendulum clocks were very pleased to finally be able to carry a relatively accurate, portable timekeeper. Makers were designing and creating watches that embodied the very height of technology, craftsmanship, and artistry that, for the proud owner, conveyed one's self-regard and stature in high society—pure magic. It was also a time when production was still fairly low, and the maker whose name was engraved on the movement was actually the one who had worked on it. After becoming established, the larger and more famous makers, including Thomas Tompion, Daniel Quare, Charles Gretton, and Joseph Windmills, were, generally speaking, devoted to supervising and running the business. Their time at the bench was mainly focused on special commissions, assuming they still had the health, dexterity, and eyesight to do intricate work.

The most significant family of makers in English history were the Fromanteels. Ahasuerus Fromanteel (1607–93) and three of his sons, John (1638–92), Ahasuerus II (1640–1703), and Abraham (1647–1730), made exceptional clocks, working together and individually in workshops in England and Holland.[1] Their work is most often just signed "Fromanteel," without a first name or initial, for the family business. Every one of their early watches that I have seen, those made prior to the Fromanteel and Clarke partnership of 1694, are also signed this way. Most importantly, they also contain a movement of their own design that is unlike any other maker.[2] Although research is ongoing, I have also found that Fromanteel cases have a Dutch casemakers' stamp, a "B" with a star above, that is unfortunately unidentified. This shows that whether destined for sale in Holland or England, their early watches were likely made by John and/or Ahasuerus II in their Amsterdam workshop.

The Fromanteel sun and moon automation watch featured here—the first watch in this Art of Time series—is one such example and has a beautifully designed dial and an elaborately adorned movement and case (Figures 1–9). It was likely made by Ahasuerus II. The addition of a calendar, and the seconds register in particular, were advanced features that conveyed precision timekeeping within a watch designed to amaze wealthy patrons with beauty and craftmanship (Figures 7 and 8).[3]

The fine Baroque-style floral and foliage patterns displayed on the dial and movement represent some of the finest quality of work that is found in any of the decorative arts from this period. For comparison, Figure 10 is a photograph of an important and intricate solid gold tobacco box that is part of the Victoria and Albert Museum's world-renowned decorative art collection. It was made in 1670–85, after the Restoration of the monarchy, apparently as a remembrance to King Charles I, who was executed years before in 1649.[4]

It seems that the Fromanteels only began making watches after the invention of the balance spring that made precision timekeeping in watches possible. Interestingly, nearly all of their early surviving watches

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Figure 1. Sun and moon automation watch with its original cases, ca. 1685–90. Notice the calendar at the 12 position and the large, integrated seconds register that conveys that the watch has a high-precision movement.
PHOTO COURTESY OF JOHN COTE.

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Figure 2. Elaborately decorated backplate with a pierced and engraved balance cock depicting foliage with a flower head at the center. Notice the faceted winding and regulator arbors, a nice touch. The movement is signed "Fromanteel London". PHOTO COURTESY OF JOHN COTE.



Figure 3. Very deep fire gilt verge escapement movement with proud blued screws, and broad pierced and engraved divided tulip pillars. PHOTO COURTESY OF JOHN COTE.



Figure 4. Close-up of one of the fine gilded tulip pillars and the turned solid silver case spring screw. High-quality craftmanship that is characteristic of Fromanteel's workshop. AUTHOR'S PHOTO.



Figure 5. Movement detail showing the barrel and fusee. The delicately shaped fusee stop-iron block, located directly in front of the fusee in this photo, contains the iron fusee stop that prevents overwinding of the movement. AUTHOR'S PHOTO.

have either a sun and moon automation dial or, more often, a wandering hour automation dial, indicating that they specialized in these advanced features and therefore catered to the wealthiest buyers. Another sun and moon example is in the collection of the Ashmolean Museum in Oxford, England,[5] and a third is pictured in *English & American Watches* by George Daniels.[6]

Notes and References

1. Biographical information throughout this article is from Brian Loomes, *Clockmakers of Britain: 1286–1700* (Mayfield, Ashbourne, UK: Mayfield Books, 2014). Ahasuerus Fromanteel worked in London and established a second shop in The Hague by the late 1660s and then in Amsterdam. It was run by John and Ahasuerus II, who relocated to Holland (The Hague and Amsterdam were part of the Dutch Republic in the province of Holland). Abraham, operating from London, is

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Figure 6. Turtle shell outer pair case with silver and gold inlay and pique work. The intricate center design depicts birds and flowers, the inlay now largely absent. The inner case, not shown, is silver and stamped with a Dutch maker's mark, "B" with a star above, and serial no. 834. AUTHOR'S PHOTO.

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Figure 7. Fine and elaborately engraved and stippled silver champlevé dial. Although made in Amsterdam, the watch was likely destined for sale in London at the family's retail outlet in the heart of the city at the sign of the Mermaid in Lothbury, or perhaps at their workshop in Southwark. The rising and setting sun or moon acts as the hour hand. The time displayed is 7:40 a.m. PHOTO COURTESY OF JOHN COTE.



Figure 8. The dial showing the rising moon with surrounding clouds for nighttime hours. The time displayed is 8:20 p.m. Notice the conjoined "TE" to fit the signature, "Fromanteel London". AUTHOR'S PHOTO.



Figure 9. Close-up of the balance cock showing intricate pierced and engraved foliage patterns typical of fine Baroque craftmanship. AUTHOR'S PHOTO.



Figure 10. Gold tobacco box in the collection of the Victoria and Albert Museum with similar Baroque-style floral embellishments. THE ROSALINDE & ARTHUR GILBERT COLLECTION, ON LOAN TO THE VICTORIA AND ALBERT MUSEUM, LONDON. © VICTORIA AND ALBERT MUSEUM, LONDON.

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known to have traveled between England and Holland many times.

2. The design, with the foot of the balance cock attached with two screws and the winding arbor at its neck (see Figures 2 and 3), provided more adjustment options for the balance than the more common single-foot screw that other London makers used. Locating the fusee and its winding square at the six-position of the movement was perhaps intended to facilitate a steady grip when winding with the then-standard crank-style key. They ceased using this design in the mid-1690s, perhaps coinciding with Ahasuerus II's partnership with Christopher Clarke in the firm Fromanteel and Clarke, in 1694. No doubt that the one-screw balance foot and offset fusee train layout that was the established standard in England was a less costly ébauche procurement option than making or sourcing their own. A watch with a similar balance foot and train layout design as Fromanteel's is on a watch signed by Isaac Hasius of Haarlem, circa 1685. There is no known affiliation between Hasius and Fromanteel, but it seems reasonable to conclude that Hasius's ébauche was supplied by Fromanteel's Amsterdam workshop. Pictures of the Hasius watch can be viewed on my research website: colonialwatches.com.
3. Sun and moon dials on watches first appeared in the last quarter of the 17th century, the design perhaps influenced by clocks and watches that displayed astronomical complications. The concept is to differentiate daytime from nighttime hours by displaying a rotating sun or a moon that acts as the hour hand and points to the Roman-numbered hours index that is above the semicircular aperture. The single hand, attached at the center, points to the Arabic-numbered minute index located at the perimeter of the dial.
4. Pictures of the box can be viewed on the Victoria and Albert Museum's website: collections.vam.ac.uk/item/O158174/tobacco-box-unknown.
5. Pictures of the watch can be viewed on the Ashmolean Museum's website: collections.ashmolean.org/object/391101.
6. George Daniels, *English & American Watches* (New York: Abelard-Schuman, 1967).

About the Author

Richard Newman joined the NAWCC over 30 years ago, following in his father's footsteps. He is a frequent author and lecturer dedicated to the organization's educational mission; this is his 15th contribution to the *Watch & Clock Bulletin*. He is a past Board chair and a Silver Star Fellow of the NAWCC, a Freeman of the Worshipful Company of Clockmakers, and president of the Antiquarian Horological Society USA Section and the NAWCC British Horology Chapter 159. Rich also hosts ColonialWatches.com to promote horological research and education.

Kathleen H. and Wilbur L. Pritchard Award for Excellence in Watch Repair and Restoration

The NAWCC's Pritchard Award was established by the late Kathleen Pritchard and is funded through the estate of her husband, Wilbur Pritchard, to encourage superior work in the repair and restoration of watches.

A prize of $1,800 will be awarded at the 2026 National Convention banquet.

Submission guidelines are available at nawcc.org/about/member-recognition-awards. Entries must be received at NAWCC headquarters in Columbia, PA, by April 30.

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Willis Graves and His Gruen Presentation Watch

By Bob Stokes (CA)

Willis M. Graves Jr. (1890–1966) championed the legal fight against segregation in Detroit and nationwide for over 40 years, as both an attorney and respected community leader. As chairman of the Detroit National Association for the Advancement of Colored People (NAACP) Legal Redress Committee, he challenged the city's "Jim Crow" laws and housing discrimination, defending the rights of his community to live and work in dignity (Figure 1).

Throughout the 1930s and 1940s, Graves represented his clients in a never-ending stream of Detroit discrimination cases. In 1947, Graves partnered with future Supreme Court justice Thurgood Marshall in *Shelly v. Kraemer,* in which the Supreme Court ruled that restrictive ("whites only") residential housing covenants were not legal.[1]

In November 1950, the Detroit Chapter of the Howard University Alumni Association honored Graves for over 20 years of dedicated pro bono civil rights leadership in Detroit and nationwide, including his role in overturning residential housing segregation (Figure 2). They presented him with a 10-kt. gold Gruen Veri-Thin wristwatch, engraved "Presented to Att. W. M. Graves For Work Well Done By Detroit Chpt. Howard Alum. Assn. 11-16-50" (Figures 3 and 4).

I presented Graves's watch to his great-niece Susan Mask in July 2025.

A PIONEERING CIVIL RIGHTS CHAMPION

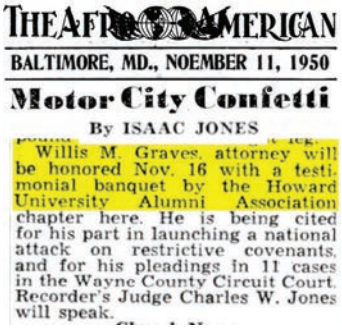
Willis M. Graves Jr. was born in 1890 in Oberlin, the freedman's village in Raleigh, NC. He attended Shaw University in Raleigh and graduated from Howard University Law School in 1919. After moving to Detroit, he soon discovered the housing inequalities experienced by the city's African American residents.

By 1940, Graves and his law partner, Francis Dent, were leading the fight against racially restrictive covenants and pervasive Jim Crow segregation. Graves served as counsel for the Detroit NAACP and worked with civil rights attorneys across the county to establish civil rights litigation.



◀ **Figure 1.** Attorney Willis M. Graves Jr. COURTESY OF PRESERVATION NORTH CAROLINA.

▼ **Figure 2.** From *The Afro-American*, Baltimore, MD, November 11, 1950.



THE AFRO-AMERICAN

BALTIMORE, MD., NOEMBER 11, 1950

Motor City Confetti

By ISAAC JONES

Willis M. Graves, attorney will be honored Nov. 16 with a testimonial banquet by the Howard University Alumni Association chapter here. He is being cited for his part in launching a national attack on restrictive covenants, and for his pleadings in 11 cases in the Wayne County Circuit Court. Recorder's Judge Charles W. Jones will speak.



Figure 3. The dial on Willis Graves's Gruen watch. AUTHOR'S PHOTO.



Figure 4. The inscription on the caseback of Willis Graves's Gruen watch. AUTHOR'S PHOTO.

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Figure 5. Montage of newspaper articles announcing the successful *Shelley v. Kraemer* Supreme Court decision. The headline is from *The Afro-American*, Baltimore, MD, May 15, 1948. PHOTO OF THURGOOD MARSHALL IN 1957, LIBRARY OF CONGRESS, PHOTO BY THOMAS J. O'HALLORAN.


Francis Dent (Standing on L), with Edward Swan, Orsel McGhee, Willis Graves, Jr., & Minnie McGhee, victorious in the Michigan racially restrictive covenants lawsuit.

Figure 6. Willis Graves and Orsel and Minnie McGhee celebrating their Supreme Court victory, May 1948. COURTESY OF GAMMA CHAPTER, OMEGA PSI PHI FRATERNITY.

In 1946, Graves was the lead NAACP attorney before the Michigan Supreme Court in *Sipes v. McGhee.* He defended an African American couple, Orsel and Minnie McGhee, who moved into a white Detroit neighborhood and were ordered to sell their house based on a residential covenant. Despite Graves's argument to the Court that America as the "self-proclaimed beacon of liberty" should not permit legal housing discrimination, the Michigan Supreme Court upheld the covenant.[2]

However, Graves joined future Supreme Court justice Thurgood Marshall in 1947 to appeal that decision as part of *Shelley v. Kraemer.* The US Supreme Court unanimously overturned Michigan's decision, ruling that "whites-only" residential covenants were not legal (Figures 5 and 6). *Shelley v. Kraemer* was later used as a precedent in the 1954 *Brown v. Board of Education*, which ruled "separate but equal" unconstitutional.[3]

THE COLOR OF COURAGE

In 1999, Kathleen McGhee-Anderson—Orsel and Minnie McGhee's granddaughter—wrote and produced *The Color of Courage*, a film about her grandparents' fight for justice and the role that attorneys Thurgood Marshall and Willis Graves played in their victory over prejudice (Figure 7).

"'My grandparents were very quiet people, very soft-spoken,' Anderson said. 'They never sought notice for their role in history. They just wanted to buy a house for themselves and their growing children. . . . The human aspect, with the black and white couples who were able to transcend this vicious, bitter battle and become friends—that was the story I wanted to tell.'"[4]

In December 2025, I contacted Kathleen. She was, of course, very familiar with the critical role that Willis Graves had played in obtaining justice for her grandparents and was appreciative of my efforts to return Graves's watch to his family.



Figure 7. Advertisement for *The Color of Courage*, from kathleenmcgheeanderson.com/film/the-color-of-courage.

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A LIFE WELL LIVED

Graves continued to fight for racial justice for the remainder of his life. In 1957, he and his law partner, Francis Dent, were honored at the 48th annual convention of the NAACP by executive secretary Roy Wilkins for their many years of service to the cause of racial justice (Figure 8).


The St. Louis Argus

ST. LOUIS, MO., FRIDAY, AUGUST 16, 1957

DETROIT LAWYERS honored at NAACP 48th annual convention. Attorneys Willis M. Graves and Francis M. Dent receive scroll from Roy Wilkins (right), NAACP executive secretary. The certificate

Figure 8. Willis Graves was honored by the NAACP's executive secretary Roy Wilkins, as reported in *The St. Louis Argus*, August 16, 1957.


Detroit Free Press

Monday, June 21, 1965

IT WAS WILLIS M. Graves Day in Detroit Sunday, and one of the rewards for his many civic services was this oil portrait, presented by Mrs. Connie Houston, chairman of an appreciation tea at St. Cyprian's Episcopal Church. Graves is noted for winning a Supreme Court case which outlawed restrictive covenants in Detroit. He has also received the Bishop's Cross for outstanding service to his church.

Figure 9. Willis Graves was honored with a portrait, as reported in the *Detroit Free Press*, June 21, 1965.

On June 20, 1965, the city of Detroit declared it to be "Willis M. Graves Day," honoring him for his 40 years of service to the community (Figure 9).

Graves died on December 15, 1966, after a long illness. The *Detroit Free Press, t*he city's largest and oldest newspaper, published his obituary. However, the white-owned *Free Press* rarely mentioned Graves's legal efforts to end segregation from the 1930s through the 1960s; it provided virtually no coverage of the ongoing struggle for civil rights in Detroit during that era. The nation's African American newspapers were the primary sources for information.[5]

HONORED IN NORTH CAROLINA

In February 2025, Graves was honored with a marker on the North Carolina Civil Rights Trail, placed outside his childhood home in Oberlin, NC. "This marker serves as a tribute to a man whose legal battles reshaped American history," said Benjamin Briggs, president and CEO of Preservation North Carolina. "His work continues to inspire us today."[6]

RETURNING WILLIS GRAVES'S WATCH TO HIS GREAT-NIECE

I purchased Graves's watch from a Michigan eBay seller in June 2025. My initial internet research led me to contact the CEO of Preservation North Carolina, the group that had just restored the historic Graves family home near Raleigh. He put me in touch with Susan L. Mask, Graves's great-niece. Graves and his wife, Irene, did not have any children; Susan's grandfather and Graves were brothers. Susan knew "Uncle Bill" when she was a child and is very knowledgeable about the Graves family's contributions to both North Carolina and the civil rights movement.

Susan, a talented artist, has depicted her family's history in her work. In 2020, her solo exhibit, *Back Then: Black History Told through Art,* featured art works inspired by the Graves family homestead in Oberlin Village, NC.[7] Her most recent watercolor features Graves's portrait superimposed on text from a court case won by Graves's great-grandmother in 1881 (Figure 10).

Seventy-five years after Graves was honored by his Howard University Alumni Association, his wristwatch

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Figure 10. Susan Mask's watercolor of Willis Graves. AUTHOR'S PHOTO, USED BY PERMISSION OF SUSAN MASK.



Figure 11. Great-niece Susan Mask wearing Graves's watch. AUTHOR'S PHOTO.

was returned to Susan in July 2025 (Figure 11). Graves's Gruen is a historic artifact that uniquely honors his courageous 40-year effort to achieve racial equality in the United States, and it is now reunited with his family. To paraphrase Patek Philippe, "You never actually own a watch. You merely look after it for the next generation."

WILLIS GRAVES'S GRUEN VERI-THIN WATCH

Gruen Watch Co. was one of the largest watch manufacturers in the United States in the early 20th century. It was founded in 1894 by a father and son, Dietrich and Fred Gruen.

Born in Germany, Dietrich (1847–1911) moved to Columbus OH, in 1867 and was a co-founder of the Columbus Watch Manufacturing Co. Dietrich's oldest son, Fred (1872–1945) worked in his father's factory and studied watchmaking in Germany. After the Panic of 1893 and resulting depression in America, Dietrich left Columbus Watch and, with Fred, established what would become Gruen Watch Co. Fred's younger brother, George, joined the business in 1898 as treasurer and financial officer.[8]

In 1917, the Gruen brothers built their new headquarters outside of Cincinnati, OH, and named it Time Hill. The building was designed to look like a medieval guild hall. "It has always been our aim," Fred Gruen stated, "to foster those ideals of the ancient guilds, of quality and craftsmanship; to make useful things in a beautiful way, under ideal surroundings."[9]

The Gruen VeriThin concept was first produced as a pocket watch in 1904. It was between a 10- and 12-size and around 7 mm thick, nearly one-third thinner than a normal 12-size watch.[10]

Veri-Thin wristwatches were first offered to the public in the spring of 1939, had their heyday in the 1940s, and were produced until 1957. Note that the wristwatch model was hyphenated as Veri-Thin and the early pocket watch model was one word, VeriThin. The Veri-Thin models probably have the greatest variety of all Gruen watches. Its dial has a dome shape and the movement is thicker in the middle and thinner on the outside edges, so when viewed at an angle, it looks very thin indeed.[11]

The dial is usually labeled "Gruen Veri-Thin" or possibly with the addition of "Precision". The movement is round or tank- or cushion-shaped, and features a ratchet wheel bearing the inscription "VERI-THIN PATENTED". The movement designation is usually followed by another three-digit number, the model or style number, assigned by Gruen from around the mid-1930s onward.

Graves's 1950 Veri-Thin is model/style No. 623, featuring a 17-jewel movement/caliber No. 435; this is engraved on the inside of the back case. It has a 10-kt. gold bezel and a stainless-steel caseback (Figure 12).

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Figures 12A. Graves's Gruen in a display case, as presented to Susan Mask. **B.** The movement of Graves's watch. C. The inscription on the inside case. AUTHOR'S PHOTOS.

With Fred Gruen's retirement in 1940 and George's death in 1952, the Gruen family sold their stake in the business in 1953. Over the next few years, the company underwent significant restructuring, and by 1958, what was left of it was divided and sold.[12]

Acknowledgment

I would like to thank Susan L. Mask and Kathleen McGhee-Anderson for working with me to complete this story of Willis Graves.

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About the Author

Bob Stokes is a retired IT consultant and project manager. He is the president of NAWCC Ventura and Santa Barbara County (CA) Chapter 190. Bob has been collecting, researching, and returning vintage, personalized wristwatches to families since 2015. As of October 2025, he has returned more than 20 of them. He launched his website, TimeCapsule-Watch.com, four years ago; it fully documents the stories from his historic collection. Feel free to contact him at timecapsule.watch@gmail.com with any comments or if you have a watch that he could help you research.

We are accepting submissions of articles about wristwatches personalized with the original owner's name. The Time Will Tell column will share noteworthy, researched stories of the owner's life and details about the timepiece. Submissions should be under 2,500 words and include images and may be sent to editor@nawcc.org.

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Mastering the Fundamentals of Clockmaking

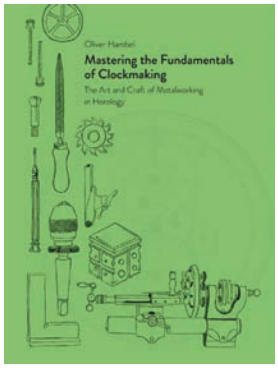
Book review by Sam Gradel (PA)

Oliver Hambel has created something substantial here, and for the best reasons—to share a deep passion for a niche field, to create contemporary and accessible literature, and to preserve traditional techniques. Although this book is titled for clockmaking, it discusses watches and clocks together. The tone is a beginner-friendly how-to, written from the perspective of someone trying to share knowledge among varied backgrounds and interests.

Its 244 pages are jam-packed with practical content. The table of contents is granular enough to jump to a specific topic quickly. The text is tight and clear, broken into logical sections. Hundreds of large, high-resolution *color* photos complement the text and make concepts easy to follow end-to-end. Safety warnings are clearly identified by red text boxes. Hambel has great economy of language and the layout flows.

It teaches fundamentals techniques in metalwork, tailored to horology: materials, hardening and tempering, measuring, filing, drilling, reaming, countersinking. It dedicates equal time to the watchmaker's lathe and precision lathes (going through a Schaublin 102 in detail). It touches milling, including wheel cutting (with module cutters); grinding and polishing, including black polishing; joining, threading, welding, soldering, sawing, broaching, even lacquering, bluing, and silvering. The page count from the table of contents is a good indicator of the level of detail in which each of these topics are covered.

Some chapters contain "Practical Excursus" in which the skills or tools are directly applied to a horological use case. For example, an excursus for hand-filing is its application in counter-filing when installing bushings. Two given in the watchmaker's lathe section are its use in pivot polishing and in re-pivoting. If you have never seen or tried re-pivoting with a watchmaker's lathe, the technique is well described on pages 91–95. The final chapter is additionally dedicated to practical examples in clockwork.



Mastering the Fundamentals of Clockmaking: The Art and Craft of Metalworking in Horology
by Oliver Hambel, 2025, 244 pages, 8.5″ x 11″, hardcover, ISBN 978-3-00-082575-0, self-published, available at amazon.com.

It's a book on metal work written in Germany, which means the metals are those available to a European market, described by European identification numbers (EN, DIN) or British Standards (BS). This was the biggest culture shock of reading this book as an American—if the book is at its core about metalwork, and we're using different metals, is the information still transferable? Is this book implicitly European-clock-centric? Does it matter?

Ultimately, I substituted L2 for silver steel, 1212 for free machining steel (9S20), googled a few alloys in the later chapters, and moved on with my life. I know European clock pivots are often harder, thinner, and blued, and American arbors and pivots are usually made from softer steel, and tried to keep that in mind regarding the techniques chosen.

This book offers a lot to beginners, and likely fills in some gaps or provides alternate techniques for those with more experience. The photos are worth their weight in gold.

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Time Machines

Book review by Marc Clodfelter (PA)

Time Machines is a graphic-rich narrative tracing how watches have woven themselves into the fabric of society from the late 19th century to the present—and how they became a defining element of popular culture. Co-written by Sean Paul Lorentzen and Blake Z. Rong for the Berlin-based publisher Gestalten, the book serves as a lively and informative resource for collectors, hobbyists, and horological enthusiasts alike.

Hardbound and spanning 320 pages, *Time Machines* is organized chronologically and includes a foreword by Lorentzen, a table of contents, and an index. Although not intended to be exhaustive, the selection of timepieces covers a wide range of influential watches and noteworthy media campaigns.

Rather than dividing the text into distinct chapters, the authors present a continuous timeline that advances steadily through the decades. The book opens with an introduction—"Early Advancements"—which explores the evolution of timekeeping during the industrial revolution, wartime, the rise of societal mobility, and the growing significance of timepieces in fashion.

The narrative begins in 1892 with the Hamilton Watch Co. at the center of American watchmaking innovation in Lancaster, PA, a rapidly expanding industrial hub and railroad gateway to the West. Other pioneering brands of the era, including Patek Philippe, Rolex, and Longines, are also highlighted. As the book progresses, readers encounter a diverse array of topics: the postwar tool-watch boom, Soviet watchmaking, the space race, the advent of quartz technology, the craft of watch design, timepieces on film and television, precision timing in sports, the rebirth of mechanical watchmaking after the devastation of the "quartz crisis," the influence of social media, and the rise of microbrands.



Times Machines: How Watches Shaped the Modern World
by Sean Paul Lorentzen and Blake Z. Rong, 2025, 320 pages, 9 ½" x 11 ¾", hardcover, ISBN 978-3-96704-186-6, published by Gestalten, gestalten.com.

Visually, the book is striking. Nearly every page is adorned with artwork, detailed watch photography, or portraits of notable figures, reinforcing the authors' premise that watches—whether in the foreground or the background—are omnipresent throughout modern culture. This is not a technical treatise focused on the minutiae of movement engineering; rather, it explores how watches have both shaped and been shaped by societal needs.

There are, however, a few shortcomings that may distract detail-oriented readers. For instance, the discussion of helium-related challenges in dive watch case technology appears in two separate sections. Lorentzen examines Rolex's helium escape valve on pages 146–149, then, after a series of unrelated topics, he revisits the same explanation when discussing Omega's valve-less solution on page 180. The repetition feels unnecessary and disrupts the narrative flow. Additionally, some illustrations lack captions or clear connections to the accompanying text, which will likely prompt readers to wonder about their relevance. These issues are minor, however, and do not significantly detract from the overall work.
For anyone looking to add a beautifully illustrated, culturally insightful volume to their library—one that captures the deep and enduring relationship between modern society and the wristwatch—*Time Machine*s is a worthy and engaging read.

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New York Minute

Book review by Ken De Lucca (PA)

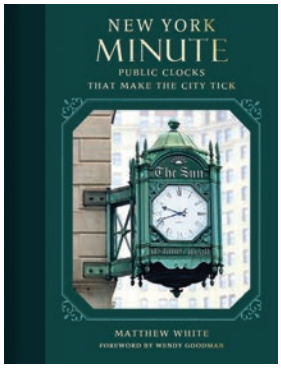
I have never met author Matthew White but after reading his book, I feel like I know him. Growing up across the Hudson River from New York City, my interest in this book was piqued by the title. Although I have been gone from that area for decades (the same goes for some of the clocks in this book), it was still a fun read.

One gains an understanding of this book's scope by reviewing the Further Reading section. Many Bulletin readers will probably be familiar with one of the suggested books: *Revolution in Time: Clocks and the Making of the Modern World,* 2nd edition, by David S. Landes. White also cites publications such as the *Guide to New York City Landmarks,* 3rd edition, from the New York City Landmarks Preservation Commission, and the *American Institute of Architects (AIA) Guide to New York City,* 5th edition. White has been part of the preservation movement in New York City for many years, and his love for the city shows in this diminutively sized book.

Horologists will only find passing comments directly related to the public clocks included in this book, such as "designed by the E. Howard Clock Company," (page 30) or "made by the Seth Thomas Clock Company" (page 84). However, White adds richness and depth to the study by including both historic and new images of the clocks while also commenting upon where the clocks are fastened or housed. Some clocks are housed in or on truly significant structures in the City.

The book includes a foreword, introduction, afterword, acknowledgments, further reading, and index. The 12 chapters of the book range from "The Train's on Time" (chapter 1) to "Get Me to the Church on Time"(chapter 10), to "Once upon a Time" (chapter 12). Each of the chapters starts with a brief introduction. Then each page thereafter includes a modern image of the clock or perhaps a historical image, and sometimes both. Additionally, White has graced the book's pages with drawings or sketches of each of the clocks included in the book. The author is indeed quite an illustrator, and this addition is certainly most interesting. For each clock presented, more space is devoted to the location of the clock (or in some cases, where it used to live, if it no longer exists) rather than the clock's pedigree. The book has more of a design and architecture focus rather than the type of escapement found within each clock, which the true horologist may have found more interesting.

In summary, I can state that *New York Minute* was an enjoyable read for me. Being one of those horologist types, I would have liked to know more about the clocks presented, but White was able to stretch my understanding to more fully grasp that these huge, magnificent clocks are found in some very interesting locations. The buildings these clocks inhabit and the sidewalks they are perched upon also have stories to tell, and the author tells that story quite nicely.



New York Minute: Public Clocks That Make the City Tick
by Matthew White,
2025, 200 pages,
6 ¼" x 8 ¼", hardcover,
ISBN 978-0-7892-1517-8,
published by Abbeville Press,
abbeville.com.

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Von Augenwendern und Schnappautomaten

Book review by Istvan Varkonyi (PA)

The fascination of automatons, whether represented in animal or human forms, has been present for centuries (as evidenced even today by robotics). One just has to scan through some of Leonardo da Vinci's voluminous notes from the 15th century to find some of the earliest sketches of such things as robotic lions and hydraulic water clocks. While there is no evidence that da Vinci actually succeeded in constructing such automatons, the interest among inventors continued through the centuries. In the 1730s, French inventor Jacques de Vaucanson created several mechanical figures, including a flute player with artificial "lungs" as well as a duck that could flap its wings, splash in a pool, and even "eat" grains, much to the amusement of spectators. In the same time period, the renowned Swiss watchmaker, Pierre Jacquet-Droz, was astonishing his aristocratic patrons with automatons such as "The Writer," "The Draughtman," and "The Musician." These automatons still draw crowds even today to the Musée d'Art et d'Histoire in Neuchâtel, Switzerland.

The authors of this large and handsome volume (published in 2018 but recently added to the NAWCC's Library and Research Center's collection) bring to the forefront new perspectives regarding automaton clocks largely from German-speaking regions. The volume contains full-page images of 145 clocks with their requisite detailed descriptions, albeit in German. The clocks hail largely from the Black Forest region of southwest Germany and are made of wood. The clocks discussed here are in the private collection of the authors, who present a twofold objective with this publication: (1) to categorize and contextualize the historical horological significance of these German clocks; (2) to delineate between figural clocks and novelty clocks.



Von Augenwendern und Schnappautomaten: Die Welt der Uhrenmännchen und Figurenuhren von 1635 bis 1960 (Of Rotating Eyes and "Snap" Automatons: The World of Figural Clocks and Novelty Clocks from 1635 to 1960) by Frank Haverkamp and Beatrice Techen, 2018, 342 pages, 9 ¼" x 12 ¾", hardcover, ISBN 978-3-87390-409-5, published by Justus von Liebig Verlag, liebig-verlag.de.

It may be best here to briefly recollect the difference between figural and novelty clocks. Figural clocks, more classical in form and theme, blend horology with artistry thereby turning the clock into a decorative object as well. These clocks were made by well-known clockmakers and watchmakers. Often made of gilded bronze, marble, and so on, figural clocks use mythical beings and animals in their design, as seen in various historical styles such as Louis XVI, Empire, etc. Novelty clocks, in contrast, are often unusual in their form or whimsical in their design, incorporating moving or rotating parts, such as eyes, mouths, and arms. The makers are most often unknown. The clock dials are typically placed in unusual places, such as on the belly of a jovial, corpulent reveler. The figures are most often represented as non-white males.

In the introduction *(Einleitung)*, the authors draw upon the historical significance of the changing manufacturing

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landscape of Europe and its influence on the socioeconomic conditions of the 19th century. With these changes, mechanical things (e.g., the ownership of novelty and figural clocks and clocks in general) became more accessible to the lower classes. The citizenry was able to witness new technologies, as well as engage with peoples and cultures from distant regions of the world, at the popular international industrial exhibitions held from 1851 onward, made more accessible to all with the advent of rail travel. Nineteenth-century Europe was swept up into a frenzy by all things "exotic." The colonies of many European countries and the often-misconstrued perceptions of these colonies were instrumental in providing the context for the "exoticism" of cultures and peoples.

In this private collection, the clocks are divided into five main categories: (1) the Black Forest clock peddler; (2) rural and urban figures; (3) the "exotic" figures; (4) religious representation; and (5) military figures and animals. Within these groupings, there are also a few subcategories, particularly among the rural/urban figures where there are hunters, jugglers/harlequins, and revelers; the clocks under the exotic heading are subdivided into African, Native American, and Arab figures.

Among the many clocks represented in this work, one stands out for its artistic beauty and horological importance and complexity: Madonna in Gloriole *(Madonna im Strahlenkranz)*, made in Augsburg around 1635 by the renowned clockmaker and watchmaker Augustanus Nikolaus Rugendas. Mary is presented standing upon a plinth, which houses the time-strike clock mechanism (hourly striking a small bell housed in the plinth), as she holds the baby Jesus in beautiful gilded robes wearing a bejeweled crown that functions as a *cercle tournant*. The figure stands just slightly over 12" (31cm) and projects a very fluid and commanding presence—a stunning piece that must have made a huge impression when exhibited.

Any collector of figural or novelty clocks from this era would find this image and all those found in this book of great interest. Perhaps the only drawback is that one might have to brush up on one's German-reading skills.

Crafts Competition

June 25-28, 2026 • Lexington, KY

The annual Crafts Competition showcases the finest in today's horological craftsmanship. Entries are judged by qualified experts, and convention attendees may vote for the People's Choice Award, presented during the banquet.

Visit **natcon.nawcc.org/crafts** for guidelines and the entry form.



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New Books in the Library and Research Center

By Thomas Stocker (PA)

The NAWCC Fortunat Mueller-Maerki Library and Research Center has received the following publications for its collection:

- *Hamilton Field Guide: Men's Non-electric Wristwatches 1917–1969, Edition 1.0* by Andrew Krug
- *The Making of a Status Symbol: A Business History of Rolex* by Pierre-Yves Donzé
- *The Corpus Clock* by Christopher de Hamel
- *The Luxury of Time: Clocks from 1550–1750* by John C. Taylor and Kristin E. Leith, with contributions from Tacye Phillipson
- *How to Make a Weight-Driven Clock* by Richard Simmonds
- *The Clockmakers of the Cocalico Valley* by George Douglas Gehr
- *The Clocks of the Cloister* by George Douglas Gehr
- *Travels in Four Dimensions: The Enigmas of Space and Time* by Robin Le Poidevin
- *A Watched Pot: How We Experience Time* by Michael G. Flaherty
- *Wristwatch Annual 2025* by Peter Braun
- *Vintage Rolex: The Largest Collection in the World, New Edition* by David Silver
- *Clock Repair Problem Solving* by Steven G. Conover
- *Nicole, Nielsen Watchmakers: An Incomplete History of Nicole & Capt; Nicole, Nielsen; Nicole, Nielsen & Co.; and Their Successors* by Pierantonio Maragna
- *The Wonderful World of Women's Watches* by Rhonda Riche
- *Oyster Perpetual Datejust: A Watch That Made History* by Nicholas Foulkes
- *About Time: A Children's Guide to the History and Science of Time* by Rebecca Struthers and Alom Shaha
- *New York Minute: Public Clocks That Make the City Tick* by Matthew White
- *Von Augenwendern und Schnappautomaten: Die Welt der Uhrenmännchen und Figurenuhren von 1635 bis 1960* by Frank Haverkamp and Beatrice Techen
- *Mastering the Fundamentals of Clockmaking: The Art and Craft of Metalworking in Horology* by Oliver Hambel
- *The Cog Counter's Journal Supplement #1: Identification of Shelf Clock Wood Movements, A Compilation of Snowden Taylor's Tables Previously Published and Updated in NAWCC Bulletins and Supplements with His Previously Unpublished 2014 Updates and Including New Information* by NAWCC Cog Counters Chapter 194
- *Time Machines: How Watches Shaped the Modern World* by gestalten

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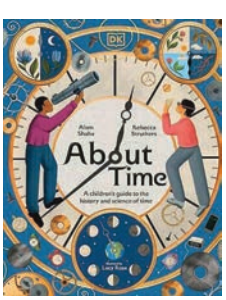





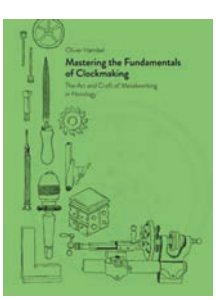

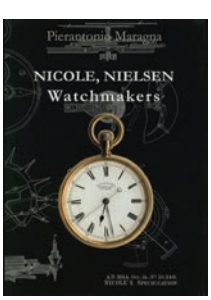

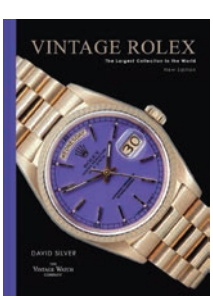

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Seeing Daylight around My Drop Lever

By Sharon Page (WI)

As I packed for the American-Style Time/Strike Movement workshop at the NAWCC School of Horology in October 2025, I mused over the storage tub of disassembled clock movements I hoped to assemble in my spare time between course assignments.

Until several months before, every clock in my 60-year lifetime had been powered by battery or plugged in. Then my husband and I started binging *The Repair Shop* TV show, where horologist Steve Fletcher repairs antique clocks dating back to the 17th century. Deciding it would be fun to own an antique clock, I went to eBay and ordered a 1936 Junghans mantel clock. It arrived with a big metal key. What the heck was *that* for? I went to YouTube for answers.

I quickly discovered the NAWCC forums online (mb.nawcc.org) and attended the next meeting of NAWCC Madison (WI) Chapter 171. My husband and I were welcomed into members' homes and workshops and began learning skills ranging from mainspring winding to using a staking set. About 40 percent of our Chapter meeting attendees are women, including a professional clock repairer, and I appreciated that all Chapter members treated me as a serious student from the start.

I quickly acquired two dozen clocks ranging from Vienna regulators to mid-century modern electro-mechanicals. While I had acquired only basic hand tools, I was able to disassemble and clean movements and apply my previous woodworking experience to case restoration.

Still, I had no idea how the parts of a mechanical movement interacted. My method was simply to photograph each movement, disassemble and clean it, and then rely on the photos to reassemble everything. To remedy some of my ignorance, I registered for a class at the NAWCC School of Horology. At the next Chapter meeting, I was presented with a generous scholarship to help defray expenses.

October brought beautiful fall colors and an 840-mile drive to Columbia, PA. I spent two days exploring the National Watch & Clock Museum and researching my clock collection in the Library. I also had the opportunity to visit School of Horology reverse-painting instructor Lee Davis in a neighboring town. Lee had painted an advertising clock tablet that I had offered to transport back to Wisconsin for a fellow Chapter member. It was a delight to meet Lee and see his award-winning projects.

On Friday at 8:30 a.m., we eight students convened in the lecture room at the School of Horology (Figure 1), located across the street from the Museum. Three students repaired clocks professionally or had already taken multiple classes at the School. The remaining five had varying amounts of experience, including one or two who had never disassembled a movement.

Our seasoned instructors, Dr. Ken De Lucca and Samantha Gradel, took turns presenting topics and demonstrating techniques (Figure 2). The course was super well organized, with interesting and clear instruction, lots of time for Q&A, and helpful illustrated handouts. We began with an overview of how clocks work, followed by the layout and terminology of the time-train gears in a typical mass-produced Connecticut movement. After relocating to the bench area, we learned how to safely clamp mainsprings and

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Figure 1. School Coordinator Sam Gradel leads the participants in a lecture and discussion portion of the workshop. AUTHOR'S PHOTO.



Figure 2. Education Director Ken De Lucca prepares to place an S3 wheel into a pin vise for a demonstration of hand polishing. AUTHOR'S PHOTO.



Figure 3. Working on the School's practice movement. PHOTO BY SAM GRADEL.

disassembled our practice movements (Figure 3). We then reassembled the time train only, checked that the clocks were in beat, and let them run overnight.

On Saturday morning, we were pleased to find our clocks still running in their test stands. Lectures and demonstrations focused on the strike side, as well as proper cleaning and lubrication of brass movements (Figure 4). This topic was a revelation for me, as I realized I had overlooked around half of the lubrication points in my own clocks.

Assembling a strike train with a count wheel was much trickier than the rack-and-snail mechanisms I had worked on at home. We novices in the group struggled to get everything properly aligned. After I finally got the School's practice movement striking properly, I moved on to an 1878 G. B. Owen count-wheel movement I had brought with me. I was pleased to assemble the entire Owen movement and have it on a test stand in under 15 minutes. I was practically a pro already!

The next morning, both of my movements were still running and striking, but they didn't get a passing grade. Ken pointed out that my drop levers were not centered in the cam notches with "daylight" on every side.

Instead, they were nearly touching the side of the cam notches, meaning both strikes could eventually start to malfunction. It was back to the lecture hall for all of us for some additional pointers about the strike train. Back at the bench, I was able to redo both of my strike trains and pass inspection.

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Figure 4. Sam leads the group in a discussion on cleaning solutions to use in an ultrasonic cleaner. AUTHOR'S PHOTO.

During the lunch break, we enjoyed guided tours of the Museum and the rest of the School, including the watchmaking rooms, lathe room, and new community maker spaces. The afternoon included demonstrations of pivot polishing, rebushing, and mainspring winding, and the workshop concluded with diplomas, group photos in front of the School, and lots of smiles (Figure 5). There was still some time left before the end of the day, so Ken generously helped me assemble a very challenging 1904 Seth Thomas movement I'd brought from home.

Since arriving back in Wisconsin, I've acquired a new wall regulator, two movement holders, two test stands (expertly made by my husband, Kevin), and an ultrasonic cleaner, and I have a mainspring winder on back order. I'm also busy re-oiling all the parts I missed on the clocks I oiled before I took the class!

At our December Chapter meeting in Madison, I gave a short presentation about my experience at the School of Horology. Coincidentally, a long-time member was departing for Columbia the next day to attend the School's Craft-a-Clock Workshop. Although she had enjoyed clocks for years, she had never worked on movements. After a brief hallway discussion, Chapter 171's board returned to present her with the Chapter's second scholarship of 2025.

I hope other Chapters will join Chapter 171 in offering scholarships for their members who are interested in attending horology workshops. Our Chapter charges a nominal $2 meeting fee to cover room rental, meaning that the treasury grows at a snail's pace. The two scholarships awarded in 2025 represented several years of accumulated savings. But our Chapter has decided

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Figure 5. Workshop participants (front, left to right) Porter Stevens, Sharon Page; (back, left to right) Matt Thompson, Robert Buerglener, Mark Willis, William Buttz, Bill Pulig, and Ken De Lucca. Not pictured: Matt Clemens. PHOTO BY SAM GRADEL.

to prioritize educational development instead of letting funds linger unused. Using these funds to defray the cost of a course at the School of Horology is also a way to directly support the NAWCC and its educational mission.

About the Author

Sharon Page has worked remotely for the biotech software industry since 1998, allowing her to experience life on four different continents. A former elite-level dog sports competitor, she currently enjoys yoyo, bonsai, kayaking, and wood carving. Her favorite clocks are Vienna regulators.

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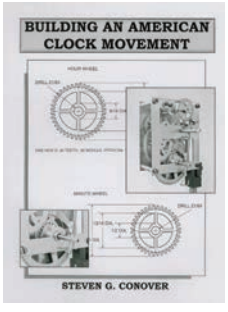

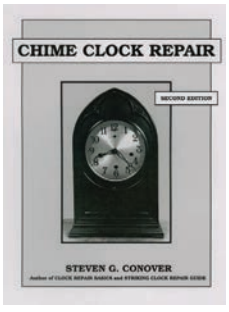

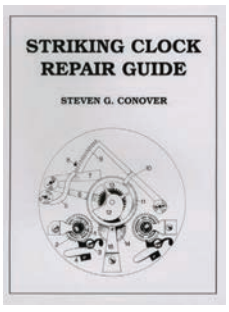

NAWCC **The Museum Store**

514 Poplar St., Columbia, PA www shop.nawcc.org 717-684-8261

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2025 Award Recipients

National Association of Watch & Clock Collectors, Inc.

KENNETH D. ROBERTS – SNOWDEN TAYLOR HOROLOGICAL RESEARCH AWARD

This award recognizes excellence in the field of horological research and will be awarded annually if a candidate is recommended by the Awards Committee. A plaque will be presented to the recipient at the National Convention. Nominations for this award must be in the hands of the Awards Committee by May 31 preceding the National Convention.

PHILIP MORRIS (AL)

Philip's research resulted in the publication of his book *American Wooden Movement Tall Clocks 1712–1835* (Hoover, AL: Heritage Park Publishing, 2011). It has become the authoritative book on early American wooden movement clocks. In 512 pages, this easily readable book is well illustrated and is a classic among American horological references. The thorough research and careful photography in this masterpiece sets the bar for future horological researchers and authors.

JAMES W. GIBBS LITERARY AWARD

This award recognizes excellence in the field of horological literature.

BOB FRISHMAN (MA)

Bob has published a large body of work, including 30 articles on the topic of horology in art published in the *Bulletin*. He is the author of several book reviews, articles about people, research articles on individual clocks and clockmakers, auction news, and descriptions of horological collections in various museums in the US, UK, and elsewhere. His comprehensive book on the 18th-century Philadelphia clockmaker Edward Duffield, his latest work, was published last year. In addition to the above, Bob has contributed many articles to outside publications such as the *Newtown Bee* and *The Maine Antique Digest*.

SILVER STAR FELLOW AWARD

This award recognizes exceptional and meritorious achievement and service in support of the NAWCC and its purposes. It may be awarded only to members who have already achieved Fellow Award status and is presented to the recipient at the National Convention.

JAMES MARINELLO (CAN)

Jim has been an active and enthusiastic member of British Columbia Chapter 121 and Friends of the West Coast Clock and Watch Museum Chapter 180. He served as president of Chapter 180 in 2023 and vice president in 2021 and 2022. Jim continues to be active in the organization of the Pacific Northwest Regional. His community involvement includes helping to maintain British Columbia's only hand-wound tower clock. Chapter 180 has benefitted from Jim's dedication, particularly when the West Coast Museum moved to its present location.

FELLOW AWARD

This award recognizes exceptional and meritorious achievement and service in support of the NAWCC and its purposes. It is administered by the Awards Committee and is given at a Regional or the National Convention.

CRAIG ANKENEY (OH)

Craig is an enthusiastic 20-year member of the NAWCC and Buckeye Chapter 23. He has served as a director, vice president, and president of the Chapter. In addition to his Chapter responsibilities, he has been a tireless worker on the leadership team for the Southern Ohio Regional

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(SOR) and has been the chair of the SOR team for the past four years. Not content with contributing at the Chapter and Regional levels, Craig has served as chair for various subcommittees for National Conventions, most recently as chair of the Silent Auction committee.

TIM BROWNLEE (TX)

Tim is a very active member of Lone Star Chapter 124, having served on its Board of Directors since 2016. He has served as the treasurer and president of the Chapter. In addition, he has organized and presented many educational classes for members. His management abilities enabled the Chapter to weather the administrative difficulties caused by the pandemic. His efforts on behalf of the Lone Star Regional ensured its survival through the pandemic as well. His enthusiasm and dedication encouraged new instructors for the Chapter's educational programs and has aided in a resurgence in the membership.

JERRY TREIMAN (CA)

Jerry has been an NAWCC member for 53 years. He is a member of Ventura and Santa Barbara County Chapter 190. Jerry has worked largely behind the scenes mentoring new members, providing expert information on numerous scholarly resources including the NAWCC Forums, and co-authored a book recently published by the NAWCC on Waltham watches. He has also assisted the Library Committee in translating over 100 important documents from the Bigelow & Brothers firm (19th century Boston), a project that has been ongoing for at least two years. On a local level, he is active in several Chapters and has served in officer positions.

NAWCC GOLDEN CIRCLE AWARDS

An award to acknowledge the achievement of 50 years of continuous membership in the NAWCC is granted automatically, and recipients receive a certificate and a special membership pin.

Kenneth Ahrenholz Jr. (NY) • William Allen (VA) • Gary Anderson (MN) • Michael Anderson (AZ) • Richard Anderson (KY) • William Andrews (WY) • Arnold Applebaum (CA) • Aubrey Aramaki (WA) • Thomas Barber (OH) • Stephen Barnett (MD) • Don Barrett Sr. (OH) • John Barth (SC) • John Baxter (AZ) • Randy Belden (IN) • Harry Berman (CA) • Louis Biagi (CA) • Tommy Bogle (LA) • Daniel Bowers (OH) • Jon Bowles (MI) • Robert Bowman (CA) • Robert Briggs (KY) • Isaak Burstein (CAN) • Thomas Burton (CA) • David Busby (OR) • Tom Cheek (TX) • Robert Cheney (MA) • Charles Christensen (OR) • Malcolm Comeaux (AZ) • Pete Cronos (AR) • Donald Davidson (NJ) • Thomas Delsa (LA) • Peter Devine (RI) • David Doell (IN) • Roger Duba (IL) • W. T. Dugan (KS) • Gary Duncan (CA) • Lowell Duncan (IN) • Rick Dunnuck (NC) • John Eriksen (TX) • Thomas Evansew (PA) • Ralph Ferone (IL) • James Fiodella (TX) • Lester Fournier (AZ) • Kirk Furr (AR) • John Gallagher (CA) • Jay Goodfellow (DE) • Lester Groves Jr. (VA) • Larry Harnden (WA) • David Harshfield (FL) • J. Wylie Hartwell (FL) • Martin Hoffman (MA) • Eric Hooker (NY) • Fred Ingram (MS) • Mark Isacoff (KY) • Mel Jensen (CA) • Thomas Jepsen (MI) • George Jones (PA) • Terrence Jones (CO) • Terry Kaplan (NY) • Richard Keagle (FL) • William Kirchhoff (MO) • Donald Koch (CA) • Manferd Dee Koch (TX) • Kenneth Korach (NC) • H. C. Kresge (FL) • George Kurz (TN) • Edward Kuziel Jr. (FL) • James Kymer III (NJ) • Philip Laing (CA) • Lindy Larson (VT) • Michael Lepie (MA) • Peter Lewin (NY) • Gary Lockwood (NY) • Michael Lowe (IL) • George Ludwig (FL) • William Lusk (IN) • Henry Maltz (NY) • Rollis Mann (AZ) • Jan Marcus (MA) • Robert Marsico (OH) • Ray Marsolek Jr. (CA) • John Martin (MO) • Ralph Meldahl (AL) • Robert Merritt III (PA) • Robert Mosher (CT) • Kenneth Murata (CA) • Randolph Naber (VA) • Edward Polzin (IL) • Ira Prilik (NY) • Jerome Renk (AZ) • David Resnick (NV) • Edward Reupke (MO) • Janet Reynolds (IL) • John Richardson (TX) • Linda Rivard (CT) • Michael Roach (AZ) • Richard Rogers (WA) • John Ross (OH) • John Ruhland (CAN) • Timothy Ryan (NH) • Millard Ryland III (MI) • Martin Saltzman (RI) • Joel Sarich (OH) • Christian Savery (CA) • Carlton Sawyer (OR) • Ron Schorr (KS) • Thomas Schwartz (VA) • Fred Shadow (TN) • Charles Smith (VA) • Charles Smith (NC) • Donald Sobel (VA) • Raymond Therrien (MA) • J. N. Turnbull (CAN) • James Vest (VA) • Charles Walker (NY) • Terry Weaver (PA) • Robert Wingate (TX) • Ronald Wise (GA) • William Yee (WA) • Tosh Yumae (CA) • Mark Yusko (NH) • David Zenk (MN)

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NAWCC 60-YEAR AWARDS

An award to recognize the achievement of 60 years of continuous membership in the NAWCC is granted automatically, and recipients receive a certificate.

Melvin Anderson (MI) • James Bryant (ME) • Marvin Coad (IN) • Lee Decatur (VT) • Seth Finkelstein (CA) • Kenneth Gudorf (FL) • Max Hoffman (KS) • Donald House (NY) • Roger Karl (ME) • M. D. Mikels (FL) • Bruce Morical (IN) • Donald Root (IN) • William Scolnik (NJ) • Gerald Siegel (GA) • Walter Wiegand (CT)

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MID-SOUTH

CHAPTER CITATION Tennessee Valley Chapter 42 • Atlanta Chapter 24 • Alabama Chapter 54 • Dixie Chapter 16 • Rocket City Regulators Chapter 61 **REGIONAL APPRECIATION** Renee Coulson (TN) • Frances Geier (TN) • Robert Geier (TN) • Keith Henley (TN) • Donna Kalinkiewicz (AL) • H. Glen Kitts (TN) • Sherry Kitts (TN) • Anthony Manis (TN) • Jae Martin (GA) • Richard Newman (IL) • Russell Oechsle (NY) • Geoffrey Parker (TN) • Dawn Thomas (TN) • Anne Travis (TN) • Hal Travis (TN) • Paul Young (TN) • Russ Youngs (TN)

SOUTHERN OHIO

CHAPTER CITATION Buckeye Chapter 23 • British Horology Chapter 159 **REGIONAL APPRECIATION** Craig Ankeney (OH) • Otto Argadine (OH) • Leroy Baker (WI) • Ness Ball (OH) • Daniel Bowers (OH) • Elaine Bullock (OH) • William Bullock (OH) • Michael Goodwin (OH) • Earl Harlamert (OH) • Bill Lusk (IN) • Scott MacKinnon (OH) • David Miltenberger (OH) • Joe Morgan (IN) • Richard Newman (IL) •Timothy Rawlings (OH) • Carol Yegerlehner (OH)

NATIONAL RECOGNITION

GOLD CERTIFICATE

An award administered by the Awards Committee to recognize outstanding contribution in the field of horology and continuing dedication to the NAWCC.

WILLIAM MCCOY (SC)

William has served as president of Palmetto State Chapter 144 for many years and now serves as the Chapter's vice president. He has mentored many people in the skills of clock repair and has been a frequent presenter at Chapter meetings. Without his efforts, members fear the Chapter

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would have folded. In addition, he has encouraged competition at the NAWCC Crafts Competition where he was awarded first place on nine separate occasions.

NATIONAL APPRECIATION
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Chapter Highlights

Total Membership on December 31, 2025: 7,911 • First Accession Number on January 10, 2026: 189735

Chapter reports must be received by the end of the working day (5 p.m. Eastern) on the following date to appear in the next published issue: March 10 for the May/June 2026 issue. Submission guidelines are available at nawcc.org/publications/chapter-highlights-submission. Send reports to chaphi@nawcc.org. For reporting questions, email chaphi@nawcc.org or call 717-684-8261, ext. 207.

ARIZONA

112. VALLEY OF THE SUN
LOCATION: Fountain Hills Community Center, 13001 N La Montana Dr., Fountain Hills, AZ 85268
WHEN: The second Saturday of each month except November
MEMBERSHIP INFORMATION: Bob Schmitt
EMAIL: roschmitt@gmail.com
WEBSITE: new.nawcc.org/index.php/chapter-112-valley-of-the-sun

NOVEMBER MEETING: We held our last meeting November 22. President Jim Powell called the meeting to order and welcomed everyone. Jim called on Bob Schmitt to cover several items. First was the sudden death of Nancy Roach, wife of longtime member Mike Roach. A motion was made and approved to send flowers and a remembrance to the Roach family. Bob announced a $5 increase in annual dues. A discussion was held on the establishment of a scholarship fund to encourage young people to explore our hobby.

Jim Powell reminded everyone of the upcoming AZ Regional Meet in March and that Regional Chairman Wagner had successfully sent the new registration form to Columbia for insertion in the January/February *Bulletin*.

In show and tell, Gary Vitse presented a carved oak German mantel clock with a 10" silvered dial and told the story of how he got it. An active silent auction saw several items change hands. President Powell was the day's speaker, reviewing the dozen-plus recent clock acquisitions from a hoard in Cottonwood, along with a great slideshow presentation.



Jeff Czoka reviewed a Black Forest cuckoo with an unusually large dial at Chapter 112's January meeting.

Visitors are always welcome. The meeting adjourned around noon and 11 people migrated to Phil's Filling Station for lunch.

JANUARY MEETING: There was an active mart and silent auction, plus Treasurer Vogt was accepting dues payments for 2026. President Jim Powell belled the business meeting to order promptly at 10. Jim called on committee members of the upcoming Regional (March 13–14 in Fountain Hills) to give progress reports. Those handling hospitality, mart, security, and registration gave updates. Regional chair Frank Wagner reminded folks that payments could be made through the nawcc.org website, and that we expect to sell out of mart tables, so register promptly!

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In show and tell, Don Couch showed an uncommon chiming skeleton clock in a glass case. Jeff Czoka reviewed a Black Forest cuckoo with an unusually large dial.

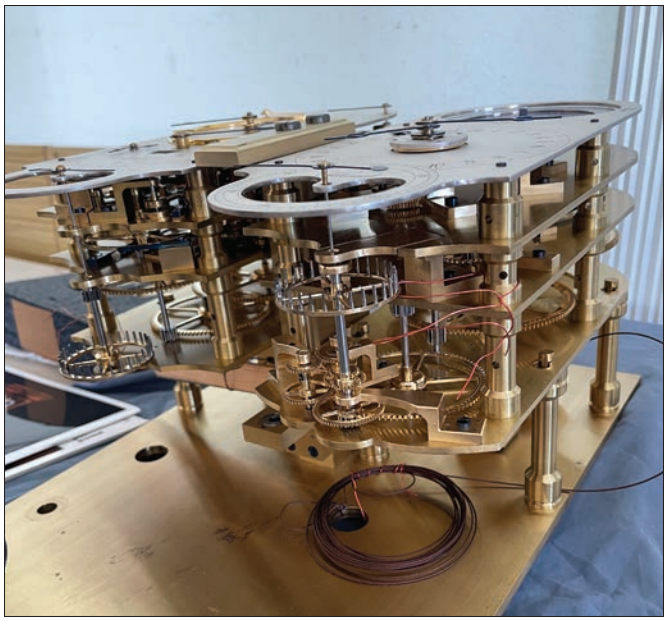
PROGRAM: President Powell presented, "Restoration of an early 19th-Century Boulle Clock," with lots of photos and a demonstration of the miniature electric tools he used in the process. The meeting was closed at noon and members adjourned to Phil's Filling Station for lunch.
—Bob Schmitt

CALIFORNIA

52. LOS PADRES
LOCATION: South County Senior Center, 1580 Railroad St., Oceano, CA 93445
WHEN: 1:30 p.m. the second Sunday of each month
MEMBERSHIP INFORMATION: Ray Hallenbeck
EMAIL: bcmc26129@yahoo.com
WEBSITE: new.nawcc.org/index.php/chapter-52-los-padres

DECEMBER MEETING: Tom called the December meeting to order with nine members in attendance and no guests. For show and tell, Virginia spoke about her father, who had a watchmaker background and owned his own business. She told how her father belonged to the Horological Association of California and how one year he was able to get an astronaut to come speak at the yearly convention. She does not recall the astronaut's name, but remembers he was asked what kind of watch he would like as a gift for his speaking, and he chose a tank watch made by Citizen that his daughter wanted. Virginia said that this particular movement made by Citizen is the thinnest quartz movement ever made.

JANUARY MEETING: Happy New Year everyone! We made another trip around the sun and start anew. Tom called the first meeting of the year to order and welcomed 17 members and one guest, David, who joined us for another meeting. Bert gave the club a status of its current funds and no old business was discussed. A barbecue potluck was enjoyed by all as we celebrated the new year together. A big thank you to all who brought the yummy food, side dishes, deserts, and drinks.



David Walter brought this double pendulum clock to Chapter 52's January meeting. David is in the process of repairing it.

PROGRAM: This month featured a double pendulum clock that David Walter brought, a true treat since it's the only one in the world like it. He spoke at length about this clock that he built 14 years ago, and explained its many complications and functions, many of which I still don't understand. The clock has one movement displaying Greenwich time and the second showing Sidereal time. He told the group how he was able to get the pendulums to work in unison since Sidereal time (astronomical time) is actually a little faster than Greenwich time (solar time) as it gains 1 second every 6.1 minutes.

He said that he never expected to see the clock again, but the person he sold the clock to in England had decided to sell his collection, and the double pendulum clock ended up in the US but was damaged in transit. Repairs were attempted by someone who couldn't figure out how to properly repair it and called David at his shop for guidance. David received the clock for repair and should have it fixed and shipped back to its new owner by the time of this article's printing. All in attendance would agree that it was a true treat to see such a clock that we might never have the opportunity to see again.
—Ray Hallenbeck

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Max Nesbit, left, and his mentor, Dorian Clair, spoke to Chapter 107 about San Francisco's Magenta master clock.

107. DIABLO VALLEY
LOCATION: Danville Grange Hall, 743 Diablo Rd., Danville, CA 94526
WHEN: The second Sunday of even-numbered months, 10:30 mart, 12:30 meeting
MEMBERSHIP INFORMATION: John Koepke, jskoepke@comcast.net
EMAIL: Chapter107NAWCC@gmail.com
WEBSITE: Chapter107.NAWCC.org

OCTOBER MEETING: The Chapter gathered at the Danville Grange Hall and the mart was modestly attended with few sellers or buyers. Too bad, as all present had an opportunity to buy our Chapter's duplicate clock books for $1 each, many of which sell on the internet for $20–75.

Vice President Price Russ described the extensive library of Chapter 107. Consisting of 56 speaker's presentations (video) from 2015 to 2024, and approximately 515 books (many rare) and instructional pamphlets, the library is now occupying a single location (the Hall, where we have our meetings). A list of library materials and tools-for-loan (to members) is available on our Chapter website, and will also appear on the National website.

PROGRAM: Those living in the San Francisco Bay area occasionally go to "the City" for special events and holiday meetings. It's a big city, but those of a certain age, and younger and older, mostly know where to meet their friends: "Under the Clock." No further explanation necessary, just the time and date to meet. The Clock is the locally famous Magenta master clock, in the lobby of the St. Francis Hotel on Union Square since 1907. And we were pleased to greet Max Nesbit, and his mentor Dorian Clair, to hear about the history and restoration of this famous clock.

Built by the Magenta clock systems company of Zurich in 1899, this master clock had its own power system (the Remontoire), no battery, and no electrical contacts. This enhanced reliability, especially in often damp San Francisco. Depending on the master were up to 1,000 "slave" clocks in the rooms of the St. Francis, and this saved the labor of winding each one. In an interesting aside, at the UN meeting in 1945 the Russian delegates cut the wire to the "slave," thinking it was a spy installation. They also tore the wires out of the wall! They, of course, never apologized or paid for repair of the damage. The Soviets are not welcome back.

The rigors of the access, move, and careful repair of this historic instrument were covered in fascinating detail, and we thank both Max and Dorian for this exceptional tale. —*Ross Smith*

COLORADO

21. COLORADO
LOCATION: St. Michael and All Angels' Episcopal Church, 1400 S. University Blvd., Denver, CO 80210
WHEN: 7 p.m. the fourth Monday of each month, except July and December
MEMBERSHIP INFORMATION: David Gies
EMAIL: nawcc21@gmail.com
WEBSITE: nawcc21.com

NOVEMBER MEETING: The final meeting of the year opened with a raffle for a Thanksgiving turkey, a drawing for a Sessions mantel clock, a nice wall clock, and a silent auction. About 20 members participated, both online and in person.

The website has been updated, and Central Christian Church on Cherry Creek South Drive has been selected as the site for the Second Annual Mini Mart in March. The venue's central location, generous parking, and spacious facilities make it an excellent choice and promise an

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Lydia Fabian and her 1920 Attleboro Kitchen and Sessions mantel clock at Chapter 21's November meeting.

event equal to or better than last year's. Tables are included in the rental fee, which will help ensure a financially successful one-day mart.

Planning for the year's programs is already underway. A call for presenters brought forward three volunteers, which is a great start as we continue to recruit from within our membership and invite outside speakers as well. Suggestions are welcome. Your involvement is essential in keeping our meetings filled with timely, engaging presentations. We need your help.

Paul Wegener, our librarian, offered a thoughtful critique of *The Clockwork Universe: German Clocks & Automata, 1550–1650* by Klaus Maurice and Otto Mayr. Paul's mini lectures have become a highlight of our monthly meetings. In addition to reviewing one of our holdings, he brings two full boxes of books for display and checkout each month, making our collection easily accessible. Paul also houses the Chapter's 300-volume library in his basement. His dedication to our horological literacy is extraordinary, and we extend our sincere thanks.

The expanded show and tell segment featured several contributions, including a delightful presentation from Emily Griffith student Lydia Fabian, who shared a 1920 Attleboro Kitchen and Sessions mantel clock she recently repaired in class. The evening concluded with two videos, including one featuring our Chapter president repairing a grandfather clock for the Golden History Museum.
—David Gies

IDAHO

153. IDAHOROLOGICAL
LOCATION: Varies
WHEN: Third Sunday of even-numbered months
MEMBERSHIP INFORMATION: Ira Goldstein, 208-853-2062
EMAIL: bsuperg@icloud.com

OCTOBER MEETING: Our October meeting was hosted by Dick Barton, and we welcomed new members Dr. Peter Doble and Dedi Doble, who have been members of the NAWCC for some time but have just now joined our Idahorological Chapter. We also welcomed guests Martha Tatum, Jody Tatum, Sheri's niece Lauire Wright, and Lauire's nephew, Luke.

Vice President Sheri Partyka presided over the meeting as President Ira Goldstein was out of town. The door prize was a large caramel apple and it went to Chris Satterwhite.

PROGRAM: Peter Doble presented "A History of Naval Chronometers from WWI and WWII." Peter elaborated on the history of about a dozen naval chronometers and companion deck watches used on ships throughout WWI and WWII. Included in his discussion were chronometers with detent and pivotal escapements made by the Germans, Japanese, and the Swiss. Many were commissioned by the British (Zenith) clock works. These chronometers served on battleships, minesweepers, and patrol boats. Our meeting concluded by celebrating with a birthday cake for Dick Barton's 99th birthday!

DECEMBER MEETING: Once again the venue for our final meeting of the year and Christmas/Hanukah celebration was the Y-Knot Winery in Glenn's Ferry. They provided a beautifully decorated room and table and, as always, they are great hosts and take excellent care

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The Idahorologicals enjoy good food and fellowship at their December meeting.

of our group. Sheri Partyka treated us to her amazing homemade cookies and brought bunches of them!

Chris Satterwhite brought her sister, Jodi Tatum, whom it was a pleasure to meet and who was a great addition to the party! Festivities included door prizes, an ornament auction, and a gift exchange. Three door prizes were awarded. First prize was Dallas Baker, who won a very large and beautiful basket containing an assortment of cheeses, candies, cookies, hot chocolate and more, donated by Barb and Ira Goldstein. Second prize was a $50 Amazon gift certificate won by Neil Partyka, donated by Cheryl and Mike Miller. Third prize was a mixed coffee and tea assortment won by Ira Goldstein, donated by Kam and Dallas Baker.

The ornament auction was a great success, raising almost $200 for the club, and by popular request, Dallas Baker performed as our fast talking, very animated and entertaining auctioneer. There was surprisingly very little stealing in the gift exchange, so it must have meant that everyone did a stellar job picking out gifts!

We missed members who were unable to attend, including Carol Cole, Dave and Cynthia Hovland, Dick Barton and Janice Boyd, Terry Freed and Renee Blume, and Rachel Matthews. We hope to see you in the new year.

We had 14 attendees for the business meeting. In October, the Goldsteins attended the West Coast International Watch and Jewelry show in Las Vegas. They said it was a great show with over 500 attendees, and Barb regaled us with her accidental adventures in the trauma center after some injuries she sustained in a fall!

Kam Baker will be ending her duties as secretary after serving in the role since December 2023. Dallas Baker explained to the group that he will be leaving the club due to other interests he is pursuing that are taking up significantly more of his time, and Kam is undecided as to whether she will continue.

Chris Satterwhite has accepted the role of secretary. Thank you, Chris! Ira Goldstein asked for member submissions and ideas for changing the format and/or content of meetings. *—Kam Baker and Sheri Partyka*

KANSAS

63. SUNFLOWER CLOCK-WATCHERS
LOCATION: Woodland United Methodist Church, 1100 W. 15th St. N., Wichita, KS 67203
WHEN: 7 p.m. the first Friday of each month
MEMBERSHIP INFORMATION: Stev Overstreet
EMAIL: stev.overstreet@cox.net
WEBSITE: nawcc63.org/Membership.aspx

NOVEMBER MEETING: We took a field trip to view a private collection of music boxes, organs, and other automatic musical instruments in the Wichita area. Our gracious hosts opened their home to us with wonderful explanations and hospitality.



The host for Chapter 63's November program demonstrates one of the music boxes in the extensive collection.

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DECEMBER MEETING: This was our annual covered dish holiday get together at Stev Overstreet's home. These are always well attended and a welcome way to end the year. Our hosts from the November field trip were our honored guests and joined our Chapter before the end of the evening. Also, as usual for this event, members and guests donated $180 and numerous canned goods to a local food pantry. —*Stev Overstreet*

MAINE

89. MAINE
LOCATION: Brunswick United Masonic Lodge 8, 65 Baribeau Dr., Brunswick, ME 04011
WHEN: 11 a.m. the third Saturday of odd-numbered months
MEMBERSHIP INFORMATION: Mike Brown
EMAIL: nawcc89@gmail.com
WEBSITE: new.nawcc.org/index.php/chapter89-maine

NOVEMBER MEETING: Thirty-eight members of Chapter 89 gathered in November for our final meeting of the year. Members and guests spent time catching up on news and projects while looking over mart wares and discussing show and tell items. Shortly after noon, lunch was ready and clock talk continued over deli sandwiches, chips, drinks, and dessert.

For show and tell, Mike Brown displayed a modification he made to a Sherline center rest. The factory rest uses quarter-inch square stock legs to support work in the lathe. Mike slotted the ends of each leg and inserted butter bearings such that the outer face of the outer race bears against the work. Using 6 mm O.D. butter bearings, the legs close down enough to support a 1 mm arbor snugly, and with essentially no friction against the arbor.

George Orestis reported on a watch class that he recently attended at NAWCC National. He was extremely pleased with the quality of the training. Tom Zimmerman shared a tip. He attached a small strip of brass to the tip of an electric soldering gun. Using high heat on the gun, the brass strip will melt shellac. Using low heat will soften the shellac but not melt it. Tom finds this very useful when setting pallets in Brocot escapements.



Harry Hepburn, left, and Greg Saunders work the annual auction at Chapter 89's November meeting.

Paul Fournier plans to present a one-day session on crown wheel verge escapements in February, and Paul and Mark Beever will present a one-day session on fabricating lifting tools using tempering and annealing techniques in April.

Paul Fournier led the group in the election of officers for 2026. The following slate was nominated, seconded, and approved with a unanimous vote. President Greg Saunders; First VP Anne Hemsley; Second VP George Orestis; Treasurer Tim von Reyn; Assistant Treasurer Tony Accardi; Secretary Mike Brown; Assistant Secretary Mark Van Lunen; and Directors: Paul Fournier, Jim Powers, and Roger Karl.

In lieu of a presentation, the group adjourned to the big room for our annual auction. We had 17 people place items up for auction, including contributions to the Chapter. Almost 40 people were in the audience, and it looked like it would be a long day. Thanks to the auctioneering hustle of Harry Hepburn and Noah Yoder, everything was sold in less than three hours! More than 130 transactions took place, with a total value of $3,482.

Thanks go out to the many people who helped set up, carry items, break down, and help the big buyers load out. Special thanks to George Orestis, who was pressed into service as the accountant with zero notice. —*Mike Brown*

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MARYLAND

11. MARYLAND
LOCATION: Pickersgill Retirement Community, 615 Chestnut Ave., Towson, MD 21204
WHEN: 9 a.m. mart, 10 a.m. meeting and program the second Sunday of even-numbered months
MEMBERSHIP INFORMATION: William Miller
EMAIL: bill1815clocks@gmail.com
WEBSITE: new.nawcc.org/index.php/chapter-11-maryland

DECEMBER MEETING: Nine members enjoyed Dunkin donuts and coffee before and during the meeting. After a short business meeting, our program began. Several members brought items of interest to show and discuss. Frank Goad showed several railroad grade Waltham pocket watches, with Breguet hairsprings, and up and down indication showing the winding status of the mainspring.

Bill Bonta showed and described a universal equinoctial ring sundial. The sundial was brass and about 3" in diameter. Bob Butler brought a watchman's clock in a leather case, dated 1930, signed by Dent, an English maker. The watch was about 4" in diameter and recorded time punched on a round pieces of paper. Ed Butler showed a 12" marine clock with a brass seconds movement, in a black bakelite case and dial with white numerals and makers name, that he obtained at the York Regional boot sale. The clock was made by the Ulm Manufacturing Co. Inc. Ed has not been able to locate any information on the maker.

PROGRAM: Our program was a DVD on the restoration of tall case clock dials, narrated by Mary Francis Tennent. The program covered cleaning, repairing damaged areas, gold leafing, and repainting the numerals and other areas. Tennent is also the author of *The Art of the Painted Dial*, which is available online. —*Bill Miller*



The lively action at the 2025 New England Regional. This year's event will be April 24–25 and hosted by Chapter 8, with help from sister Chapters across New England.

MASSACHUSETTS

8. NEW ENGLAND
LOCATION: Varies
WHEN: February, April (New England Regional), May (Annual Willard House & Museum Workshop), August, and October.
MEMBERSHIP INFORMATION: Steve Chatlas, 860-828-1743
EMAIL: sgchatlas@aol.com
WEBSITE: nawcc8.org

JANUARY MEETING: Save the date for the 2026 NAWCC New England Regional! Member's day is Friday, April 24. Member and public day is Saturday at the Douglas N. Everett Arena, 15 Loudon Road, Concord, NH 03301. The event's lead host is New England Chapter 8. Co-hosts are Berkshire Chapter 186, Connecticut Chapter 148, Granite State Timekeepers Chapter 189, Greater Massachusetts Chapter 87, Green Mountain Timekeepers Society Chapter 109, and State of Maine Clock and Watch Collectors Chapter 89.

Please join us for our third year! —*Gary Ewing*

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MICHIGAN

6. GREAT LAKES
LOCATION: Varies
WHEN: March, August, October, December
MEMBERSHIP INFORMATION: Tom Morris
EMAIL: thomasm326@gmail.com
WEBSITE: new.nawcc.org/index.php/chapter-6-great-lakes

DECEMBER MEETING: Great Lakes Chapter 6 held its annual Christmas Chapter meeting December 14 at the Masonic Center in Dearborn. Approximately 30 members and guests braved the cold to attend. They were treated to a lunch of pizza, salad, beverages, and dessert. Several members brought items to sell and many treasures changed hands. The Chapter table of donated items was especially busy. After lunch, there was a drawing for a lottery ticket tree with about a dozen Michigan lottery tickets that was won by Norm Anderson. It was a nice holiday get-together, giving members a chance to catch up. Our next meeting will be February 1 at the Masonic Center in Dearborn. —*Tom Morris*

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101. WESTERN MICHIGAN
LOCATION: St. Paul's Anglican Catholic Church, 2560 Lake Michigan Dr. NW, Grand Rapids, MI 49504
WHEN: 10 a.m. the first Saturday of even-numbered months
MEMBERSHIP INFORMATION: Jon Start, 269-345-3726
EMAIL: j.r.start58@gmail.com
WEBSITE: westmichigan101.com

DECEMBER MEETING: December is Chapter 101's annual Christmas potluck, an event all members look forward to, with the plethora of festive foods that grace the buffet table and the spirit of comradery that dominates the event. Twenty-three members and guests attended the festivities this season.

This month's mart, however, lacked the holiday spirit. So sparse were the offerings one would not be blamed for thinking the event was hosted by the Grinch. On offer though was a pristine mid-century IBM wall clock, one like those found in American classrooms after World War II. Near it was another fine electric wall clock, this one a Postal Telegraph model. There were two NOS motors for Jefferson Golden Hour clocks and an unblemished time-only store regulator. For the watch enthusiast there were various pristine wrist and pocket watches. One of the latter of particular interest was an early key wind and set Elgin model with the "National" on the dial.

Door prize winners went home to enjoy their gift of sugar plums. Ron Heidrich won the member prize while Therese Lynema won the women's prize.

More prizes were awarded in the clock and watch contests. December's clock contest was for Swiss clocks, a category that surprisingly produced a spirited competition with several interesting entrants. When the dust settled, Clark Strobel took first place while Tim Post came in second. In the meantime, Swiss watches went head-to-head. Here Jim Lawson captured first and Tim Post secured second place for the second time.
—*Richard Weiderman*

MINNESOTA

20. O.T. LANG
LOCATION: Varies
WHEN: Third Saturday of odd-numbered months
MEMBERSHIP INFORMATION: Darold Hanson
EMAIL: StSc112358@gmail.com
WEBSITE: Minnesotawatches.com/otlang

NOVEMBER MEETING: Twenty members and guests attended the November 15 Saturday meeting at Elsie's Restaurant. The meeting was presided over by Chapter President Gary Anderson. Jerry and Peg Renk served as hosts.

PROGRAM: Sherry Kitts presented via Zoom "The Watch that Built an Empire." Her program focused largely on Richard Warren Sears and the formation of Sears, Roebuck and Co. Richard Sears was born in 1863 in Stewartville, MN, and later moved to Spring Valley in 1869. Sears's father died in 1879, and Richard became the primary breadwinner at only 16. First, he became a laborer for the railroad, but also learned telegraphy, a valuable skill. At 20 he would become the telegraph

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operator and manager at the Redwood Falls station. The enterprising Sears started a side business in lumber and coal. Working for the railroad, he got favorable rates that allowed him to compete with local businesses.

At this time, unscrupulous businesses would send unsolicited COD orders to random businesses and then "apologize" for the mistake. Then they would offer "a good price" to the business rather than have the merchandise sent back. One Redwood Falls jeweler fell victim to one of these scams when he had a box of watches delivered to him. The jeweler was not interested but Richard Sears, using his contacts as a telegraph operator, was able to dispose of the watches at a profit within two days. Sears ordered more watches, and utilizing his contacts with other telegraph operators, was able to clear $5,000 within six months. That's more than $150,000 today!

In 1886, at the ripe age of 22, Sears formed the R. W. Sears Watch Co. in Minneapolis. He started by selling Elgin private label watches. Sherry showed an example of an Elgin Model 82 branded as a Sears watch. Later he also sold Illinois private label watches as well. Two of these included the Famous, an 18-size 7-jewel watch, and the Lawrence, an 18-size 11-jewel watch. The venture was so successful that he moved his watch company to Chicago in 1887. Sherry also showed an example of a Sears watch ad. The ad copy was quite lengthy but interesting to read; he did all he could to entice buyers. Sears proved to be a great salesman. Sherry also displayed a curiosity, an 18-size Illinois private label watch called "Railroad Magnet." Was this a spelling mistake? Should it have read "Railroad Magnate" instead? We may never know. Two more Illinois private-label watches included the Defiance (18-size, 11-jewel) and the Time Card (18-size, 15-jewel).

Sears's famous partnership with Roebuck started when Richard Sears placed an ad for a watchmaker in the *Chicago Daily News*. The ad was answered by Alvah Curtis Roebuck, and he was hired in 1887. In 1889, Sears sold the R. W. Sears Watch Co. for $100,000 (about $3,000,000 today) and moved to Iowa. Apparently restless, Sears returned to Minneapolis in 1890 and founded the Warren Co. with Roebuck. Within a year he sold his portion to Roebuck, who named the new company A.C. Roebuck. Sherry showed a Roebuck watch, a private-label Trenton (18-size, 15-jewel). Sears then persuaded Roebuck to give him two-thirds of the company in return for investing capital. In 1893 Sears moved the company to Chicago and renamed it Sears, Roebuck and Co.

In 1893 the soon-to-be-famous Sears catalog was 196 pages and now sold a variety of merchandise. It would not be until 1991 that Sears would be surpassed by Walmart as the nation's largest retailer. Early watches sold by Sears Roebuck seem to have been made by Seth Thomas and Rockford. Rockford watches were labeled the Plymouth Watch Co. Two models included the King Edward and the Prince of Wales. Some King Edward watches were likely railroad grade. Sears also sold their Interstate Chronometer, which was an Illinois Bunn Special. None were offered after 1915. Interestingly, Sears also sold what were referred to as "fake" watches. These were lower grade 7-jewel watches made to look fancy.

In 1895 Roebuck sold his one-third stake to Sears. Apparently, Roebuck, a low-key guy, found the business too stressful. In that same year, Sears took on a new partner, Julius Rosenwald. In 1906 Sears and Rosenwald took the company public. However, Richard Sears was in poor health and died in in 1914 at age 50. Julius Rosenwald had succeeded Sears as president in 1909. In contrast to Sears, who was tight-fisted, Julius Rosenwald became quite the philanthropist. Inspired by Booker T. Washington, Rosenwald established 5,300 schools for African American children in segregated south.

In 1924 Robert E. Wood became the third president of Sears. He helped transition the company to include brick and mortar stores. In doing this, he embraced an open-plan concept that allowed customers to browse and touch merchandise. In the 1960s, Sears was the largest retailer in the world and an innovator in a number of areas. For example, they offered a money-back guarantee, their ad copy was creative, and they had no middlemen and so could compete favorably with local businesses. Also, their customers included African Americans in the Deep South who might otherwise not be allowed into a store. Sears also encouraged customers to write a letter and state what they wanted in their own words and their own language, as they had translators on staff. Finally, Sears deliberately made their catalogs

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smaller in size than the Montgomery Ward one, so that when they were stacked, the Sears catalog would be on top! —*Steve Scidmore*

NEBRASKA

58. GREAT PLAINS
LOCATION: The Holiday Inn & Suites at Ameristar, 2202 River Rd., Council Bluffs, IA 51501.
WHEN: Second Sunday of odd months (except May, when it's the first Sunday)
MEMBERSHIP INFORMATION: Neal Brenner, 402-672-4894
E-MAIL: kneelbee@outlook.com
WEBSITE: facebook.com/nawcc58

JANUARY MEETING: Chapter 58 met on January 11 with 21 members present. An open mart was held from noon to 1. It was an interesting mart, with many watches and clocks for sale and display. We are always grateful for our knowledgeable members, as some of us were able to bring questions, photos, or timepieces for review and commentary. Thanks to all that are willing to share. There was a great spirit and camaraderie among the group that we look forward to carrying into 2026!

Chapter President Neal Brenner offered the meal prayer, and we all enjoyed the catered lunch. The business meeting was called to order, and the following items were discussed. Chapter dues for 2026 are being collected. Members were able to pay at the meeting. If members were unable to attend this meeting, please contact Treasurer Mike Bailey regarding payment. If there are any changes to member information, the start of a new year is a good time to update the membership roster. Please send any changes to Neal Brenner.

The 2026 River City Regional, hosted by Heart of America Chapter 36, our sister Chapter, will take place March 27–28 in Paola, KS. The host hotel is the Paola Inn and Suites. The treasury report was given by Mike Bailey. Board elections are to be held in May and will be discussed at the March meeting.

PROGRAM: Tom Wallace presented, "1872-Some Railroad Pocket Watch History." Very informative and insightful. He traced the history of the need for railroad employees to have precision watches in the field as train traffic grew. Tom discussed the first watches being produced by the United States Watch Co., to its reorganization in 1872 as the Marion Watch Co. He highlighted the beauty and functionality of the butterfly cutout for viewing the escapement as a hallmark of US Watch Co. watches. A great presentation that sparked a discussion on mechanics and questions from members regarding the intricacies of these watches, their availability to employees, and even the discussion of development of time zones. Thanks to Tom for sharing and bringing different interests together! —*Deb Fornstrom*

NEW HAMPSHIRE

189. GRANITE STATE TIMEKEEPERS
LOCATION: First Baptist Church, 49 Church St. Belmont, NH 03220
WHEN: Six meetings on the third Saturday, September–May
MEMBERSHIP INFORMATION: Heidi Carignan
EMAIL: info@cwrnh.com

NOVEMBER MEETING: We had 33 members and 2 guests in attendance. Attendees received one ticket for the raffle. Steve Sanborn donated a cuckoo clock, and Rick Saul was the winner. Rick Saul updated the group about the New England Regional. It is on Friday and Saturday April 24–25. Thursday evening is pizza night, and Friday evening is dinner at the Common Man. Registration is open.

SHOW AND TELL: As told to us by Steve Sanborn: He had a ladder chain movement clock that was in his repair shop. He had evaluated it, adjusted it, and tested it for about a week, and just when he was ready to give it back to the customer, he found that it had stopped. A stink bug had gotten into it and got its leg stuck. Steve removed the bug, and the clock ran again. He said, "After all, the customer just asked me to get the bugs out."

PROGRAM: Tyler St. Gelais, along with his wife, Courtney, who was running the PowerPoint for him, gave an interesting presentation on the origin and evolution of dive watches. After the Rolex Oyster waterproof watch

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Stephen Franke presents to Chapter 189 on the painstaking process of restoring a French clock from 1558.

was invented, Omega Marine was the first true certified dive watch. It was tested in Lake Geneva to 70 meters. Navy Commander Yves Le Prieur wore it. In 1932, a sapphire crystal was used in dive watches. Italian frogmen wore canteen and Panerai watches. In 1953, Rolex Deep Sea was tested down to 150 meters, a significant leap from previous 100-meter watches. In 1954, Blanc Pain developed the 50 Fathoms watch. The mid-1950s dive watch development really took hold. EPSA patented and designed a compressor watch. Jaeger LeCoultre designed the Memovox Alarm watch, but it never really caught on as it was more complicated than it needed to be. In 1959, Rolex created crown guards. In 1967, Doxa Sub 300 truly perfected the dive watch with its one-way bezel, compression table, and orange dial (the easiest color to see underwater). Rolex and Doxa worked together on the helium release valve, but Rolex brought it to market first. It keeps the watch from building up too much pressure. The Rolex Sea-Dweller can go further than any diver can.

The group enjoyed Tyler's presentation and had many questions for him. He also explained that he only touched on the highlights, as there was too much to explore for our brief time today.

JANUARY MEETING: Twenty-seven members and five guests attended the meeting of the Granite State Timekeepers. Two of guests became members at this meeting, bringing the final total to 29 and three guests. New members are Karl Schumacher and Andy Klock.

President Phil D'Avanza thanked Steve Sanborn and Karen Way for planning and serving lunch, especially with the snowy weather. Phil thanked Heidi for arranging the fellowship hall in Belmont to keep the meeting the third Saturday of the month. This is not a new location; the church in North Sutton remains the usual place.

Bob Frishman updated us about the New England Regional in April. Thursday evening is pizza night with an illustrated lecture by Bob, "Americans at London's 1851 Great Exhibition in the Crystal Palace." Friday is dinner at the Common Man with an illustrated lecture by Ron Price about his extensive research on Waltham Boston Watch Co. watches. Saturday is the public day. After closing, Dan Horan is hosting a preview at his auction house in Candia. Chris Way is looking for volunteers. Give an entire time slot or a piece of a time slot. Every little bit helps.

The secretary read a letter from Richard Arms. He explained he was sadly letting his membership go, focusing on other retirement activities, but wanted to give his warm regards to the membership. His letter said that we are a remarkable group, with an extraordinary breadth of knowledge and talent. The group was a warm and generous one, for whom he had deep admiration and high regard. We will send a thank you note for his kind words.

Arlo Klock is a senior at Andover High School in MA. He spoke about how he met Bob Frishman and got into clocks. For his research, he studied antique clocks. His project has three parts: (1) observing clocks through a historical lens, (2) studying craftsmanship and repair processes, and (3) cultural reflection and preservation. He spends Sundays working with Bob.

Dan Craici spoke about his watchmaking adventure, inviting everyone to view the customized watch he brought, as well as to spread the word to others on his behalf. His watches are for sale on his website, greatpotentionalfarm.com. He asked colleagues and friends to view it and share it too.

Upon entry, attendees received one ticket for the raffle. A gingerbread clock was up for grabs and won by Chris Way.

PROGRAM: Stephen Franke of Test of Time Horology LLC in New London, WI, presented, "1558: To Bush, or

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not to Bush? The Sympathetic Restoration of a French Renaissance Timepiece, and the Philosophical Questions it Evoked." Steve spoke about the meticulous approach he took for this project. He evaluated it intently before doing anything to it and asked questions along the way before each modification/repair. He explained the reasoning behind each modification/repair on such an old piece. Clear, enlarged photos on the screen demonstrated his restoration, and he described his techniques throughout. This was a fascinating talk, as it is rare to learn about the restoration of timepieces this old. *—Heidi Carignan*

NEW YORK

84. MID-HUDSON
LOCATION: Freedom Plains Presbyterian Church, 1168 Route 55, Lagrangeville, NY 11540
WHEN: The second Saturday of even-numbered months
MEMBERSHIP INFORMATION: Mark Nathanson, 845-592-0065
EMAIL: tictockmark@hotmail.com
WEBSITE: new.nawcc.org/index.php/chapter-84-mid-hudson-chapter-84

DECEMBER MEETING: Our bi-monthly meeting attracted more than 25 guests and members, including some from neighboring Chapters. A typically active mart drew everyone's interest and featured some old and unusual timepieces and movements. Chapter President Chuck Montrose took the opportunity to recognize a longtime member, Al Mack, celebrating his 50th year as an NAWCC member (No. 39,175) and a regular attendee of our meets.

SHOW AND TELL: John Wilman explained his epicyclic clock project. John's plans were based on a circa 1830 design by William Strutt, which included a ring gear drive with teeth on the inner and outer edges of the ring. John displayed several chucks he had fashioned for cutting this gear. John's project is nearing completion.

Ken Hurst, son-in-law of the late Ray Rio, a noted collector and clockmaker, brought several samples of his father-in-law's collection. Ken and his wife, Carol, inherited a sizeable collection of timepieces, tools, plans, and parts. A short business meeting preceded a bountiful luncheon and refreshments. *—Mike Graham*



Ken and Carol Hurst with a few of the late Ray Rio's collection at Chapter 84's December meeting.

NORTH CAROLINA

17. CAROLINA
LOCATION: Lexington Masonic Lodge, 468 Central Ave., Lexington, NC 27292
WHEN: Mart 9:30 a.m., classes 10:15, meeting noon the second Saturday of odd-numbered months
MEMBERSHIP INFORMATION: Terry Hall
EMAIL: tehall2018@gmail.com
WEBSITE: new.nawcc.org/index.php/chapter-17-north-carolina

NOVEMBER MEETING: At our November meeting we welcomed 19 members and guest John Orman. Welcome, John! An active mart was held with an assortment of items for sale/trade. This month saw no items for silent auction, and we encourage participation by bringing those less-loved items.

Don Whitaker conducted a watch class and will continue doing so as long as there is interest. Thank you, Don. Howard Elliott won the door prize at this meeting, and John Prevatte cashed in on the 50/50 drawing, graciously donating the proceeds back to the Chapter. Thank you, John.

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Don Whitaker presents to Chapter 17 on the Randolph County tall case clock that he restored.

Chapter 17 also remembered Anthony Price and Lyall Schroeder, who are experiencing some health issues. Our prayers are with you both. David Pendly combined his clock class with our program, discussing current supply chain issues as well as a discussion on activities with National and resources for programs.

Members, please consider presenting a Chapter program this year. Contact Paul Stamey or any other officer for more information.

JANUARY MEETING: Our first meeting of 2026 saw 21 members in attendance, as well as guests James Tennant and Mark Sheffield. We also welcomed our newest member, Lore Schneider.

An active mart was held with an assortment of items for sale/trade, and David Pendley conducted a clock class with 12 in attendance. The subject was American count wheel striking. David provided a handout demonstrating various examples and tips on checking these out.

Mark Mayerchak won the door prize this meeting and donated the free entry to new member Lore Schneider. Paul Richmond cashed in on the 50/50 drawing, donating the proceeds back to the Chapter. Thanks to both of you for your generosity.

Mark Mayerchak was also recognized for his recent work on the Quincy Clock at NAWCC headquarters. This was documented in the January NAWCC newsletter.

PROGRAM: Don Whitaker was our speaker and discussed the restoration of a Randolph County (central North Carolina) wooden works clock. A very interesting talk that touched on its acquisition from Duke University and the clock's known history from the Asheboro area of Randolph County. This was a Seth Thomas wooden works 30-hour weight movement time/strike with a simple calendar function, circa 1813–20, with a crafted tall case. Duke had records of the clock's origin from the Hutchens family, which donated the clock in 1916.

Don explained the condition of the clock as received, missing parts on the movement and the case, and issues with joinery and feet of the 84" tall case. His restoration used period joinery methods, cut nails, and forensic examination that determined the native poplar and southern yellow pine materials, as well as what was left of original milk-painted finish. Don's restoration also included the hands and the original dial.

This is an impressive timepiece sitting on our meeting floor, running and striking, and it should now survive for another century or two.

Chapter 17 is attempting to provide meeting notices only by email. If you want a notice, contact Terry Hall at ehall@lexcominc.net. —*Terry Hall*

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126. WESTERN CAROLINAS
LOCATION: Dana Community Center, 2879 Upward Rd., Flat Rock, NC 28731
WHEN: Second Saturday of odd-numbered months, 9:30 a.m.
MEMBERSHIP INFORMATION: John Wagner, PO Box 4, Clemson, SC 29633
EMAIL: drjrwagner@gmail.com
WEBSITE: new.nawcc.org/index.php/chapter-126-western-carolina

SEPTEMBER MEETING: The Western Carolinas Watch & Clock Group met November 8 with an open watch and clock help bench for members and guests. David Moline

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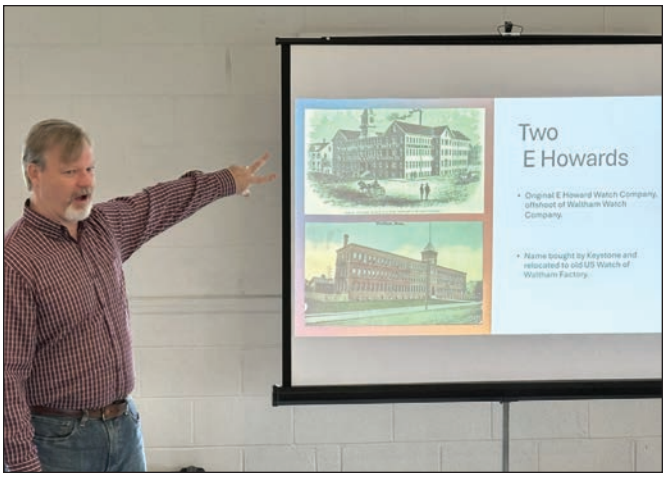

Speaker Mark Zaun presents on repairing and casing E. Howard pocket watches at Chapter 126's September meeting.

reported on his recent visit to the National Watch & Clock Museum in Columbia, PA.

PROGRAM: Our featured speaker, Mark Zahn, spoke on "Problems Repairing and Casing E. Howard Pocket Watches," addressing challenges with loose movements, case identification, and repair techniques. He circulated and displayed various E. Howard watches, noting that the company did not manufacture its own cases and relied on letters for movement identification. Balance staff variations were highlighted, with 65 types identified in 16-/18-size models, and design stabilization after 1870 was noted for improvements in isochronism and temperature compensation. Images featuring hound, horse, and stag motifs were used to identify movement variations.

Our May meeting will feature the "Design of Street Clock Movements," and the July meeting is our annual picnic. If you are traveling to Asheville, please consider joining our community of horology enthusiasts for a meeting. *—John Wagner*

OHIO

23. BUCKEYE
LOCATION: Moraine Civic Center, 3050 Kreitzer Rd., Moraine, OH 45439
WHEN: TBD
MEMBERSHIP INFORMATION: Stefanie Arnett-Price
EMAIL: thebuckeyechapter23@gmail.com
WEBSITE: new.nawcc.org/index.php/chapter-23-buckeye-23

DECEMBER MEETING: The Buckeye Chapter welcomed 40 members and their guests to the Moraine Civic Center for our annual Christmas mart and potluck lunch. We had five guests attend as a result of a membership drive held on a Sunday afternoon at a local antique mall. It was a great afternoon of buy-sell-trade activity, an excellent educational presentation, sampling everyone's favorite holiday dishes, and just the fun of engaging with fellow horology enthusiasts. Many thanks to Brenda Baker and Debbie Griffin for expertly arranging that tempting array of delicious treats for all to enjoy.

PROGRAM: Christ Bayman, a local woodworker, gave a demonstration on veneering, patch veneering, how to apply it, and how to stain it. He does beautiful work and was so kind to share his skills and knowledge with those in attendance.

Our condolences to Mike Goodwin on the loss of his beloved wife, Peggy, in late November. Please keep the Goodwin family in your thoughts and prayers.

Anytime you're travelling in the Dayton/Cincinnati area on a weekend that our Chapter meets, by all means, please come join us. All NAWCC members are welcome at our meetings, and your presence certainly contributes to the fun. *—Stefanie Arnett-Price*

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28. LAKE ERIE
LOCATION: Best Western, 15471 Royalton Rd., Strongsville, OH 44136
WHEN: TBD
MEMBERSHIP INFORMATION: Ginny Sims
EMAIL: secretary@nawcc28.org
WEBSITE: nawcc28.org

JANUARY MEETING: Lake Erie Chapter 28 met on January 4 with 22 members in attendance. One of the items discussed was a restored Vienna-style clock case. One of the members recognized the case, one made by the Gazo Family Clock Co. in San Diego in the early 1970s. Although the clock looked old, it was not. The

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highly carved case was good quality. No one had ever seen a clock made by this company in this area. Jeff Ring showed an interesting video about early wood works tall case clocks. Many thanks for an interesting program. There were about a dozen mart table that were very active. —*Ginny Sims*

OKLAHOMA

74. SOONER TIME COLLECTORS
LOCATION: Belle Isle Restaurant & Pub, 1900 Northwest Expy. #44R, Oklahoma City, OK 73118
WHEN: 2 p.m. the second Sunday of even-numbered months
MEMBERSHIP INFORMATION: Carissa Teixeira
EMAIL: chapter74communications@gmail.com

DECEMBER MEETING: Chapter 74 met on December 14 with 23 members in attendance.

PROGRAM: Chapter Vice President Len Kaufman hosted the annual Sooner Time Collector Christmas Party at his house. The event was lively and festive with both new and regular Chapter members in attendance. With some catering and some delicious sides and desserts brought by members, everyone had plenty to eat.

Len gave a guided tour of his clock collection. With a novelty clock wall, plenty of scroll and pillar clocks, and some interesting banjo clocks, Len has an amazing collection.



Chapter Vice President Len Kaufman hosted the annual Sooner Time Collector Christmas Party at his house for Chapter 74's December meeting.

Don't forget, Chapter 74 is set to co-host the 2026 MKOA Regional in Oklahoma City this year. We are well on our way with planning and logistics. We hope to see you all in September! —*Carissa Teixeira*

OREGON

31. PACIFIC NORTHWEST
LOCATION: West Linn Lutheran Church, 20390 Willamette Dr., West Linn, OR 97068
WHEN: The third Sunday of March, June, September, and December
MEMBERSHIP INFORMATION: David Noall
EMAIL: nawccpdx31@gmail.com

DECEMBER MEETING: Jeff Eastwood presented "The Equation of Time" as cultivated from two books he obtained: *The Equation of Time-AEquatio Dierum* by Kevin Karney and *The Astronomical Clock* by Paulus and Gheisbreght. What followed was a technical discussion supported by charts and photos from the books. Jeff's particular interests relate to the gear and cam designs of EoQ clocks. He designed a working model in of the rotating cams to show eccentricity in one portion of the Paulus Clock.



Bill Butcher's 1870s perpetual calendar Achille Brocot clock with a yearlong Equation of Time dial that he discussed at Chapter 31's December meeting.

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SHOW AND TELL: Bill Butcher showed photos of his 1870s perpetual calendar Achille Brocot clock with a yearlong Equation of Time dial. The clock movement is regulated by a Brocot escapement. Bill reasoned that you could set your clock using the Equation of Time feature and a good sundial.

The Chapter maintains the historic master clock from the Meier and Frank Department store. The clock was made about 1915 by the Joseph Mayer Co. of Seattle. The Chapter donated the clock to the Oregon Historical Society in 2020. It is on display in the foyer of the museum. The Chapter also repaired and maintains the street clock in the St. John's neighborhood of Portland.

The 2026 Pacific Northwest Regional will be held on May 15–17 at the Hilton Garden Inn in Clackamas, OR. *—David Noall*

PENNSYLVANIA

37. ALLEGHENY
LOCATION: Alle-Kiski Historical Museum, 224 Seventh Ave., Tarentum, PA 15984
WHEN: First Sunday of even-numbered months
MEMBERSHIP INFORMATION: John Scott
EMAIL: alleghenyclockchapter37@gmail.com

DECEMBER MEETING: Everyone was engaged for the good of the order, and members agreed this made December's a successful meeting. Tom Huber's contributions about PRR Pocket Watches and history of the railroads were most important. Scott Becker, thank you for your information on existing train museums to visit. Several members made a Christmas clock wreath and said it was interactive.

Thank you, Raymond Mailki, for sharing two clocks and the special memorandum about the lives lost in Hawaii in remembrance of Pearl Harbor Day. Thank you also Steve Kubicko, assistant museum curator, for being the bridge to this event. The museum was seasonally decorated and tables were set up for our refreshments and crafts.

PROGRAM: Ten years ago, we were able to purchase NAWCC's recorded workshops from the Syracuse



Tom Huber spoke about railroads and railroad watches at Chapter 37's December meeting.

Regional on DVD. Steve Kubicko set up his laptop and screen and members viewed Tom Huber's video from the 2015 Eastern States Regional 2015 titled, "What Really Is a Railroad Watch?" Afterwards Tom told us about the history of the railroads and the story about his grandfather's watch. Tom wrote an article for the *Bulletin* about his grandfather's watch.

Discussions continued. Scott Becker, former CEO retired of the Trolley Museum, told the group about the history of the big train companies and what happened to them after they ended. Some went bankrupt and one company ordered all contents destroyed. Some train companies' artifacts were sold, salvaged, and put into museums. These discussions lead to a greater appreciation of the railroad watch.

Scott Becker volunteered to do the next presentation in February. Scott will discuss various balance wheel clocks built by Seth Thomas. These clocks were built for applications where a pendulum clock would not work, such as on ships and trains. *—Claudia Scott*

158. KEYSTONE
LOCATION: Hoss's Steak and Sea House, 61 Gettysburg Pike, Mechanicsburg, PA 17055
WHEN: Third Wednesday of odd-numbered months
MEMBERSHIP INFORMATION: Karen Laning, 480-544-5501
EMAIL: karenlaning5552@gmail.com
WEBSITE: new.nawcc.org/index.php/chapter-158-keystone

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Chris Corveleyn presented at Chapter 158's November meeting on the mid- to late-19th-century clocks of Nicholas and Karl Muller.

NOVEMBER MEETING: Chapter 158 met at Hoss's near Camp Hill on November 19 with over 20 in attendance. President Wayne Laning opened the meeting and food was ordered. After dinner Wayne called on Lee Davis for a brief report on the Mid-Eastern Regional sponsored by Chapter 1, with help from Chapter 158 and Chapter 193. Lee presented a brief synopsis on the Regional, with funds going to both Chapter treasuries for their excellent help.

PROGRAM: Our speaker for this meeting was Chris Corveleyn from New Jersey who gave a fine presentation on clocks with metal fronts made by Nicholas Muller and brother Karl in the mid- to late-19th century. Chris brought several clocks with him for an outstanding display, and showed many photographs of Muller clocks he has researched using, in part, Arlyn Rath's book that shows several dozen clocks she and her husband collected in past years. —*Lee Davis*

139. SUSQUEHANNA
LOCATION: Trinity Episcopal Church, 844 W. 4th St., Williamsport, PA 17701
WHEN: Varies
MEMBERSHIP INFORMATION: Allan Harvey
EMAIL: allanwharve@gmail.com

DECEMBER MEETING: Fifteen members and guests enjoyed a delicious homemade lasagna dinner prior to the business meeting. For show and tell, Danny Pfirman brought a very interesting spring-wind balance wheel clock manufactured by the Terryville Manufacturing Co. This clock has its original glass dome and carries a patent date of October 5, 1852. Allen Kaplin will spearhead the restoration of the Stevens School/Apartments tower clock in Williamsport. A few members worked on this clock many years ago, and owners of the apartment building would like to have it running again. Members interested in this project are to contact Allen directly. —*Allan Harvey*

SOUTH CAROLINA

144. PALMETTO STATE
LOCATION: Lizard's Thicket, 7938 Garners Ferry Rd., Columbia, SC 29209
WHEN: 9:30 a.m. the first Saturday of even-numbered months
MEMBERSHIP INFORMATION: William McCoy, Dave Graley, Helga Crandall, Robert Auman
EMAIL: dlgraley@aol.com, info@lowcountryhorology.com, mossyoaksrepair@gmail.com, whynotnc@gmail.com

DECEMBER MEETING: Our meeting was held on December 6 and attended by 14 members. We conducted our usual mart, followed by a formal business meeting.

PROGRAM: William McCoy gave a talk on how to easily adjust the strike train for proper operation in a Terry-style woodworks movement. This adjustment is often difficult because of the outside-the-plate location of the locking lever paddle arm. In addition, another woodworks movement was shown that had previously



William McCoy discusses a Terry-style wooden movement at Chapter 144's December meeting.

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been "re-bushed" in some previous decade using melted lead dripped into the pivot hole — with the wheel still installed! This business never ceases to astound!
—William McCoy

TENNESSEE

16. DIXIE
LOCATION: Hiram Masonic Lodge, 115 S. Second Ave., Franklin, TN 37064
WHEN: 10:30 a.m. the second Saturday of every odd-numbered months except December, when we meet the first Saturday
MEMBERSHIP INFORMATION: Wanita Quakenbush
EMAIL: mumquake@aol.com
WEBSITE: dixie.nawcc.org

JANUARY MEETING: Dixie Chapter 16 began the new year with two important updates to share. Blake Wylie reported that he finished the initial build of the Chapter 16 website, and it is now up and running. His goal was to keep the site clean, simple, and easy to navigate. Blake also created a Chapter 16 Facebook Group page: facebook.com/groups/nawcc16.

We welcome our newest member, Jerry Maler!

Dixie Chapter 16 meetings begin with a social period, followed by lunch and a program. We encourage attendees to bring a watch or clock for show and tell or to get help with a repair that is frustrating them. Lunch is provided by the Chapter, and members contribute to the potluck by bringing a side dish. Visitors are welcome!
—Wanita Quakenbush

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48. KING COTTON TIMES
LOCATION: Junior League Building, 3475 Central Ave., Memphis, TN 38111
WHEN: Second Sunday of odd-numbered months except for May 21; mart 1:30 p.m.; regular meeting 2 p.m.
MEMBERSHIP INFORMATION: Ray Smith, 901-272-0939
EMAIL: rsmithtn@hotmail.com

JANUARY MEETING: Our Chapter president, Tom Fuller, called the meeting to order. Seventeen members and guests were in attendance. Welcome Edna Wilkerson, who joined our local Chapter today. Edna took over Leroy Wilkerson's number 4,820 with the national organization. Edna also paid dues for John Wilkerson and Marshal Davis. We look forward to Edna, John, and Marshall's participation in future meetings.



Roy Burlingame's clock repair journey started when he found a mantel clock in a landfill in 1975. He moved onto cabinetry and presented on his journey and what he's learned at Chapter 48's January meeting.

In memory of Glen Weeks's birthday, Deb brought donuts from Glen's favorite donut shop. Glen's birthday would have been on January 9. Thanks to Deb for supplying this special treat.

A repair class for 2026 was briefly discussed. More discussion is planned for the March meeting. Members are asked to send items that they would like to have covered in a class to Ray Smith. The following items were mentioned today: replacing a dial, cutting glass, keeping the original works and cabinetry, soldering, re-pivoting, an advance class repairing a 3-train movement, and gear replacement. John Williams has offered his shop again for the class. He will need help with setting up and then resetting his shop for the class.

Edna brought a framed document granting the petition for our local Chapter. The charter is dated December 12, 1963. A list of the 12 founding Chapter 48 members is on the back: Robert E. Sawyers, Guy Beacham, Darwin D. Shipley, R. E. Collins, Walter Cline, John L. Shaw, David

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L. Brown, Joseph S. Talley, J. M. Parker, John H. Payne Jr., Aubrey L. Wilkerson, and Audley L. Wilkerson. The charter was also signed by NAWCC President Urban Thielmann and Secretary Earl T. Strickler.

SHOW AND TELL: Matt Fulmich brought a Christmas present that he gave to himself. It is a 24-hour Gruen watch that was made in the late '50s or early '60s. The watch is in good condition. Curtis Keech displayed a Seth Thomas clock that was a gift from his brother. The clock has an arm that turns every six hours. Curtis believes that it may be an advertising clock by W. W. Carter. Curtis also discussed cleaning solutions that he uses. He does not recommend an alcohol bath. The flash point of alcohol is greater than that of mineral spirits. Curtis recommends mineral spirits or naphtha. Jim Clark brought a clock stand that he made.

PROGRAM: Roy Burlingame prepared today's program. Roy started clock repair in 1975 when he found a mantel clock in a landfill. Clock repair led to Roy making cabinets. Roy spoke on and displayed his collection of wood-turning tools and cases that he has made. For the cabinets that Roy brought, he cut the tree and sent it to the mill to finish. Roy has used his tools and skills to build several original clocks.

Roy built the case that he brought that he uses to store and display his collection of cutting blades and samples of his trim work. Roy won a blue ribbon for the case at the National Convention in 1992. Roy prefers Macomb cutters. He also displayed trim pieces that he had turned using lathes and other tools. Roy seldom uses a router when making cases and doing trim work. —*Ray Smith*

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162. WATAUGA VALLEY
LOCATION: Food City Press Room, 300 Clinchfield St., Kingsport, TN 37660
WHEN: Third Saturday of odd numbered months
MEMBERSHIP INFORMATION: Jim Austin or Robert Turpin
EMAIL: nawccchapter162@gmail.com or jnca.n10ec@charter.net

NOVEMBER MEETING: The meeting was called to order by President Rod Groenewold with 19 members in attendance. Mike Meighan began the meeting with his program on railroad pocket watches, and the business part of the meeting came after the program. Treasurer Jim Austin gave a report on the club's finances. Vice President Wayne Bledsoe then thanked new members who have volunteered to help wind the public clock in downtown Kingsport and for those who have stepped up and volunteered to do programing. Our president then encouraged members to come to our next meeting in January with ideas for the new year.



Mike Meighan presented to Chapter 162 on the importance of accuracy in timekeeping for US railroads at the beginning of the 20th century.

PROGRAM: Mike Meighan presented on railroad grade pocket watches. He brought several examples to show the attendees. There was an extended discussion about who was responsible for keeping time for the railroads.

SHOW AND TELL: Several members brought their own railroad watches to show the group. There were numerous 992b's, a few Bunn specials, a 950b, and several others, with some of the most interesting variations being with the branding, logos, and format of the dials. There were also several tables of tools and parts for sale as a part of our mini-mart that was held before the meeting began. After the meeting, several members stuck around for barbeque, baked beans, potato salad, coleslaw, and cookies. —*Robert Turpin*

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TEXAS

15. SOUTHWESTERN
LOCATION: Pflugerville Public Library, 1008 Pfluger St. W., Pflugerville, TX 78660
WHEN: The third Saturday of each month except August and December
MEMBERSHIP INFORMATION: Pat Holloway
EMAIL: patricia.w.holloway@gmail.com

NOVEMBER MEETING: In November, Pioneer Farms invited Chapter 15 members to hear more about Pioneer Farms and plans for the newly relocated clocks. On a nice, cool morning, 10 Chapter members met with the folks from Pioneer Farms in one of the houses on the grounds. We learned more about the grounds, facilities, and programs in general before moving to the house that will showcase many of the clocks. Many of the visitors are young people from schools and various organizations. There are plans to create engaging signage for each of the clocks to help educate and raise awareness of time in general, as well as each timepiece's place in history. There will also be programs and exhibits that will include details linking Texas history and timekeeping in Texas.

Work has already begun cleaning and arranging the timepieces in a manner that will achieve these goals. There will be additional workdays and opportunities for Chapter members to support this effort and introduce visitors to horological history. *—Pat Holloway*

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124. LONE STAR
LOCATION: 701 S Main St., Grapevine, TX 76051
WHEN: June, August, October, January (see website for dates)
MEMBERSHIP INFORMATION: Evelyn Slough
EMAIL: eve.slough@sbcglobal.net
WEBSITE: chapter124.org

DECEMBER MEETING: The Chapter has really been busy during December, with a lot of work underway for upcoming events: Our first one-day meeting of the year will be held on January 17 at the Founder's Building in Grapevine. Since this date falls halfway between our Regionals, we are planning a special event — the MID-WINTER MINI-REGIONAL. Regular one-day meetings are members-only, but for this special event, we are opening it up to the public. Tables are being reserved for buying, selling, and trading. Hourly auctions of donated items are sure to ramp up excitement for everyone. Chapter 124 has advertised this event via posters distributed to nearby businesses and area antique malls. Weather permitting, we expect a great turnout with lots of clocks and watches trading hands. We are also hoping to entice a few new members and applications for upcoming classes.

Unfortunately, we were not able to reserve our regular March dates for the 2026 Regional. It will be held at the Hampton Inn in Mesquite as usual, but over the weekend prior to Memorial Day, May 22–24, with our banquet on Saturday night.

The 2026 Regional coincides with our country's 250th birthday. We plan to focus our exhibit on 250 years of American clockmaking as well as military clocks and watches. Tim Brownlee and John Acker will be heading the 2026 Regional, and Chuck Edwards will be organizing the exhibit. We are beginning to collect donated clocks, tools, and parts for our Regional auctions.

We have been very fortunate to have several members, past and present, donate clocks, watches, and tools to be sold and auctioned at the Regional. In order to get the hundreds of clocks and other horological items cataloged and prepared for the Regional, we will be scheduling "Regional Prep Events" (sounds better than "Unpaid Work Days") at our Irving facility soon. Please watch for announcements for these events and help us get this going. Look for the registration form in this issue of the NAWCC *Bulletin*. Join us!

An expanded classroom and storage space has been added. Board member Doyle Welch worked with the church representative to acquire more space for our operations. He successfully negotiated 100% more space for a 50% rent increase! This expansion will permit us to have larger classes and more room for storage. Thanks, Doyle!

As of this time, we have completed the move from our small classroom to the new larger facility in Irving. While moving all the tools and equipment, we conducted an

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inventory of Chapter-owned items. A big thanks to Tom Hefner, our vice president, for coordinating the move and setting up the new classroom. Classes currently scheduled are listed on our Chapter website. Please join us for these fun and educational events. It should be a great year for Chapter 124! *—Janet Anaya*

139. SAN JACINTO
LOCATION: Grace Community Church, 1021 Campbell Rd, Houston, TX 77055
WHEN: 8 a.m. the second Saturday of each month
MEMBERSHIP INFORMATION: Gordon Shahin
EMAIL: gtshahin@swbell.net
WEBSITE: chapter139.com

NOVEMBER MEETING: The show and tell session was abbreviated since planning for the holiday party and Herschede clock auction were on the schedule. A few items worth mentioning are: Edward McDowell displayed several exceptionally fine French and UK (London) fusee watches housed in pear cases that were made for the Turkish market; Desmond Rolf demonstrated how a relay will restart a stuck quartz crystal watch movement; and Darrah Artzner showed everyone a mainspring arbor that Desmond Rolf custom made for a Seth Thomas military clock in which Darrah is correcting platform balance and main spring winding problems. The business meeting included issues related primarily to address changes for billing and payment purposes.

PROGRAM: Jeff Zuspan began proceedings by introducing everyone to the history of Herschede clocks. He provided attendees with a handout detailing the Herschede history with a timeline from 1857–1984. He gave a well-deserved recognition to the clock owner for donating all of his fine tall clocks to the Chapter.

Gordon Shahin began auctioning the clocks to members in attendance and those bidding by phone. A total of eight clocks were sold, while the others will be auctioned later in the year. Herschede models such as The Clock, Christopher Columbus, American Gothic, Alexander Hamilton, Christopher Columbus, Marquis DeLafayette, and Haverford were sold, while some higher-valued clocks such as The Duke and Wellington are being scheduled for another auction.



Poor Andy Staton had a vintage German pocket watch holder stolen from him during Chapter 139's white elephant gift exchange.

DECEMBER MEETING: The meeting was replaced by our annual holiday party. There were 45 attendees and more than enough food and drinks were available to everyone. A tremendous thank you to all the volunteers and attendees for making it a successful event.

PROGRAM: The white elephant gift exchange was the main entertainment, and it truly was lively, especially when desirable gifts were stolen and a victim had to choose another gift or make someone else a victim. Someone made out like a bandit and came away with a vintage early German wall-mounted pocket watch holder. The victim, Andy Staton, wasn't so lucky and had to choose another gift in hopes of a decent recovery.
—Darrah Artzner

WASHINGTON

50. PUGET SOUND
LOCATION: Franklin Lodge No. 5, 5 N Rainier Ave., Port Gamble, WA 98364
WHEN: The fourth Sunday of every month except July and December
MEMBERSHIP INFORMATION: Gary Myers
EMAIL: nawcc50@time-hill.org
WEBSITE: nawcc50.org

JANUARY MEETING: Our first meeting of the year took place at the house of Ernie Lopez. We had 30 people in attendance. For the business meeting, Gary gave the

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schedule for the next six months. There will be another house meeting in March; all other meetings will take place at the Franklin Lodge in Port Gamble.

Gary passed around a volunteer list for the PNW Regional. Gary would like to thank all those who volunteered thus far. The regional dates are May 15–17 in Clackamas, OR, at the Hilton Garden Inn.

Jack Goldberg gave us a program update for a Zoom meeting for Chapter 135. The Zoom is at 1 p.m. on February 8. Keith Scobie-Youngs, who restored Big Ben in London, is giving a virtual walkthrough of the Public Time gallery at the National Watch & Clock Museum in Columbia, PA.

The Norwest School of Horology is looking to give a course on tabletop (jewelers') lathes sometime this summer. Gary will provide details when it is known.

Ernie Lopez gave us a museum update on the renovations in Vista, CA. The windows and floors are being finished and installed. The new section should be done around March or April.



Ernie Lopez hosted an open house for Chapter 50's January meeting.

For all of us in Chapter 50, we sincerely thank Ernie for opening his house and providing food and beverages for the members. —*Gary Myers*

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Peggy Goodwin

By Craig Ankeney, NAWCC Fellow (OH)

It is with great sorrow that Buckeye Chapter 23 announces the passing away of the soul of our Chapter, Peggy Goodwin.

Peggy was a dynamo, full of life and energy until her illness slowed her pace. During her life, she used her energy to serve as our Chapter secretary for 21 years, Southern Ohio Regional coordinator for about as many years as well as advisor on Robert's Rules, 501(c)(3) organizations, all things computer related, and advisor on club financial obligations. On the national level, always behind the scenes, she was the program manager for the 2013 National Convention as well as an onsite registration volunteer. She held the same role at the 2022, 2023, 2024, and 2025 Nationals and initiated the planning for the 2026 event.

Peggy was a native of the Commonwealth of Virginia and had a degree in business administration from Radford University. She certainly used that education to benefit the Chapter and NAWCC and her community. She came to Ohio in the mid-1980s as an employee of General Electric Corp. and worked there for 25 years as a computer program manager in the finance section.

Outside of work, her energy went into community service as a city council member, volunteer worker, and coordinator for the Loveland Stage Company Theater, volunteer and coordinator for the Loveland police and fire services, the local food pantry, the farmer's market, the county Adult Education Career Center, local pollinator garden club, and maintenance and attendant at the center city mulch facility. She was also active with community outreach through her role as a Valentine Lady, a select group of Loveland, OH's Chamber Alliance ambassadors. Needless to say, we were blessed to have any of her time to so thoroughly direct our club from behind the scenes. She was equally as comfortable behind the computer screen as she was with dirt under her fingernails and mud on her boots.

I called her Scarlett because of her charming and subtle southern accent (similar to the character in *Gone with the Wind*). When I became vice president and then president of the Chapter, she had already schooled me on how things should be done—gently and gracefully, of course, as a southern lady would do.



Peggy was happily married for 56 years to Mike, who owned a clock repair business that she helped maintain with the same love and intensity that she gave to all her endeavors. She was loved by all for her dedication to service. The soul of Buckeye Chapter 23 has left us with holes in our hearts and lasting memories of how one person can make such a difference in so many ways for so many people.

Peggy was the most dynamic, intelligent, unpretentious, self-directed, dedicated, energetic, organized, genteel, and industrious person to have ever crossed my path. It was Chapter 23's intention to pursue a Silver Star Fellow Award for Peggy, an award she richly deserved, but sadly she passed before that could happen.

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David Andrew Hanna, *NAWCC Fellow*

By John D. Cote, NAWCC Fellow (IN)

David A. Hanna was a husband, a father, a friend, and a clock collector. He was an NAWCC Fellow and a member for more than 50 years. He held every office including the presidency of NAWCC Indiana Chapter 18 and was a mentor to many new and old members all over the Midwestern US. He was a US Army veteran and a graduate of Indiana University.

I met Dave at a Chapter 18 meeting at the beginning of 1994. My dad, a longtime member and collector, had known him through Chapter activities for many years before that. Dave was quick to take me under his wing and make me feel right at home, as he did with many other new members.

Early on, and for a long time, Dave was the mart and registration chair for the large Mid-America Regional put on by Chapters 18 and 26. Dave and the rest of the Regional volunteers built the Mid-America mart to over 400 tables at its peak. Not much of the work of organizing a large Regional meeting like this was computerized at that time. Dave had his own simple but effective system. His knowledge was very helpful to the members who put together the NAWCC's first computerized registration system.

Dave's enthusiasm, his loyalty to the Chapter, to the Regional, and to the NAWCC rubbed off on me as it did on the many members he affected. We had fun. We did good work. We solved problems. At Mid-America, Dave calmed down malcontents and tried his best to make local Chapter members, the Regional attendees, and the people at NAWCC HQ happy. Dave knew most of the weird and wonderful people from dealers to collectors to researchers who make up the membership of our organization. Whenever a new member needed an expert on any horological topic, Dave could make the connection.

Over the years, Dave and I drove together to many NAWCC Regionals and Nationals. After hours and hours of highway time, we got to know each other's stories very well. We started to tell the same stories over again, and it never got old. We made many stops along our way at flea markets, jewelry stores, and antique malls. Dave had an instinctive eye for quality. He always found the hidden gems wherever we were. He was a true and dedicated collector.



Dave in his favorite sweatshirt. PHOTO BY SARAH MAISTO.

For Dave, the NAWCC was always more about the people than the clocks and watches. He once told me that, although he joined the NAWCC because he collected clocks, what he really ended up collecting was friends. His mentoring and friendship over the years was a blessing to many NAWCC members. Dave passed away on January 4, 2026, at the age of 89. I know he will be missed by the many members whose collecting lives he touched.

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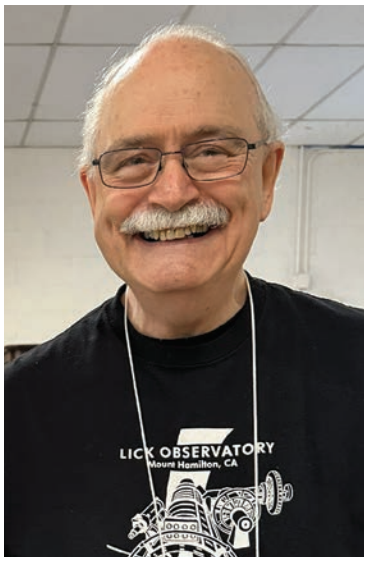
John S. Koepke, *NAWCC Silver Star Fellow*

By Price Russ, NAWCC Fellow (CA)

John Koepke, born on December 17, 1946, passed away on January 18, 2026. He spent his whole life in or near San Pablo, CA. When asked to describe John in a few words, the universal reply can be summarized as "a really nice man" and "always ready to serve." He was one of a rare breed who would step up and take on responsibility for tasks that needed to be done whether at the family, community, or NAWCC level, and he always did it with a smile and kind words.

As a family man, he was a loved husband, brother, father, and grandfather. "Poppop" to his grandchildren. At the civic level, he served as a council member and mayor of San Pablo and on numerous county advisory committees. He also served as president of his local Chamber of Commerce and Rotary Club.

John likely developed his interest in horology while working in his parents' furniture store. He went on to open Koepke Clock and Hearth. He joined the NAWCC in 1971 when he was not quite 25 years old. His horological interests were wide, including collecting early American clocks, particularly those associated with Henry Davies, horologic tools, and early clock and tool catalogs. He also amassed a large library of horological books. Beyond being a collector, he did extensive research on Davies and the British United Clock Co. John gave presentations to local NAWCC Chapters on a range of subjects, such as "Time Service of the Lick Observatory." He was a great help to me for establishing the history of Lick's Shortt-Synchronome.



From 2018 until 2025, John was the sole contact for coordinating the scheduling of Regionals, the National, and symposia, not an easy job. In 2015, he served as the co-chair and registration chair for the Silver Dollar Regional. At the time of his passing, John was president of Horological Tool Chapter 173 and Dr. W. Barclay Stephens Memorial Chapter 5. In addition, he had served as president of Diablo Valley Chapter 107 on several occasions. He was also a member of Sierra-Nevada Chapter 65 and Sacramento Valley Chapter 71.

John was a true friend and a real mensch.

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In Memory Of

We recognize here those individuals and Chapters whose gifts to the NAWCC were given in memory of fellow members.

Edward Beyer given by Peace Pipe Chapter 83
Jon Carpenter given by Donald Norris
Doug Cowan given by Dorothy Jean Cowan
Betty Crouse given by Dorothy Jean Cowan
Mel Crouse given by Andrew & Linda Dervan
Robert Elwell given by Peter Nunes
Peggy Goodwin given by Craig Ankeney
Peggy Goodwin given by Sherry & Glen Kitts
Peggy Goodwin given by Pamela Lindenberger
David Hanna given by Brad Maisto
David Hanna given by Kentucky Floral Clock Chapter 44
John Haviland given by Ralph Ferone
Eric Hooker given by Andrew & Linda Dervan
Hosea Jump given by Donald Norris
Bruce Lewis given by Donna Kalinkiewicz
Myron Mintz given by Pamela Lindenberger
Hugh Overton given by Pamela Lindenberger
Dwight Salley given by Heart of America Chapter 36
George Steiner given by Ralph Ferone
Leonard Steiner given by Nicole Soldi
Leonard Steiner given by Bruce Sable
Sara Steiner given by Ralph Ferone
Hal Travis given by Tennessee Valley Chapter 42
Hal Travis given by Russ & Geni Youngs

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Obituaries

James M. Boyer
63812 Flower Mound, TX

Edward L. Brown
32198 Marietta, GA

Larry E. Collins
54869 Unionville, MO

David A. Hanna
10707 Indianapolis, IN

Theron B. Jeffery
75110 New Freedom, PA

Thomas Litzenberger
12290 Palmetto, FL

Allen G. Schumacher
30541 Peoria, IL

Mike Sheine
156744 Newmarkey, ON Canada

Leonard Steiner
18724 Coral Gables, FL

Lawrence W. Treiman
18391 Los Angeles, CA

Andrew Wyrwicz
15849 Deerfield, IL

In Memoriam articles for the *Watch & Clock Bulletin* are written to mark the passing of an NAWCC member. Submission guidelines are as follows:

- A maximum of 550 words submitted in a Word document. Including birth-death dates is recommended. Text will be edited for grammar, spelling, style, and word count.
- Images are optional, and there is typically a limit of one image. High-resolution images are preferred (a minimum of 300 dpi or 1,000 kb) and must be submitted as a separate .jpg, .tiff, or .pdf file. Do not embed the photo in the Word doc. Images of very low resolution/quality may be rejected.
- The author's name and state must be included.
- Deadlines for In Memoriam articles are the first of the month, 60 days prior to publication (e.g., the deadline for the March issue is January 1).
- Send text and image files to editor@nawcc.org.

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Cryptogram

MARCH/APRIL 2026

A cryptogram is a word puzzle in which one letter stands for another. If you think X = O, it will equal O throughout this entire puzzle. The solution is trial and error. Puzzle solvers, please email your answer, name, and Chapter affiliation to mart@nawcc.org. All emails will be acknowledged (if you receive no acknowledgment, please resend). Mail your answers to NAWCC, Inc., Attn.: Publications Dept., 514 Poplar St., Columbia, PA 17512-2130. Your name will be listed in the next available puzzle section. **(Clue H = Z).**

E X E G P B P W M X A Y X X F D A Q L E E G P

U Y X U F, M X S P E G D A Q S L Q D U L Y D M

G L B B P A D A Q E G L E U L A A X E I P

P C B Y L D A P K J A Y P M M O X J L W P E G P

U Y X U F S L F P W. — I W D L A M P Y H A D U F

The Adventures of Sherclock Holmes – *A Tale for the Ages*



While wandering around the British Museum one afternoon, Dr. Watchson said to Mr. Sherclock Holmes, "By the way, a friend told me a very clever puzzle the other day. Think of four single-digit numbers—X, Y, Z, and T—not necessarily all different, and three people—Ann, Bob, and Cal—two of whom have the same age. The number "XY" (i.e., if X = 8 and Y = 9, the number XY would be the number 89) is Ann's age (i.e., in years). The number "XT" is the sum of Ann's age and Bob's age. And the number "ZT" is the sum of Ann's age, Bob's age, and Cal's age. Can you guess the numbers X, Y, Z, and T? Sherclock? Sherclock, where did you go?" Unfortunately, Sherclock had walked away to explore a different museum wing.

There are many possible solutions to this puzzle (X = Y = Z = T = 0 is not an acceptable solution), but the same two people always have the equal ages. If you find any possible answer (you may give X, Y, Z, and T, or A, B, and C), email your answer, name, and Chapter number to SherclockPuzzle@nawcc.org, and you will be mentioned in the next issue. *(Courtesy of Jim Guinn)*

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Puzzle Answers

JANUARY/FEBRUARY 2026

Cryptogram Answer: How did it get so late so soon? It's night before it's afternoon. December is here before it's June.
— Theodor Seuss Geisel

The Adventures of Sherclock Holmes — An Old Chess-Nut
The solution to this puzzle is found by using the process of elimination. To get you started, notice that in order for space d2 to be attacked by two pieces, the knight must be on either space c3 or e3. This means that the knight cannot be on space b5, and so space a7 must be attacked from spaces e3 and g7. So, space e3 cannot be the knight. Therefore, the knight must be on space c3. Continuing like this we find the king on b5, the queen on g7, the bishop on e3, the knight on c3, and the rook on d8. I borrowed the idea for this puzzle from Martin Gardner's wonderful book *Puzzles from Other Worlds* (Vintage Books, 1981).

Congratulations to the NAWCC members who submitted correct answers! The Chapter with the most solvers was 23. The names are listed below in the order received.

Cryptogram — Jan/Feb 2026

Elgin Eissler
Richard Beach
Jared Carnevali — Ch 37
Edward Sass — Ch 124
Bryant Albin
Steve Hossner — Ch 31
Vernon Vagnier — Ch 23
Daniel Trick — Ch 23
Wayne & Sheila Fugett — Ch 23
Paul Manfredo — Ch 37
David Stillwell — Ch 178, 195
Ken Rothaus — Ch 71, 159, 178
Pam Hall — Ch 32
Margo Brill — Ch 55
Robert Linkenhoker — Ch 178, 180
Pat Holloway — Ch 15, 22, 78, 120, 124, 139, 195
Mike Essi
Mike Graham — Ch 84, 148
Dale Kiesewetter — Ch 12, 141
Barb Cline — Ch 29
Kriss & Jim Connery — Ch 148
Chuck Montrose — Ch 84
John Acker — Ch 124, 139, 168, 195
Chuck Edwards — Ch 124
Donald Newman
Lori Janczura — Ch 107
Kate Beever — Ch 89
Jay Broad — Ch 14
Dick & Dorothy Baker — Ch 13, 55
Terrence Turgyan — Ch 142
Joe Cupurdija — Ch 34
Roland Pizzini — Ch 139
Stuart Gray — Ch 13
Mark Stevens — Ch 3
Christopher Hill — Ch 36
Thomas Stocker
Art Kruppenbacher — Ch 13
Ron Jensen — Ch 34
Fritz Lotze — Ch 59
George Augustas — Ch 124
Ralph Ferone — Ch 3, 47, 66, 159, 194, 195
Mark Hughes — Ch 59
Bill Shrum — Ch 71
Deb Lockwood — Ch 55
Cheryl Comen — Ch 2, 148
Elinor Kline — Ch 23
Rick Shaw — Ch 15
Neil Gallensky — Ch 160
Tom Chapell — Ch 6
Gary Biever — Ch 35
Anne Hemsley — Ch 89
Bob Ballenger — Ch 31
Becky Haney — Ch 16, 42
Jim Hartog — Ch 119
Greg Ruda — Ch 6, 194
Ron Gehauf — Ch 21
Jim Wynne — Ch 34

Cryptogram — Nov/Dec 2025

Pat Holloway — Ch 15, 22, 78, 120, 124, 139, 195
Nancy Burke — Ch 37
Mark Stevens — Ch 3
Ron Gehauf — Ch 21

Sherclock Holmes — An Old Chess-Nut

George S. Augustas — Ch 124
Steve Hossner — Ch 31

Sherclock Holmes — Who Is Einstein?

Steve Hossner — Ch 31
Robert Rentzer

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or email: tmchp@aol.com

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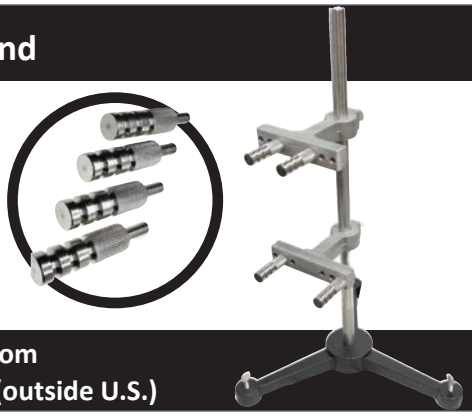

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The NAWCC reserves the right in its sole discretion to reject, edit, or otherwise refuse to publish any advertisement without recourse to the NAWCC. All advertisements received, whether from a member, organization, or other party, are received subject to this condition and without recourse to the NAWCC. Statements of opinion or fact appearing in the Watch & Clock Bulletin are accepted as the advertiser's own. While the NAWCC strives to ensure that only reputable advertisers appear in its publications, it assumes no responsibility for the accuracy and correctness of any statements of its advertisers. Neither the NAWCC, nor the officers, nor any of its employees will be responsible for any losses or misunderstandings arising from any of these listings.

The deadline for receipt of advertisements and payment is 3 p.m. Eastern time on the first of the month prior to the month of publication. The NAWCC reserves the right to edit and place all copy.

Alerts regarding stolen items are listed at no charge in one issue only.



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All pre-registrations received by May 13th 2026 will be confirmed by mail or email. Refunds granted up to May 20th 2026. **After May 20th, 2026, price will be $45.00 at the door.** Only horological and related Items will be allowed to be bought and sold in the Mart. Only members of NAWCC, their partners, their children under 18, and paid public during public hours. (Public times: May 23rd 9am – 5pm and May 24th 8am – noon). **Banquet reservations must be made by May 13, 2026. Hampton Inn room reservations must be made by April 29th, 2026 Discount Code 917**. NAWCC officers, Chapter 124 or members are not responsible for loss, damage, injury, tort or illness. Parking is $8.00 with discount code **lonestar26 at kiosk. Hotel Booking link; Lone Star Regional Chapter 124 2026**

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PHONE ( ) _____ EMAIL _____

ADDRESS _____

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FELLOW_____ STAR FELLOW_____ OLD TIMER _____

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8-FT TABLE	_____	$40.00	_____
ELECTRICITY	_____	$35.00	_____
Saturday NIGHT BANQUET (PRE-REGISTRATION ONLY)	_____	$52.00	_____
Circle one Meat or Vegetarian			
Tailgate session (70 Limited Spaces)	_____	$25.00 (each space)	_____

Make checks Payable to: Lone Star Chapter 124 and Mail to: **Total** _____

Pete Cronos
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March 11–13
Foundational Clock Repair Skills
Instructors: David Lindow and Wayne Andrews
AWCI Headquarters, Harrison, Ohio
This foundational class offers a basic understanding of the most fundamental operations involved in clock repair, restoration, and conservation and to those more advanced a deeper understanding and exposure to different techniques. The class will cover basic lathe operations, burnishing/polishing pivots, re-pivoting, making and setting bushings from scratch, and the basic use of the depthing tool to check bushing work.

March 26–28
Restoring 400-Day Clocks
Instructor: Jerry Faier, CMC21, FAWCI
AWCI Headquarters, Harrison, Ohio
Instructor: Jerry Faier, CMC21, FAWCI
AWCI Headquarters, Harrison, Ohio
This class will focus on traditional 400-day/anniversary clocks. The class will do a complete takedown and servicing (General Movement Servicing) of two 400-day clocks. The class will study the routines for servicing these types of products, both newer and older models, including disc pendulum products an so much more. For additional information go to **https://www.awci.com/events/**.

April 22–24
Foundational Clock Repair Skills II
Instructors: David Lindow and Wayne Andrews
AWCI Headquarters, Harrison, Ohio
This class reinforces the skills learned in Foundational Clock Repair Skills I—including making a wheel hub, spin riveter, dome stake, pusher stake and stump to prescribed dimensions—and pushing those skills forward through continuing to teach lathe work; introducing heat treatment; mounting a wheel blank and arbor to a hub using the spin riveter and dome punch; use of a jeweler's saw; wheel and pinion engagements; the depthing tool; and determining issues with an Indian clock movement.

April 27–May 1
CW21 Exam
AWCI Headquarters, Harrison, Ohio
AWCI is offering two core components and all five available elective components during the certification period. The exam is modular and each component can be taken separately, or multiple components can be taken at the same time. Please review the documents and information at https://www.awci.com/event/cw21-3-3-2-2/. **Deadline to register is March 27, 2026.**



May 4–8
Modern Automatic Watches
Instructor: Jason Champion, CW21
AWCI Headquarters, Harrison, Ohio
The purpose of this course is to teach the student all the fundamentals of modern mechanical automatic watch repair that are most prevalent on today's market. The student will learn how to perform the various diagnostics in evaluating the condition of the various components, cleaning, assembling, adjustments, dialing and casing.

For additional details about specific courses in comprehensive syllabi form, including complete tool lists, visit: **www.awci.com/classes** or contact education director, Jason Champion, CW21, at 866-FOR-AWCI (367-2924), x303. For additional calendar events visit: **www.awci.com/calendar**.

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Tommy Ticker Search

JANUARY/FEBRUARY 2026

In the January/February 2026 issue, Mr. Ticker is on page 46 in the top-right corner of Figure 4. Congratulations to these sharp-eyed readers who found him:

Rich Pozniak (MI)
Gary Wilkerson (MO)
Thomas Stocker (PA)
Andrew Apicella (CT)
Paul Weissbrod (OH)
Gary Taylor (MT)
Jay Broad (MO)
Mark Gallistel (WI)
John E. Durbin (IL)
Mark Mayerchak (NC)
Steve Jacobs (MO)
David B. Johnson (VA)
Joan DeWolf-Benoit (FL)
Robert McAtee (AZ)
Chuck Montrose (NY)
David Shaffe (VT)
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Christopher Hill (MO)
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Peter K. John (AZ)
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Tim Squiggins (SC)
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Terrence Turgyan (NJ)
Bruce Bezel (PA)
Lisa Davis (PA)
Gerald Yeadon (MEX)
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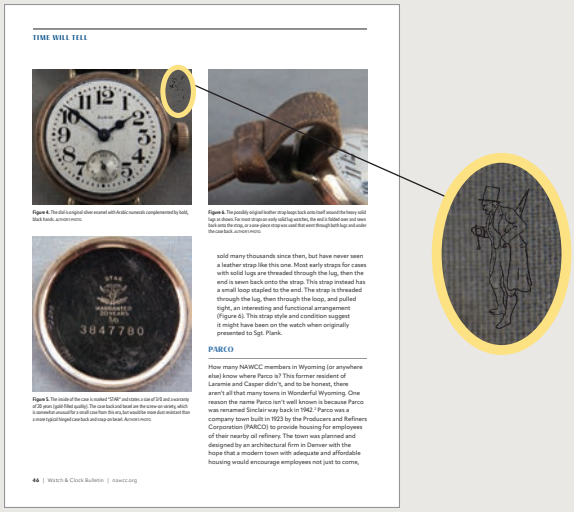
TIME WILL TELL

sold many thousands since then, but have never seen a leather strap like this one. Most early straps for cases with solid lugs are threaded through the lug, then the end is sewn back onto the strap. This strap instead has a small loop stapled to the end. The strap is threaded through the lug, then through the loop, and pulled tight, an interesting and functional arrangement (Figure 6). This strap style and condition suggest it might have been on the watch when originally presented to Sgt. Plank.

PARCO

How many NAWCC members in Wyoming (or anywhere else) know where Parco is? This former resident of Laramie and Casper didn't, and to be honest, there aren't all that many towns in Wonderful Wyoming. One reason the name Parco isn't well known is because Parco was renamed Sinclair way back in 1942.[2] Parco was a company town built in 1923 by the Producers and Refiners Corporation (PARCO) to provide housing for employees of their nearby oil refinery. The town was planned and designed by an architectural firm in Denver with the hope that a modern town with adequate and affordable housing would encourage employees not just to come,

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If you find Mr. Ticker's image as shown here, email editor@nawcc.org with your name, page number, and his location.

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Dates to Remember

Access information about Regionals, the Convention, and the Symposium from **nawcc.org » Events.** All Regional meetings must be scheduled through Regional Coordination Manager Gary Myers, 10015 NE 201st St., Bothell, WA 98011 • 425.215.5907 • gary@geekslounge.com.This listing includes events that have been confirmed as of January 26, 2026.

2026 NAWCC WARD FRANCILLON TIME SYMPOSIUM
May 3–10, 2026 • London, England
Co-Chairs: Cathy Gorton and Rich Newman

2026 NAWCC NATIONAL CONVENTION
June 25-28, 2026 • Lexington, KY
Co-Chairs: Ed Brown and Derek Phelps

MARCH 2026

MARCH 13–14—ARIZONA SUNSHINE*
Host: Valley of the Sun Ch. 112
Cohosts: Keywinders of Arizona Ch. 46, Southern Arizona Ch. 113
Location: Fountain Hills Recreation Center and Best Western Fountain Park Hotel, Fountain Hills, AZ

MARCH 27–28—RIVER CITIES*
Host: Heart of America Ch. 36
Location: Miami County Fairgrounds and Paola Inn and Suites, Paola, KS

APRIL 2026

APRIL 9–11—SOUTHERN OHIO
Host: Buckeye Ch. 23
Cohost: British Horology Ch. 159
Location: Roberts Convention Centre and Holiday Inn, Wilmington, OH

APRIL 24-25—NEW ENGLAND*
Host: New England Ch. 8
Cohosts: Greater Massachusetts Ch. 87, Maine Ch. 89, Green Mountain Timekeepers Society Ch. 109, Connecticut Ch. 148, Granie State Timekeepers Ch. 189
Location: Douglas N. Everett Arena and Comfort Inn, Concord, NH

MAY 2026

MAY 15-17—PACIFIC NORTHWEST*
Host: Mt. Rainier Ch. 135
Cohost: Pacific-Northwest Ch. 31
Location: Monarch Hotel, Clackamas, OR

MAY 22–24—LONE STAR*
Host: Lone Star Ch. 124
Cohosts: Southwestern Ch. 15, Five State Collectors Ch. 80, San Jacinto Ch. 139
Location: Mesquite Convention Center and Hampton Inn & Suites, Mesquite, TX

AUGUST 2026

AUGUST 14–15—EASTERN STATES*
Host: Central New York Ch. 55
Cohosts: Western New York Ch. 13, Toronto Ch. 33
Location: J. M. McDonald Sports Complex, Cortland, NY

AUGUST 21–23—ALL TEXAS CHAPTERS*
Host: San Jacinto Ch. 139
Cohosts: Southwestern Ch. 15, Five State Collectors Ch. 80, Lone Star Ch. 124
Location: Marriott Houston Westchase, Houston, TX

AUGUST 28-29—MID-AMERICA*
Host: George E. Lee-Michiana Ch. 26
Cohost: Western Michigan Ch. 101
Location: Auburn Cord Duesenberg Automobile Museum, Auburn, IN

SEPTEMBER 2026

SEPTEMBER 4–5—MID-SOUTH*
Host: Alabama Ch. 54
Cohosts: Atlanta Ch. 24, Dixie Ch. 16, Tennessee Valley Ch. 42, Rocket City Regulators Ch. 61
Location: Dalton Convention Center, Dalton, GA

SEPTEMBER 19—MKOA*
Host: Sooner Time Collectors Ch. 74
Cohosts: Arkansas Razorback Ch. 62, Sunflower Clock Watchers Ch. 63, Ozark Ch. 57
Location: National Cowboy & Western Heritage Museum, Oklahoma City, OK

OCTOBER 2026

OCTOBER 2–3—NORTH COAST*
Host: Lake Erie Ch. 28
Location: Best Western, Strongsville, OH

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OCTOBER 2026

OCTOBER 16-17—MID-EASTERN*
Host: Philadelphia Ch. 1
Cohost: Keystone Ch. 158
Location: York Expo Center and Wyndham Garden, York, PA

APRIL 2027

APRIL 8–10—SOUTHERN OHIO
Host: Buckeye Ch. 23
Cohost: British Horology Ch. 159
Location: Roberts Convention Centre and Holiday Inn, Wilmington, OH

**Public day offered*

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MESSAGE FROM THE DIRECTOR OF PHILANTHROPY

In the January/February *Bulletin*, I touched on the theme of sharing the stories of time because I thought it was especially relevant for NAWCC members. In this message, I would like to continue the same thread by describing a longtime friend, Sheila. For many years, Sheila ran a business that recorded family stories. More often than not, she explained to me, it was one of the family elders who came to her wanting to create "something meaningful to pass on to the children and grandchildren."

Sheila described how she had developed a process that, through a series of interviews with family members, gathered information that ultimately captured the family's history. Their ancestors. Their traditions. Their dreams. Their trials. Their triumphs. Their passions. Their values. Sheila noted that, at the end of the interview process, the accumulation of stories that would be passed from one generation to the next became something quite powerful—and, she added, those stories often helped the family define their *legacy.*

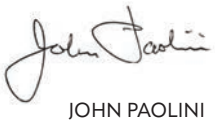
I was puzzled, and I asked Sheila what she meant by this. She replied, "Legacy means different things to different people. It isn't just about family stories, or making a significant gift, or getting your name on a plaque or a building. But, for most people, it is about deciding that certain things that were meaningful during their lifetime should endure."

For each of you, every watch or clock in your collection tells a story, too—of provenance, of craftsmanship, or perhaps of how you came to acquire it. And those stories are indeed meaningful. Whether your treasures will be passed on to subsequent generations, sold to other collectors, or displayed in a museum one day, the stories those objects hold will undoubtedly be shared by many.



Consciously or not, when you joined the NAWCC you became part of a storytelling tradition as well as a collecting tradition. At the same time, you joined a community of like-minded members and affirmed your commitment to the world of horology. Making a bequest is one of the most powerful ways to express that commitment. It is also one of the simplest and most flexible ways to make an enduring gift. When you include the NAWCC in your will or trust, you help ensure that the Association's mission is carried forward—and that your stories will extend to the next generations.

I hope you will consider making a bequest to the NAWCC this year. Thank you for your generosity and for making the Association part of your legacy.



JOHN PAOLINI
JPAOLINI@NAWCC.ORG

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