The NAWCC, Inc. is the world’s largest museum, research library, educational institution, and international community of horological professionals and enthusiasts dedicated to clocks, watches, time, and timekeeping.

We are committed to being the world leader, educator, and advocate for horology and for everyone who is interested in timepieces and horological issues.

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**Official Notice**

The approved minutes of NAWCC Board meetings are available at https://www.nawcc.org/about/document-library.

**Membership**

- **US Memberships** with publications mailed & online: Individual $12, Business $75, Student/Youth $45, First-Time Member Special Discount $58
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**Contact NAWCC for information at 717.684.8261 (option 5) or nawcc.org/join.**

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**Members can update contact and payment information as well as make payments by going to their account at nawcc.org.**
Letter from the Editor

It’s a new year and a new look for the Watch & Clock Bulletin! With the last design change having occurred in the January/February 2017 issue and with 2023 being an anniversary year for the NAWCC, it’s a great time to refresh the journal’s look. We’re quite excited about this modern design and the very readable fonts!

Take a walk down memory lane as our Associate Editor, Michael Schwartz, explores how the Bulletin has changed since it first appeared in 1943 (page 7). While typewriters and the literal cut-and-paste methods are no longer used in producing each issue, we certainly do still count on our contributors providing the same engaging, educational content the Bulletin has always featured.

Not only is 2023 the Association’s anniversary year, it’s an election year for us. Page 60 has details about the upcoming election for the Board of Directors and the Nominating and Elections Committee. The candidates’ bios are included in this issue for your review. Support the NAWCC by voting when you receive your digital ballot.

Laura Taylor
Managing Editor
editor@nawcc.org

About the Front Cover

Ed Fasanella and Tyler St. Gelais discuss the D-shaped escapement of the Timex Model 72 21-jewel watch as well as the fascinating tale of its inventor Georg Garbe. The front cover features this Timex manual wind watch in a chrome case. Their article begins on page 11.

About the Back Cover

On page 25 Adrian van der Meijden and Alan Myers delve into the story of Frederick Seeland’s rise and fall at IWC, Switzerland. Though Seeland seemed to be the ideal candidate to lead IWC, sales at IWC dropped under his leadership. The back cover shows an IWC Seeland caliber 21 hunting case and an IWC caliber 29 developed under Seeland’s management.
Message from the Board Chair

As we start a new year, I thought it would be appropriate to outline some of what is in store for 2023. First in February, the Board will be meeting face to face just prior to the Florida Mid-Winter Regional at the World Golf Resort in St. Augustine, FL. This will be a chance for the Board and our Executive Director to not only meet as a team, but also interact directly with members attending the Regional.

Second, since this is an election year, you will find in this issue of the Watch & Clock Bulletin an outline of the voting process and candidates running for the Nominations & Elections Committee (NEC) and the Board of Directors. The NEC, chaired by Carroll Wolfe, solicits qualified candidates, and manages the election and appointment process for members of the Board of Directors and elected members of the NEC. I would like to thank the NEC for identifying a strong set of candidates with diverse skills and business experience who are willing to put in the many hours of hard work needed to help steer the NAWCC into the future. Please take time to vote.

Third, 2023 will mark the NAWCC’s 80th anniversary. To celebrate, planning is underway for what promises to be a can’t-miss National Convention in July. The Convention will be held in an upscale business-class facility in the heart of historic Lancaster, PA, with what I believe will be an incredibly diverse program that will appeal to those with interests in clocks, pocket watches and wristwatches. A gala event is also being planned at our Museum, only a few miles west of Lancaster where we will be unveiling some exciting changes to the Museum as well as a new special exhibit. In addition, this year’s Convention will be followed immediately by the NAWCC Time Symposium to be held at the Hamilton Club in Lancaster, PA. The Convention and Symposium Committees are hard at work to make this an unforgettable series of events. Stay tuned to the Watch & Clock Bulletin, Mart & Highlights, and the Convention website at natcon.nawcc.org for further details.

Last but not least, many of our Chapters will also be holding Chapter meetings, regional events, and mini marts throughout the year. I would like to encourage members to get involved with their local Chapters, whether it’s serving on a Chapter board, helping with meetings, presenting a program, or supporting a Regional. The NAWCC and your local Chapters are only as good as the members and volunteers who participate.

Rhett Lucke
NAWCC Chairman of the Board
rlucke@nawcc.org

Message from the Executive Director

Around five years ago, an Australian friend recommended that I listen to a podcast about a clockmaker. At the time, I was working weekends in my home workshop repairing domestic clocks for some long-standing clients and friends. My curiosity was piqued, and benchwork was perfect for a long listening experience. The outstanding level of the production, clever editing, and storytelling quickly drew me into the story of John B. McLemore, a clockmaker from Birmingham, AL.

Several episodes in, it began to feel like a radio dramatization. Stories of buried gold caused me to doubt that I was listening to a factual story, and I started to lose interest. This abruptly changed when I heard a very familiar voice. It was my good friend, Duncan Greig, a widely respected horologist from the UK speaking about his regular conversations with John.

With renewed interest, I listened to the end of the series and followed the story to its conclusion. Without any spoilers, I can say the S-Town podcast is powerful and deserves the popularity and acclaim that it received. This was a human story, and clockwork was a peripheral part of it. To go some way toward filling in the details of John’s clockmaking, the NAWCC is hosting an exhibition, curated by Philip Morris, that will focus on the work of John B. McLemore. The exhibit is accompanied by a beautifully illustrated book, S-Town Exquisite Clocks, that details the magnificent French clocks that John restored over the years and focuses on some of the positive
aspects of his life that were not featured in the podcast series.

This exhibit is just one of several exciting events that will be unveiled over the coming months. I am delighted to report that the Museum will be filling an important gap in its collections with the donation of a number of significant European skeleton clocks. These extraordinary pieces will be installed in a new display in the jewelry store front window. The new Public Time Gallery is developing and has catalyzed the donation of an E. Howard 0-size two-train tower clock, which will sit nicely between the 0-size timepiece and the number 2-size striking movement. We also received news of an exciting addition of a phenomenal research collection to the Library & Research Center. We will be sharing details of these donations as they arrive.

Another exciting development is the initiation of a digitization of a collection of glass plate negatives from the Hamilton archives. This project has already yielded some fascinating results, such as this modified pocket watch with electrical break circuits fitted to the dial (Figure 1). Figure 2 shows the then-new dial of a quartz clock that was used in the Hamilton factory and now resides in the Museum (Figure 3). This project has been made possible by the generous support of Dan Fritsch and Mark Cardelucci, who have provided the necessary equipment and funds for an intern to complete the work. The end result will be a rich resource for members.

We are working to provide better functionality on our web pages and Forums. This process of simplifying and updating our communications network will also yield some savings on expenditure in the mid- to long-term. Speaking of communication, we are reviving regular email newsletters to improve the link between HQ and the membership. If you have registered an email with the NAWCC, you should automatically receive them. If you are not receiving them, or would prefer not to, please contact us via newsletters@nawcc.org.

Following discussions at our last National Convention, Member Services Manager Marlo Davis and I are now meeting online with the Chapter Relations Committee and Chapter officers. Our goal is to work together to develop initiatives that will improve communications and, with the Membership Committee, promote the NAWCC to potential members. As an example of how staff can support Chapters, we have a wealth of recorded lecture material at HQ that can be sent to Chapters, should they need a speaker at short notice.

As we get closer to celebrating the NAWCC’s 80th anniversary in July, there will be opportunities for you to get involved in the many preparation activities, if you are able. There are some areas of the collection that need basic preventative conservation. In particular, there are tower clock movements that require light cleaning and waxing. Please watch for invitations to get involved in the spring.

The year 2023 is going to be a special one, and I look forward to welcoming you to Columbia and Lancaster for a great horological celebration.

Rory McEvoy
NAWCC Executive Director
rmcevoy@nawcc.org
NAWCC Members Are Coming To Lancaster!

For NAWCC’s Most Exciting National Ever!

NAWCC’s 2023 National Convention and 80th birthday celebration start Thursday, July 13. Members will gather at the Lancaster Convention Center – and a few miles away – at headquarters in Columbia, Pennsylvania.

- **Thursday Gala:** Talks, tours, and special sponsored exhibits. (Combine your Convention trip with a Museum trip!)

- **Friday:** Mart opens, first to “Early Birds.” Later that day, to “Members Only.”

- **Saturday afternoon:** For the first time in years, the Mart opens to the public.

- **Every day:** Educational talks, exhibit tours, and member workshops.

- **Sunday afternoon & Monday:** 2023 Ward Francillon Time Symposium. (Combine your Convention trip with a Symposium trip!)

**More customers and more time mean more sales!**

The host hotel, the Marriott Lancaster, connects with the Convention Center and has deluxe rooms starting at the incredibly low rate of $119 per night – including parking.

**One-third of tables already reserved!**

Register, select tables and book rooms online today!
NAWCC GALA: National Watch & Clock Museum, 514 Poplar St., Columbia, PA
Mart & Host Hotel: Lancaster Marriott at Penn Square
25 South Queen Street, Lancaster, PA

*Name: ________________________________  *NAWCC #: ________________________________  
Spouse/Partner: ________________________________  NAWCC #: ________________________________  
Child Name/Age: ____________________________________  
Child Name/Age: ____________________________________  

Children Under 18 No Charge  

*EMAIL: ____________________________________  PHONE: ________________________________  
*Address Line 1: ____________________________________  *Address Line 2: ____________________________________  
City, State, ZIP/Postal Code: ____________________________________  
*Required: Please print clearly

Registration

Early Registration Discount

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<td>Friday Early Bird Mart Entrance</td>
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<td>Saturday Night Awards Banquet</td>
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<td>Special Access Needs or Dietary Restrictions?</td>
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Museum and School Open House

- Thursday, July 13th Starting at 9:00 am (Mart Load-in is on Friday)
- Demonstrations & Guided Museum Tours
- Special exhibitions
- Food & Beverage Vendors
- Special Gala Night TBA-

Table Holders

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Note: Table Holders wanting to be next to each other must submit their registrations together. All Table registrations include Early Bird admittance.

I'm staying for the entire show: [ ]  I may leave before the show ends: [ ]

Check [ ]  Money Order [ ] -Payable to NAWCC - Drawn on USA Banks Only

Cardholder Name: ____________________________________  Card Number: ________________________________  
Exp. Date: __/____  CVC: ________________________________  

**Donation - Thank You!**

Total Amount: ________________________________

Register by June 1st to Receive Early Registration Discount. All Registrations Nonrefundable After June 1st.  
** Donations are fully tax-deductible in the USA. To assign a donation to a particular purpose, contact membership@nawcc.org

NAWCC Inc., its officers, directors, members, and convention committee are not responsible for any loss, injury, or tort during this event. Valid NAWCC membership card required for entry. Photo ID required for new and renewing member applications.

National Association of Watch & Clock Collectors • National Watch & Clock Museum • Library & Research Center • School of Horology
514 Poplar Street, Columbia, PA 17512-2130  Phone: 717.684.8261  email: membership@nawcc.org

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Deadbeats, Cuckoos, and Dumb Repeaters
A Look Back on 80 Colorful Years of the Watch & Clock Bulletin

BY MICHAEL SCHWARTZ (PA)

This year we celebrate the 80th anniversary of the NAWCC and its journal, the Watch & Clock Bulletin. In many ways, the publication you’re reading today has changed remarkably little since FDR’s last term in office; this chronicle of horological inquiry and the goings-on of the NAWCC and its members was born more or less fully realized.

However, the decades have brought some change to the journal, and we thought it would be fun to do a bit of time travel to compare and contrast the Bulletin of yore with the one you’re reading now.

In 1943, the first, typewritten issue of the Bulletin (Figure 1) introduced to you, “[a]ear friend,” the Watch Collectors’ Club. “It is to be a live and interesting affair,” proclaimed Secretary-Treasurer L. D. Stallcup. To persuade those perhaps unsure about the new venture, Stallcup ended with a suggestion about as subtle as a Wagner opera: “JOIN WITH US NOW.”

That first newsletter also announced the intention to print in the Bulletin “a ‘Trading Post’” that describes exactly what would become the sibling publication we know today as Mart & Highlights, first published in July 1951.

Then, in June 1946, the Bulletin was printed with a proper cover (Figure 2), a rather sparse affair that says “The National Association Of Watch And Clock Collectors” and, beneath a small sketch of the sundial-inspecting, top hat–bedecked NAWCC mascot, Tommy Ticker, reads the Latin motto Tempus Vitam Regit. This issue describes the process of selecting a motto for the Association:

It was early proposed that some motto be placed underneath our crest or emblem. On the cover of the present issue of the Bulletin this motto has been used:

TEMPUS VITAM REGIT

Figure 1. Page 1 of volume 1, number 1. The Bulletin’s first readers got their watch and clock news on typewritten pages.

Figure 2. After three loose-leaf years, the Bulletin became a professionally bound, 6” x 9” journal.

Figure 3. This hip art deco design was apparently cool enough to use once, but not cool enough to ever use again.
“Time rules our lives” or as one wag translated it: “Our lives are run on time.”

The inside covers feature lists of officers of the NAWCC and the Philadelphia and New York Chapters, directors of the Council, and members of the committees. Along with the new cover came professional printing and binding; the Bulletin had evolved from a glorified letter into a sophisticated little journal.

In December 1949, the Bulletin cover got an art deco makeover (Figure 3). Perhaps the publications team became intoxicated by the infinitude of possible cover changes, because they abandoned the art deco version after just one issue. Its replacement (Figure 4) lasted through October 1951, until it too was pushed aside in favor of a new design in December 1951. This new cover featured a detailed drawing of Tommy Ticker (Figure 5).

Just like Dorothy waking up in Oz, the Bulletin’s cover went from black and white to color (two colors to be precise, red and green) in December 1954 (Figure 6). Color remained a Christmas treat in the December issues for the next two decades. Then in February 1977 the NAWCC embraced a color-of-the-month approach, giving each issue a dedicated cover hue (Figure 7).

The February 1986 issue saw the most radical redesign to date, featuring a new title—NAWCC Bulletin—in a new font, above the first cover photograph in Bulletin history. If all that wasn’t excitement enough, the Bulletin morphed from the 6” x 9” size it had been for the 209 issues since December 1949, into the modern 8.5” x 10.875” magazine standard we recognize today (Figure 8).

Two more design refinements and a modest title tweak would bring us up to date. In 2010, the NAWCC Bulletin became the Watch & Clock Bulletin (Figure 9), and 2017 saw a changed look for the cover (Figure 10). Here we are in 2023, celebrating the 80th anniversary of the NAWCC with an updated design for better readability and a more modern feel. The look is slightly different, but the content remains solidly focused on the technical, historical, and artistic stories of clocks and watches.

From its earliest days, the Bulletin could be relied upon to present readers with serious horological fare such as 1968’s “Regulator Defined, a Discourse,” or “The Secret of the Japanese Clock Dial (Part III)” from 1976. There is an equally long (if less robust) tradition of authors writing for laughs. Consider Roy Mosoriak’s 1944 piece on “An Early American Glass Watch — The Whiskeybury.” Including a photo as a helpful visual aid (Figure 11), Mosoriak listed the clock’s virtues: it “requires no

Figure 4. The publishing team was more pleased with this version, which replaced the art deco cover and was used for a year.

Figure 5. NAWCC mascot Tommy Ticker was presented in finer detail.

Figure 6. A holiday gift to the NAWCC in the form of a color cover in the December issue.
winding” and “always shows the right time.” In addition, “it enables its wearer to carry fire water into the most polite company without the embarrassing bulge of a hip flask.” As to its provenance, Mosoriak says, “This must necessarily be an unfinished mystery. You will agree we (you and I) from this bout with the Whiskeybury Watch are like the famous champion prize fighter who, after recovering from a knock-out blow, was asked to tell immediately to a million radio listeners of his experience. He said: ‘The first thing I knew, I didn’t know nothin’.”

While the journal’s look has changed over the years, the most fundamental quality of the Bulletin remains—and will continue to remain—the thoughtful and thorough contributions of NAWCC.
members to expand the world of horological knowledge. That would be a worthy endeavor in its own right, but what makes the Bulletin special is that it’s not just a scholarly journal; members’ love for their subjects animates their work and the result is a sharing of knowledge as well as that love.

And after all, isn’t love the reason we all joined this gang in the first place?

**Highlights and Quips from the Pages of the Bulletin**

**October 1949:** “All back numbers of the Bulletin are still available. The price as fixed by the Council is $1.00 each. Frankly some of the early numbers are not worth it but it is a great satisfaction these days to be able to get a complete file of any publication.” —Willis I. Milham, Editor-in-Chief

**October 1957:** “Members You Should Know— ‘[Bugs Bunny]’s’ zany greeting and ninety-five percent of all the other voices you’ve heard with Warner Brothers Cartoons are from the vocal chords of our good member, Mel Blanc. . . . The Blanc watch collection began in 1946 when [his wife] Estelle presented Mel with a Patek-Phillipe minute repeater as a birthday present. It now includes watches of every type and period. . . . His favorite is an automatic repeater by Pierre Le Roy, which rests near a nice example of the work of the father, Julien Le Roy.” —Unattributed

**December 1962:** “The season for New Year’s Resolutions is about upon us, so here is something to think about:

TEN WAYS TO WRECK A CLUB

1. Do not go to meetings.
2. If you do go, be late.
3. If it is bad weather, don’t even think of going.
4. When you do attend a meeting, find fault with the President and other officers.
5. Never accept an office. It is much easier to sit back and criticize.
6. If you should be appointed on a committee, don’t go to the meetings. If not appointed, get peeved about it.
7. When your opinion is asked, reply that you have nothing to say. After the meeting tell everyone how things should be done.
8. Do nothing more than is absolutely necessary but when others do the lion’s share, tell everyone how the organization is run by a clique.
9. Don’t worry about paying your dues. Wait until you receive two or three notices from the Secretary. That will keep him from running out of anything to do and getting lazy.
10. Do not bother about getting new members. Let the ones who do all the other work do that too.

And now it gives me great pleasure to wish you a Healthy, Happy New Year and one filled with good honest collecting. Faithfully yours, James W. Gibbs [president, 1961–63]”

**February 1973:** “Random Notes from the Editor’s Desk: With this issue we complete twenty years as editor. To break with precedent, we have decided not to preach nor admonish in this space. (This issue only!)” —Earl T. Strickler
A DeLong-Type Escapement in a Vintage Timex Movement Invented by Georg F. W. Garbe?

BY EDWIN FASANELLA, NAWCC FELLOW (VA) AND TYLER ST. GELAIS (NH)

Introduction
Yes, believe it or not, it is true! While discussing Timex watches with my co-author Tyler St. Gelais, who collects Timex prototypes and has a bench from a famous Timex designer (Georg Friedrich Wilhelm Garbe), I mentioned that I was impressed with the simplicity and rugged engineering of the vintage mechanical Timex watches. As John Cameron Swayze would say in the long-running Timex commercial, “It takes a licking and keeps on ticking!”

Back in the 1970s, I helped out part-time in a repair shop in Florida that had a good business in Timex repairs and sales. I liked watch mechanisms and had a little spare time from my teaching job at Stetson University, so I could teach myself watch repair. If the Timex movement did not run after cleaning, it was easy to exchange movements with the Timex Service Center in Arkansas. (Only the dial needed to be removed from the movement for ultrasonic cleaning.) Timex also supplied very robust assortments of crystals and stems with crowns attached. Most Timex movements in the mid-1960s and afterward had information on the bottom of the dial as to the case style, model of the movement, and year made, which could be used with a chart to determine the crystal and stem/crown combination. Unlike other watches, the crowns were not replaceable as they were friction fit to the stem. Also, at that time Timex had a very good repair manual that was helpful.

While discussing Timex watches, Tyler, who has an encyclopedic knowledge of all things wristwatch, asked, “Do you know that Timex had a DeLong-type escapement in its mechanical 21-jewel movement?” That shook my memory to the time an old-timer (and now I am one) approached me at an NAWCC Convention, showed me his watch (I believe it was a 16-size Hamilton), and asked, “Have you ever seen a DeLong escapement?” I replied, “What is a DeLong escapement?” So, he kindly pointed to the upright pallet jewels poking up toward the watch plates and showed me the different-looking escape wheel. I said, “Wow! That must be rare!” He replied, “Sure is.” I was too embarrassed to ask if it was for sale because I knew, if rare, I could not afford it on an assistant professor’s salary.

The Timex 21-Jewel Watch
I had a fairly good knowledge of Timex movements from the 1960s through 1970s, and I always kept Timex 21-jewel vintage watches when I found them, as I thought they might be collected someday. However, I did not pay much attention to the escapement. I thought it was a pin pallet with round
cylindrical jewels. I did not notice that the jewels were actually “D” shaped and that the escape wheel was different. (Please recall that the movements were not taken apart, just cleaned whole!)

In Figure 1, a typical Timex 21-jewel watch is shown. There is a small number at the bottom of the dial that is not readily visible while the movement is in the case. The number on the dial in Figure 1 is 65177267. The first four digits are the catalog number, and the last four digits indicate a Model 72 made in (19)67. In Figures 2A and 2B, the back of the movement and the escapement are shown, respectively. In addition to the manual wind version, an automatic was also produced by adding a rotor. Automatic watches, also called self-winding, are very popular mechanical watches. These watches, as all our watch enthusiasts know, have a large pivoted rotor (swinging mass) that winds up the mainspring of the watch due to arm movement. The automatic watch also has the advantage of keeping the mainspring wound up in a “sweet range” that provides almost constant force. Hence, the amplitude of the balance wheel remains fairly constant, leading to better timekeeping.

Before exploring the D-shaped escapement of the Timex 21-jewel watch in more detail, let’s look at the life of its inventor, Georg Friedrich Wilhelm Garbe. One may wonder why Timex developed a jeweled watch in the 1960s and how Georg Garbe came to be involved. These questions are addressed by Tyler, who was able to interview Garbe’s daughter and grandson.

**Georg Frederick Wilhelm Garbe (1908–69)**

Georg Garbe was born in Dessau, Germany, in 1908. His father, also named Georg Garbe, had a watchmaking shop in Dessau (Figure 3) and taught his young son the trade. From 1924 to 1928, young Garbe furthered his studies at the German watchmaking school in Glashütte. The war years were incredibly tough on Garbe and his family. He had set up a watch and chronometer business in Hamburg with a business partner. However, as a staunch anti-Nazi, Garbe was arrested by the Gestapo for throwing a party official into the street when he tried to recruit him and his apprentices to join the Nazi party. This resulted in a most unusual and cruel punishment of three months’ labor at a chocolate factory; Garbe was diabetic, which was known to the authorities. His apartment in Hamburg was bombed by the Allies, resulting in the family moving back to Dessau where Garbe’s aging father still ran the family shop. After more Allied bombing, the capitulation of Germany, and a daring escape under Soviet rule, Garbe and his family found peace on the picturesque Lake Constance overlooking the Swiss Alps. Garbe had made a deal with the French, building gyroscopes for the French government in return for a safe home for him and his family.

After living in Paris, followed by time spent in Germany, Garbe was offered the role as head of the newly formed Christiaan Huygens school in Rotterdam (Figure 4). He spent several years there teaching the youth of the Netherlands, as well as his young daughter Anna, to be master watchmakers. During this period, Garbe was approached by the US Time Corporation about joining the company. His demands were simple: a job for himself at good pay in research and development (R&D) and another for his young protégé, his daughter Anna. The head of R&D at US Time during this period was a young Swiss-born engineer named Paul Wuthrich. He immediately recognized the value of
having someone on staff with Garbe’s knowledge and expertise, and strongly encouraged upper management to accept his offer and bring him on staff.

The 1960s were a wonderful time for the family. Garbe had left prestigious firms such as A. Lange & Söhne and Jaeger-LeCoultre to go to Timex, but he immensely enjoyed his work. He also became quite active in the NAWCC around this time, writing numerous articles for the Bulletin and writing several books on watch escapements. He became close friends with horologist and master watchmaker Henry B. Fried, among others. His daughter married the young Paul Wuthrich, and everything seemed to be perfect in their lives. Sadly, in 1969, while taking photographs in the woods of Massachusetts, he died at just over 60 years of age, leaving an interesting but not so well-known legacy except to those who knew him and his accomplishments personally.

Details of the Timex D-Shaped Jewel Escapement

Checking the Timex Repair Manual and Parts Catalog, one finds the following description of the Timex Model 72:

The Timex Model 72 is readily distinguished from other Timex movements by the number of jewels and the small, gracefully decorated movement plate. . . . Another important feature of the Timex Model 72 is in the escapement. Timex has developed a jeweled lever escapement which functions exactly as the conventional escapements, but eliminates the danger of loose pallet stones. In conventional jeweled club-tooth lever escapements, the pallet stones lie horizontal to the plane of the lever and are normally shellacked in place. This type of construction leads to frequent loosening of the stones during cleaning. The Timex design, however, uses pallet stones vertical to the pallet lever which are driven permanently in place.4

In addition to the reasons given above, one finds there are other important reasons why Garbe came up with this novel, patented escapement design.5 The patent is quite long and has multiple figures and a lengthy written description. Garbe describes in his patent why his escapement is a big improvement over the original DeLong D-jewel escapement. A top plan view from the patent is shown in Figure 5, with the standard club-foot escapement invented by Breguet in 1793 on the left and the Garbe D-shaped jeweled escapement on the right. As Garbe noted, the accuracy and efficiency of the escapement are important determinants of the quality and timekeeping of the watch. Timex was known for the robustness of its movements and reasonably good timekeeping for an inexpensive watch. The Garbe escapement, even with jewels, was quite rugged and would not “overbank” due to shock, and it kept better time than the previous Timex escapement. The Garbe escapement did not have banking pins like the standard lever escapement. Instead, the D-shaped jewel engaged with the escape wheel in a novel way to avoid extensive escapement adjustment as required by the standard jeweled lever escapement. In the standard escapement
where the square section jewels are shellacked into the pallet, it is a very time-consuming job to heat and move the jewels and the banking pins for proper alignment during manufacture. This job required a very skilled worker. Timex was always looking for ways to improve their watches and also reduce its manufacturing cost.

**Notes and References**

1. *Timex Repair Manual and Parts Catalog* (Little Rock, AR: Timex Corporation), 72.1–72.8. The original three-leaf binder was published in the 1960s and covered models 1961 and on. New pages were sent by Timex as new movements were introduced.


3. Details about Garbe’s life come from a variety of sources. Tyler St. Gelais interviewed Georg Garbe’s daughter, Anna, in person in the fall of 2017. He also interviewed Garbe’s grandson, Marc Wuthrich, who had received details from his father who had worked closely with Georg. Tyler also had access to Anna’s unpublished memoirs and Georg’s own personal diaries.


Vox Temporis

Have You Thanked Your Reverse-Painted-Dial Artist Recently?

I have long been convinced that partnerships are critical to any level of project completion, both in the business world and with timepieces, clocks, and instruments.

About one year ago, I was blessed to have the support of James Campbell in the NAWCC's Fortunat Mueller-Maerki Library & Research Center and, thanks to an NAWCC Forum reference, reverse-painted-dial artist Lee Davis of York, PA. Lee did a wonderful job of restoring the badly deteriorated reverse-painted dial on this E. Farcot clock (Figure 1). Note that any unique variations in the dial layout are original to the piece, and upon my instruction, were retained during the dial restoration.

Eugene Farcot was a 19th-century Parisian clock designer known for the unique. The serial number helps date this timepiece to circa 1881–82. The pendulum and hour hand fit Farcot's flair for incorporating vintage styles. The 24-hour dial, now wonderfully restored, is an example of Farcot's design, showing daylight on the top half and night on the bottom. The sweep minute hand is not original, and a search continues for an appropriate replacement.

Detailed documentation before cleaning is critical for any restoration project; fingerprints, replaced bushings, and surface marks indicate previous work. Gentle, non-ammoniated cleaning techniques were used for this timepiece, respecting the age of the brass and the importance of this timepiece to the family.

Professional dial restoration was expertly completed by Lee Davis and supported the restoration of this wonderful piece. The owners were delighted to have their family history preserved for future generations to enjoy.

—Ian Graham (CAN)

Figure 1. (Left) The E. Farcot clock before restoration. (Right) Finished dial restoration. AUTHOR'S PHOTOS.
Daneker Clock Co.

BY ANDREW H. Dervan, NAWCC SILVER STAR FELLOW (MI)

While researching Colonial Manufacturing Co. in Zeeland, MI, I spoke with a former Colonial employee, Charlie Turner. He mentioned he had worked at Daneker Clock Co. for almost 20 years before coming to Colonial after Daneker shut down its operations. While at Daneker, Charlie focused on ensuring that movements worked properly before they were installed in cases. His comments about Daneker intrigued me, as I was unaware of the company or its products. Charlie and I spoke several times by phone, and we discussed Daneker Clock Co. at length. He provided information on the company and loaned me a company catalog. He had some difficulty remembering details, as more than 40 years had passed since he left Daneker, and he did not want to confuse his Daneker work experience with his time at Colonial. Charlie joked that I was really pressing his memory, but he was very helpful in providing details for this article.

Daneker Clock Co. was the first US company founded after World War II to manufacture grandfather clocks (Figure 1). Grandfather clock production exploded in the mid-1960s due to demand by baby boomers, and more companies were formed to manufacture grandfather clock cases and acquire movements from Germany. Demand peaked in the early 1980s and began to decline in late ’80s, leading to company shutdowns beginning in the late 1990s.

In 1942, Charles Rutherford “Brud” Daneker Jr. and Million Elliot Daneker, both sons of Charles Rutherford Daneker Sr. (Figure 2), founded Million–Rutherford Co. in Fallston, MD, a semirural community northeast of Baltimore. Charles Jr. was born in 1910, graduated from Bel Air High School in 1929, and graduated from Western Maryland College in 1936. Million was born in 1915, graduated from Bel Air High School in 1929, and attended the University of Maryland.
Charles Jr. and Million set up a woodworking plant; their company’s first products were wooden key boxes for Western Electric and Bell Laboratories, as well as various wooden plaques for mounting military unit insignias, such as the 101st Airborne. The wooden military plaques became popular items.

During World War II, Charles Jr. enlisted in the army, served in the infantry, and later transferred to the US Army Air Corps where he trained pilots. After the war he was discharged as a major and worked in California at Hughes Aircraft as an aircraft designer, but he left in 1953 and returned to Maryland. Million spent the war working on the assembly line building airplanes at the Glenn L. Martin Co. plant in Middle River, MD.

In 1947, Charles Sr. retired as senior manager with the Chesapeake and Potomac Telephone Co. in Maryland for Harford and Cecil Counties and part of Baltimore County. Daneker Clock Co. literature explained that he had been collecting and studying clocks for many years and noted that no companies in the East manufactured grandfather clocks. Charles Sr. urged his sons to consider refocusing their business and using their woodworking experience to manufacture smaller grandfather clocks for modern houses with lower ceilings (Figure 3). Both brothers sensed a market for these clocks at the time, as soldiers returned from the war, married, and purchased houses. Charles Jr. promoted the idea that grandfather clocks were furniture and should be sold through furniture stores rather than jewelry stores. Just after World War II ended, Charles Jr. had observed that Colonial Manufacturing Co. in Zeeland, MI, was manufacturing more furniture than clocks, and he sensed an opportunity for a company to specialize in making only clocks.

The two brothers and their father made numerous visits to southern Pennsylvania to examine the various early American grandfather clocks and furniture produced there, specifically their designs as well as the manufacturing and finishing techniques. They even purchased some antique and contemporary grandfather clocks and disassembled them to understand their construction and finishes. Charles Jr. traveled to Europe, visiting museums to study earlier European designs. He met with numerous clockmakers to discuss their new designs and marketing strategies, and he spoke with several clock movement makers in the Black Forest region of Germany to understand their products. The Danekers decided that all of their grandfather clocks would contain a Westminster movement that chimed on the quarter hour and struck on the hour.

Based on what they learned from their trips, Million redesigned the Million-Rutherford Co.’s Fallston factory to produce clocks. He realized the clocks’ appearance and finish were important, so the company carefully selected the best-quality woods—mahogany, cherry, walnut, maple, and pine—for its cases. Million incorporated a labor-intensive finishing process for the clock cases: sanding and filling, applying and wiping glazes, sealing, and rubbing a lacquer finish, all by hand. Million hired and trained skilled workers for the case-finishing process.
Million-Rutherford Co. purchased most of its clock movements from Mauthe GmbH Uhrenfabrik in Germany. It also purchased a few movements from England for specific customers, but the brothers believed the German movements were better. The clock movements were run before installing them in the finished cases. Another German company supplied the solid brass dial with a silvered numerical disc and solid brass fittings and hinges. The clock dial was signed “Daneker” using the signature of Charles Sr.’s wife (Figure 4); a name tag identifying the model was attached to each clock’s backboard behind the pendulum rod; and a four-page owner’s booklet titled Daneker Floor Clock Created by Million-Rutherford Co. Fallston, MD was included with each clock. Million-Rutherford designed special shipping cartons with wooden frames banded onto the tops, with extensions to alternate corners, to ensure its clocks arrived undamaged for its customers.4

In 1953, the business began producing grandfather clocks. The Daneker brothers divided the workload: Charles Jr. designed the clocks and directed the sales representatives; Million supervised the factory and the case finishing. They established a sales network that represented their clocks across the United States, Canada, Mexico, and Puerto Rico. The salesmen were manufacturer representatives who worked with multiple companies in the furniture industry, a number of whom represented La-Z-Boy. Million-Rutherford Co.’s clocks were sold at major furniture retailers in the United States, including Wanamaker, May Co., and Macy’s. Charles Sr. acted only on an advisory basis. Million’s son, Million Jr., worked at the factory, was a sales representative, and also delivered and set up clocks in the Baltimore area.

The Fallston factory employed about 75 workers, many of whom had worked there since mid-1940s. It was not uncommon to find more than one generation of a family working there. Beginning in the early fall of 1953, the factory really went into high gear, building clocks for Christmas, the busiest season for clock sales.

Firsthand Accounts of Daneker Clock Co.

In March 2015, I placed an advertisement in the Aegis newspaper (Harford County, MD), seeking information from former Daneker employees. Deb (Monk) Williams spoke with her mother, Phyllis Monk Campbell, and sent me some interesting stories about her family members who worked at Daneker Clock Co:

I remember the plant and driving with my mother to pick up my dad and grandmother.

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Figure 5. Tom Monk designed a grandfather clock that was never produced. COURTESY OF DEB MONK WILLIAMS.
My dad, Thomas [Tom] Monk, began working at Daneker in 1955 after serving several tours in the Marines during the Korean War. His brothers, Burns and Robert [Bob], also worked there. Dad was the assembly line foreman; he helped design clocks as well as paint the Schoolhouse clock dials. My Uncle Burns was a finisher, and my Uncle Bob worked various jobs over time. Several of my dad’s nephews and cousins also worked there at various times.

My grandmother, Ethel Sexton on my mother’s side, began working there in early 1961 as a rough sander; she worked until the plant closed. She had the opportunity to purchase a clock that is still in the family. My mom, Phyllis, began working there in late 1961. She recalls Million telling my grandmother that he was “going to give the young lady a chance,” meaning she was going to have a chance to work. My mother was a finishing sander; she met my dad, and they got married in 1964 and she worked there until my birth in 1966. She returned to work in 1968 and left in 1970 when my sister was born.

My fondest memories are of my grandmother and dad driving to work every day. They carpooled and picked up other workers on the way. My grandmother always came home with masking tape wrapped around her fingertips and would bring me candy from a coworker named Ms. Lavenia Roberts.

The plant workers were divided over unionizing the plant; my dad supported the union. He left the company because of the union dispute; however, neither he nor the Daneker brothers harbored ill will. When they closed the company they called him, because they had a prototype of a grandfather clock that they wanted to give him. My dad had designed it but the clock was never put into production, so I have a one-of-a-kind Daneker grandfather clock that my dad designed to satisfy the modern 1970s style. [Figure 5]

My parents made lifelong friends at the plant.

Making Daneker Clocks

Daneker’s case manufacturing process was significantly different than the other clock factories at that time. Its clocks were manufactured in small production runs of 25–50 clocks based on orders rather than for the mass market. The case shop would cut wood into appropriate lengths and subassemble pieces into five major floor clock case sections: hood minus door, feet, base with the back attached, midsection sides and front with open back, and trunk and hood doors. These sections would be sent to the sanding department and then the finishing department. After finishing, the sections were moved to the assembly building where the cases were built from these major subassembly sections; in the final assembly, the hardware, glass, and movement were installed.

Unlike some companies that determined the amount of time allotted to assemble each clock and paid workers for the number of clocks assembled per the timing schedule—faster assembly yielded a bonus—Daneker had no timing schedule. Workers were paid by the hour and were not under pressure to assemble the cases quickly, which was beneficial since occasionally there was some difficulty in getting all subassemblies and doors to fit properly. The completed clocks were then boxed up and ready for transport. Daneker had a small warehouse to hold only a few days’ worth of production; its
typical production quantity was about 150 clocks each week.\(^6\)

Daneker’s first product catalogs were simple price sheets, but over time the company developed more elaborate product literature. It also expanded its product line to include wall and mantel clocks and even offered a spinning wheel that was a functioning reproduction of a Colonial flax wheel (Figure 6). I have acquired two undated catalogs that provide good snapshots of the company’s products and advertising.

Daneker Clock Co. initially purchased its movements mostly from Mauthe in Germany; however, Mauthe had financial difficulties in the 1970s, and I am unsure from whom the company purchased movements afterward, possibly Urgos. The movements arrived by ship from Germany; the company would send a truck to the Baltimore harbor and wait for its movements, packed in wooden crates, to be unloaded. Later movements came in heavy cardboard boxes. Originally, the company purchased weights with the movements, but later it arranged to have the weights made by a company in Pottstown, PA. Mauthe produced a spring-driven Westminster chime movement (W500). One version of the movement was for mantel clocks, with the hammers mounted in a row beneath the movement, and the second version was for grandfather clocks, with hammers mounted on the back of the...
movement. Daneker made a number of smaller-case grandfather clocks using the W500 movement, because the cases were too small to accommodate weights or a large pendulum disk.  

Since the company was near Washington, DC, many of its grandfather clocks had generically political names: the President (Figure 7), the Senator (Figure 8), the Capitol, the Diplomat, the Ambassador, the Independence, the Don (Figure 9), the Queen, No. 6 (Figure 10), the Cumberland, and the Williamsburg. The President must have been a big seller, because I have seen several of them for sale on the internet. The grandfather clocks ranged in height from The Queen, No. 6, at 63” (the shortest) to the President at 79 ½” (the tallest). Daneker’s clock designs were a traditional broken arch case (Pennsylvania) style, a more contemporary look for the Moderne (Figure 11), and even a flattop design for the Don. Clocks were typically supplied with one of two finishes: “C-deep, hand rubbed” or “D-slightly distressed.” Two dial options were available on some models: moving moon or “Tempus Fugit”. Most of the floor clocks contained a weight-driven, pull-up, pendulum-controlled Westminster chime movement; however, a few floor clocks—the Queen, No. 6, and the Moderne—contained a spring-driven, pendulum-controlled Westminster chime movement, the Mauthe W500; the weights and chains were nonfunctional and were only for aesthetics.
Few products were carried over between the two catalogs, which indicates that Daneker was constantly changing its products in response to model sales, marketplace changes, and competition. Also, the clocks were photographed against different backgrounds for each catalog. One catalog, which I presume was an earlier one since it had early company information not found in the later catalog, offered 11 grandfather clocks, three wall clocks, and three desk and mantel clocks. It contained an eight-page introduction with an image of Charles Rutherford Daneker Sr. dressed in work coveralls seated at a desk in a workshop and it included the history of the Daneker clocks (see Figure 2). Mantel clocks contained a spring-driven, floating balance Westminster chime movement. The second catalog offered seven grandfather clocks, two wall clocks, and four shelf clocks. Besides grandfather clocks, Daneker offered a traditional steeple clock (Figure 12), pillar and scroll (Figure 13), schoolhouse (Figure 14), banjo clock (Figure 15), and railroad models.

**Struggles for Daneker Clock Co.**

On November 27, 1969, the main clock assembly building was completely destroyed by a fire fueled by gas lines and plywood stored in the building. The fire caused an estimated $500,000 in damage to approximately 700 grandfather clocks and most of the unassembled movements. Three additional buildings on the property were saved during the multi-alarm fire. Fire trucks hauled water from the Maryland Water Works Co. to the scene and faced severe problems, including water spilling and icing the road, making driving treacherous. The company quickly rented a building a short distance away and transported the finished components there and began assembling clocks while the clock assembly building was being rebuilt. The major holdup for assembling the clocks was obtaining the initial quantity of replacement movements. The new clock assembly building featured a new showroom and a museum dedicated to the history of the clock business. The company continued to produce and market clocks, but the fire caused a significant setback to their operations. 

![Figure 13. Daneker pillar & scroll. COURTESY OF AN EBAY SELLER.](image1)

![Figure 14. Little School clock. COURTESY OF CHARLIE TURNER.](image2)
assembly building was larger than the original building (Figure 16). Both brothers had negative experiences in dealing with unions while working in various factories during World War II. In the fall of 1972, pro-union workers at Daneker voted to join the United Furniture Workers of America. Shortly afterward, the Daneker brothers decided to close the factory. Million E. Daneker Sr. told reporters that he was “tired and wanted to take a long rest.”

**Conclusion**

In the early 1950s, the Daneker brothers sensed a potential market for grandfather clocks for World War II servicemen returning home, getting married, buying houses, and starting families. They retooled their woodworking factory and began designing and producing grandfather clocks with smaller cases. The Daneker Clock Co. was initially successful, but competition increased in the early 1970s from many companies—Howard Miller, Ridgeway, Trend and Sligh, and Pearl—that entered the marketplace along with existing companies like Colonial and Herschede. In 1972, the factory workers voted to form a union. Both Daneker brothers, who were in their early 60s, decided to close the company rather than deal with the union.

**Notes and References**

4. As gathered from Blaisdell, “Clocks with Class”; discussions with Tom Daneker; factory site

![Figure 15. Daneker banjo clock. COURTESY OF AN EBAY SELLER.](image)

![Figure 16. Layout of the Danekers’ property. AUTHOR’S ILLUSTRATION BASED ON INFORMATION FROM CHARLIE TURNER.](image)
sketch provided by Charlie Turner, former Daneker employee.

5. Email correspondence in April 2015 with Deb (Monk) Williams, daughter of former Daneker employees.


9. Discussions with Tom Daneker; see also Rasmussen, “Million E. Daneker.”

About the Author

Andy Dervan joined the NAWCC in 1997 and found clock collecting fascinating. He has found researching the histories of various makers and companies as challenging and exciting as collecting. His principal collecting interest is weight-driven clocks from the late 19th and early 20th centuries. He recently retired from DuPont Performance Coatings and spends some of his free time writing articles for the Watch & Clock Bulletin and volunteering at the Henry Ford Museum.

Appointment in Time

Take me, doctor, for a moment
In your Timing cabinet,
Under the loupe please decide
What organ I must transplant!

I have arthritis in my wheels,
To rotate I need some pills...
In my life during decades,
I forgot when I was made!

By Dimitrie Vicovanu, an NAWCC member and watchmaker for more than 30 years, working in New York City’s jewelry district.
Prologue

The International Watch Company (IWC) was founded in 1868 by F. A. Jones. He had been an employee at the E. Howard factory in Boston and left America to set up IWC in Schaffhausen, Switzerland. He pioneered the “American method” of watchmaking in Europe. This term is used when a factory was established in which all the watch parts were made by machinery and the finished watch was assembled. Although ébauches were manufactured by machinery at the factory, most of the going parts had to be outsourced within Switzerland. The timely delivery of parts was sometimes problematic, so in 1875 IWC opened a new factory to manufacture the complete movements. Under Jones’s leadership, the entire production was exported to the US. Problems beset the company that could not be fully resolved by Jones, and in 1876 the factory declared bankruptcy. A number of events—the collapse of the North American watch market was the most significant—that caused the bankruptcy, only four years after Jones had started the production. A rebirth of IWC began with the arrival of Frederick F. Seeland in 1876.

Introduction

After the forced departure of Jones at IWC, the board of directors needed a new CEO. It was clear that the market had to be expanded, cheaper watches of reasonable quality had to be mechanically produced, and therefore the American system of watchmaking, introduced by Jones, had to continue. The skill and experience to manage these aspects all seemed to be present in one applicant for the job: Frederick Francis Seeland. He had worked for Waltham Watch Co., Boston, and in 1874 had been delegated to the Waltham office in London, together with his Executive Officer, Alfred Bedford, to manage a sales department, an enterprise that was to become a great success. American-made Waltham movements were housed in British-hallmarked cases, many of which bore the sponsor’s mark of Alfred Bedford, but some were commissioned by Seeland and bear his sponsor’s mark (Figure 1).

Because Seeland was familiar with both the American market and the British market, including its colonies, IWC felt that it had found the ideal person to lead the company. Furthermore, Seeland spoke fluent German, a clear advantage in the German-speaking Swiss canton of Schaffhausen. In October 1876, Seeland was appointed the new director for a period of 10 years. The new company was to be called Internationale Uhrenfabrik (International Watch Company) under the ownership of the Schaffhausen Handelsbank. The starting capital was 750,000 Swiss francs (CHF), of which CHF 515,000 was raised by the stockholders and CHF 235,000 was loaned by the Handelsbank. All stockholders were of Swiss origin except for Seeland, who had shares amounting to CHF 25,000.

F. F. Seeland and IWC: A New Start

Frederick Francis Seeland was born on January 24, 1842, in New York. His name suggests a German origin, but his parents were Swiss immigrants who entered the US in an era when thousands of European citizens moved to the New World, hoping for a better future. Seeland called himself a watch
manufacturer from New York, but no documents have been located to confirm this assertion.

Seeland fulfilled his contract with Waltham in London before arriving with his wife and daughter in Schaffhausen in April 1877. He began restructuring the IWC factory by introducing new machines and modifying existing ones, necessary for the production of new calibers. These were the full-plate watches that were clones of the well-known Waltham Model 1857 caliber (Figure 2). They were called Bostons because Waltham in Boston was the first company to produce the caliber by machine on a large scale. This simple watch had been the moneymaker for Waltham, and the success of the company had not gone unnoticed by the European watch manufacturers. Seeland well knew the potential sales for this timekeeper.

At IWC, Seeland had inherited a huge number of finished Jones movements and unfinished Jones ébauches, as well as enough watch parts to produce between 10,000 and 11,000 complete Jones calibers. A decision was made to finish these and sell them where possible, after which the line of costly Jones watches would be discontinued. Before the end of 1877, Seeland decided to replace them with other three-quarter plate watches, easier and cheaper than the Jones movements to produce but still of acceptable quality (Figure 3). Apart from the remaining Jones watches and the newly developed Bostons, Seeland now had in his portfolio a range of three-quarter plate calibers in key-wind (caliber 19) and stem-wind, and in open-face cases (calibers 18 and 20) and hunting cases (caliber 21). Some new calibers (28 and 29) (Figure 4) were being developed but would not be in production until after Seeland had resigned and Pfister-Droz had become the technical director. Compared to F. A. Jones, Seeland was less interested in the technical aspects of the watches. He did not file any patents or design or develop technical improvements. His expertise was predominantly in business strategy, marketing, and sales.

In 1872, Seeland married Fanny Hintschmann and they had three children: Irene, Frederick, and Lillie. The two youngest were born in Schaffhausen. They bought a house, named Buei im Fulacherbürgli, with a garden, meadow, and small vineyard. Seeland had his own coach and horse, and he appeared to have a bright future in Schaffhausen.

**IWC Fails Again**

Despite Seeland’s enthusiastic and promising start, applauded by IWC’s board of directors, the favorable situation would not last for long. The sales of finished Jones movements continued, but slowly, and Seeland was having problems marketing his new full-plate Boston watches. The limiting factor was not production, which was progressing efficiently, but sales. The company with the most experience with Bostons was, of course, Waltham, and they had already conquered the British market. British customers were inclined to buy the Waltham Bostons or the handmade English full-plate fusee watches, which were more expensive but better quality. Moreover, Waltham repeatedly lowered the price of their Boston watches until IWC could no longer compete.
IWC tried to target customers for its three-quarter plate watches in the US, Germany, Russia, and Austria-Hungary, markets that it had never explored before. Although negotiations in these areas were initiated and some seemed promising, in the end all of the attempts ended in failure. As a result, the stock of unsold watches at IWC increased to an unacceptable level, and Seeland found himself in the same position that Jones had a few years earlier.

The full IWC board had applauded the arrival of Seeland and saw him as the ideal candidate to follow F. A. Jones. Seeland had been trained by American Waltham and so had excellent familiarity with the watchmaking business. He knew both the US and European markets and would continue the existing mechanical production at IWC. He also had valuable experience with the reduction of production costs. Because he was fluent in both English and German, it eliminated any potential communication problems such as had been experienced in Schaffhausen by F. A. Jones, who spoke only English.

The board appointed Seeland as the technical director, but he had assumed responsibility for management tasks as well. Board members must have trusted him, and apparently they did not oversee the business as they should have done. They appear to have accepted Seeland’s leadership without questioning and assumed that all was well with the company, when in fact it was not. There are no documents in the archives explaining how the board and Seeland were running and evaluating the business.

Seeland, in a desperate attempt to hide his failures, falsified the books by recording unsold watches as having been sold for a relatively high price. In this way the company's huge loss was turned into an apparent modest profit. This “creative” bookkeeping was, of course, an act of fraud. Initially, the board had been relieved to see the financial balance, especially bearing in mind the high expenses incurred for new machines and personnel. However, in July 1879 the yearly inventory took place, and Seeland realized that he would be unmasked as a liar and a cheat. In August 1879 he secretly left Schaffhausen in a hurry and fled with his family to the US. Only after Seeland had left Schaffhausen did the magnitude of the company’s losses become apparent, and it faced its second bankruptcy. Once more IWC was auctioned, and the Schaffhausen Handelsbank and the Schaffhausen manufacturer of agricultural machines, Johannes Rauschenbach, were the two competing bidders. Rauschenbach won with the high bid of CHF 253,000 for the factory, the land on which it was built, the machines, and a huge stock of watches and parts.

**Conclusion**

Frederick Seeland has predominantly been described as a fraudulent director, responsible for the second bankruptcy at IWC. A slightly more balanced image of him has emerged in recent years. Since he had fled the country to avoid accountability, Seeland could not defend himself before the Swiss court, and he was sentenced to three weeks in prison. Of course, Seeland should have warned the board once the situation became untenable. He had probably hoped that an improvement in sales during the next fiscal year would cover his deceit, but unfortunately sales did not improve and his and the company’s fate was sealed.

There are no indications that Seeland embezzled any money from IWC. Through his actions, he forfeited his investment of CHF 25,000 and his private possessions in Schaffhausen. His house, land, and furniture were sold for CHF 49,500. The personal loss for Seeland amounted to about one-third of the sum that was paid by J. Rauschenbach in the same year for the complete factory, land, and stock.

In considering the achievements of Seeland in service for IWC, the most remarkable aspect was the speedy introduction of new calibers to the IWC portfolio. To accomplish this, the complete infrastructure had to be changed. New machines had to be installed, new operators trained, and watchmakers appointed. While Jones had manufactured bare movements that were exported to and cased in America, Seeland wanted to sell complete watches, so a manufacturer of watch cases had to be found. Time-consuming negotiations and correspondence were necessary to explore new markets. The concept of producing sturdy, reliable, and cheap machine-made watches was introduced at IWC by Seeland. Although his fraudulent actions cannot be condoned, to view him simply as a criminal does no justice to his achievements. During a short transition period of less than three years, Seeland put IWC back on its feet. He had restructured the company and prepared it for a new era. One desperate action destroyed his career, his life, and the future of his young family.

No archived criticism has been levelled at the board members, but they must carry some blame for at least part of the debacle. In his contract, Seeland was tasked with the direct leadership of technical
and commercial business affairs but was not allowed to make strategic decisions. Seeland, supported by the board, must have felt isolated, and his solution was to falsify the books to hide the income shortfall until the time when the problem would hopefully resolve itself. He deserves a better place in IWC’s long history than the one he has generally been given.

Upon his return to the US, Seeland lived in Newark, NJ, and worked in New York City as a watchmaker. However, after the disaster in Schaffhausen, the Seeland family would not be spared from further misery. On a November evening in 1881, Seeland left his house and never returned. Despite investigations, his disappearance remained a mystery and no trace of him was ever found. At that time, he was 39 years old, his wife was 29, and their children were 8, 4, and 2. Although Seeland had money, without a death certificate the young family was unable to inherit and use it for daily expenses and the education of their children. Instead, the funds were appropriated by the authorities. Several court attempts to declare Seeland deceased failed. It would be 1895 before the court finally declared F. F. Seeland officially dead. Through all those years, the family lived in reduced circumstances.

Relatively few documents and letters of Seeland have been saved, and no photographs of him have ever been found. His name was never depicted on any IWC watch dial nor stamped or engraved on any IWC movement or watch case.

Final Note
There is confusion among collectors, to this day, about pocket watch dials signed with the name “Seeland” (Figure 5). These are, in fact, watches made by Fabrique d’Horlogerie Seeland, which was founded in 1873 and registered in 1891. It had a factory located in Madretsch in the town of Bienne, Switzerland, and has no relation with the former director of IWC.

Notes and References
6. Friedrich Pfister-Droz was the successor of F. F. Seeland, coming from Bienne in western Switzerland, where Swiss watchmaking was centralized.
10. Ehrisman, König, Luchetti, Máthé, and Myers, The International Watch Co. from 1875 to 1890, 29–32.
11. Ehrisman, König, Luchetti, Máthé, and Myers, The International Watch Co. from 1875 to 1890, 15.

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Edmund Currier Revisited

BY DAMON DI MAURO (MA)

Between antiquarian-horologist Charles S. Parsons and librarian-historian David R. Proper, the career of Edmund Currier (1793–1853) has been investigated in searching depth and chronicled with meticulous detail.1 Parsons lays claim to Currier’s New Hampshire beginnings, from 1815–25, when he was a silversmith and clockmaker based in Hopkinton. Proper holds court for Currier’s Massachusetts maturity, from 1825–53, when he not only saw himself widely hailed as “one of the most skilled mechanics of his day,”2 but he rose to become president of the Salem Charitable Mechanic Association (a fraternal society formed for the twin purposes of promoting the mechanic arts and practicing benevolence).3 Still, Currier’s biography merits a coda, since new facts and ephemera have emerged. A fresh look is all the more relevant today, for his stock as a clockmaker continues to rise, as evidenced by a recent lyre-style timepiece selling at auction for $106,250 (Figure 1).4

Since most of the biographical data concerning Edmund Currier can indeed be found in either Parsons or Proper,8 only a broad outline will be provided here for the unfamiliar reader. Currier was born in Hopkinton, the namesake of a physician father.6 At the age of 14, he entered an apprenticeship in the saddler’s trade. However, he gave up this line of work after four years and instead apprenticed himself to an unspecified Hopkinton watchmaker, “in which branch there was more scope for his unusual mechanical skill and ingenuity.”7 After serving out his time, he worked as a journeyman in nearby Concord, again with an unidentified watchmaker, though not without having negotiated for himself advantageous terms—namely, binding himself for three years on the condition that his time after an honest day’s work would be his own to freelance as he pleased. It is in this manner that he developed his vaunted work ethic, which seems to have been the veritable secret to his success:

Such was his extraordinary industry and application to business, Mr. Currier used to say that during his life he had been accustomed to work sixteen hours out of the twenty-four. He allowed no time for idleness or play. His shop was one of the last to be closed at night, and almost invariably in winter he would be at work by lamp-light in the morning.8

Edmund Currier returned to Hopkinton in 1815 and advertised that he had “taken the shop of Philip Brown”9 (1789–1854), who is generally thought to have been his master.8 Sometime in late 1818, Currier removed to a new shop “nearly opposite the court-house,”10 whereupon Philip Brown placed ads in early 1819 stating that he had reclaimed “the shop lately occupied by Edmund Currier.”12 As Fortuna’s wheel would turn, a year later in 1820 Brown won $25,000 in a lottery and gave up clockmaking altogether.13

Currier’s account book, dating from this period of his career, is now on display at the Hopkinton Historical Society (Figure 2). As early as 1958, Charles S. Parsons, recognizing its exceptional value as one of the few extent ledgers in the annals of New Hampshire clockmaking, began transcribing the entire manuscript.14 He also sought to put the account book in its proper context, searching “for material that may add to the understanding of the work, the man and his environment.” The result was a rewarding 50-page introduction in which Parsons not only profiles Currier but other Hopkinton craftsmen at the time. This prefatory material is

Figure 1. Currier lyre-style timepiece. IMAGE COURTESY OF BONHAMS SKINNER.

Figure 2. Currier’s signature from the account book. COURTESY OF THE HOPKINTON HISTORICAL SOCIETY.
followed by a 26-page appendix, in which Parsons carefully inventories nearly every item repaired, cleaned, or forged by Currier: from spectacles, cutlery, tableware, jewelry, locksmith work, and gunsmith work to medical instruments, musical instruments, farm tools, wagons, and sleighs, not to mention, of course, watches, clocks, and clockcase hardware. Parsons pays especial attention to those entries related to joiners or cabinetmakers. He shows that from 1816–20 Currier purchased three clock cases from John Long of Hopkinton, two from his brother Ebenezer R. Currier, who was a piano maker by trade, and several others from David Young of Hopkinton (Figure 3). Parsons tracks every one of Currier’s customers—some 418 total from 15 surrounding towns—even cross-referencing the most conspicuous with taxpayer lists, to determine their financial standing. In the course of his work, Parsons became acutely aware of the attendant difficulties in studying records of the period:

After examining a number of account books by New Hampshire craftsmen, one realizes that there are many unanswered questions. Entries are very brief with only sufficient description to satisfy the seller. There is usually the quantity, a few words, sometimes unit price and a total value for one or more objects or services. There is no description of material in many entries, size, decoration or other details, such as quality. Many transactions were transacted in barter. The most common is of the merchant paying in goods rather than cash. Thus the seller does not leave an interesting record of what he received. In some accounts money is paid and at a later date a credit entry of “by his account.”

Parsons’s actual transcription of the account book consists of 177 pages, and his study is rounded out by a 24-page index.

Unfortunately, Parsons’s groundbreaking work has unjustly fallen into oblivion. There are only three known copies currently available—namely, at the New Hampshire Historical Society, the Hopkinton Historical Society, and the NAWCC’s Fortunat Mueller-Maerki Library & Research Center—so access is limited, if not onerous. Perhaps it would behoove a doctoral student to reprise, digitize, and update the manuscript. Parsons seemed to welcome later researchers building on his foundation, writing at the time, “Data in the account book could have been presented in different ways and further analysis is possible since the entire account book has been typed.”

Figure 3. Currier’s account with casemaker from David Young. COURTESY OF THE HOPKINTON HISTORICAL SOCIETY.
As for horology in particular, the account book reveals that about a third of Currier’s business was devoted to watch repair. However, only 13 clocks were made during this period, of which four were described as 8-day, purchased by James Stinson of Dunbarton in 1817 for $55, Philip Brown of Hopkinton in 1817 for $50, Abner Jones of Hopkinton in 1817 for $65, and Daniel Morrill of Hopkinton in 1818 for $35.¹⁸

As Parsons noted in his magnum opus on the New Hampshire clock trade, “Only one of his tall clocks made at Hopkinton has been seen and another reported.”¹⁹ The tall clock that was “reported” is quite possibly the one that is now on permanent display at the Hopkinton Historical Society, which oddly has “Currier” on the dial written with three middle “r’s” (Figures 4 and 5). It was acquired by the Society in recent years and was believed by some to be the only Hopkinton-signed example. And yet, among Parsons’s own papers at the New Hampshire Historical Society, there are unattributed photos of
another Hopkinton–signed tall clock, certainly the one he had personally “seen.”

The current whereabouts of this other, still presumably extent Hopkinton clock remain unknown.

In 1824, Edmund Currier began to close out open accounts in Hopkinton. In preparation for his departure, he sold “1 grindstone 4.50,” “1 Joiner’s bench 2.00,” and a “fire shovel & tongs 2.00.” It is not entirely clear why he felt compelled to uproot his New Hampshire business. Perhaps he found there was less opportunity for clockmakers with the competition of the Hutchins brothers and others in nearby Concord.

The choice of Salem, MA, which a European traveler had called “one of the handsomest small towns in the United States,” also made good economic sense, since its commercial dynamism was due to “the uncommonly active and enterprising spirit of its inhabitants.” From 1800 to 1820, the population of Salem had increased from 9,000 to 13,000, and the silversmithing trade in particular had come into its own, challenging Boston for dominance of the market.

By 1825, Currier was established in Salem. This period of his horological career was taken up by David R. Proper in a 1965 article in the Essex Institute Historical Collections and republished in the NAWCC’s Bulletin the following year (Figure 6).

The different shop locations, family relationships, personal residences, advertisements placed, and cabinetmakers employed will not be rehashed here. An attempt will be made instead to fill in some of the gaps left by Proper and to supplement some of his findings with ephemera and the like (Figure 7).
As Proper notes, Currier established himself immediately in Salem as a wunderkind in the craft, receiving payments from 1825 on from the town for maintaining its public clocks. He cites an “unidentified clipping from a scrapbook” to that effect, which can now be cited in full as well as accurately dated and attributed:

PUBLIC CLOCKS. For the first time, within our recollection, our Town Clocks have been made to run and strike in harmony. We regard, this circumstance, as one of the best effects, which have resulted from the amalgamating spirit of the day, and would tender our thanks to Mr. Currier, through whose skill, this harmony has been produced. At this time, we would refer to the beautiful dial recently erected on the East Meeting House. It is a public ornament as well as convenience.27

As Proper remarks as well, Currier did not tarry to join the Salem Charitable Mechanic Association.28 His original membership certificate from 1827 has now been located at the Hopkinton Historical Society (Figure 8). The certificate’s splendid view of Salem harbor in the background was drafted by none other than John R. Penniman, well known in horological circles today for his painted clock dials.29 Currier quickly rose through the ranks, serving as a trustee from 1830–32, vice president from 1842–44, and finally as president from 1845–47.30 What Proper neglects to mention is that Currier took part in some of the regional competitions for new inventions and machinery held by the Salem Charitable Mechanic Association and came away with prizes, most notably a silver medal for a “Cutting and Dividing Engine”:

It would be difficult for the Committee to speak in suitable terms of this highly finished and elegant machine, as none but an artist skilled in the use of such an instrument, could appreciate its excellence; but so far as beauty of workmanship, arising from the perfect adaptation of one part to the other, and the thorough finish of the whole are worthy of approbation, the Committee would unhesitatingly assign to it the highest reward that is offered by the Association; for the rest we would have Mr. Currier speak for himself.31

In a separate miscellaneous category, the judges awarded Currier yet another silver metal:

A Case containing Gold and Silver Watches, Gold and Silver Bowed Spectacles, &c. Also, a Regulator Movement of very superior workmanship. This was the only specimen of finished clock work in the Hall, but decidedly entitled to the first award.32

Proper points out that several clockmakers and watchmakers trained under Currier.33 He mentions but three apprentices: Ibrook H. Russell (1817–39), described as a very promising clockmaker and mechanic who died at the tender age of 22;34 William H. Keheu (1829–1900), who was a well-regarded watchmaker in Salem for over half a century;35 and especially George B. Foster (1810–81), with whom Currier briefly partnered (1831–35).36 Foster eventually left for Boston, where he worked as a watchmaker “associated with leading jewelry houses, and was long on Tremont row.”37 Yet, there were at least four other Currier apprentices who warrant mention. John B. Hill (1824–1904) trained under Currier from 1840–44, after which he removed to Beverly where he “continued in business with uninterrupted success” until the time of his death. Moreover, according to his biographer, “he was undoubtedly for many years the best-known jeweler in this section of the county and always maintained a high reputation for excellent work and honest dealing.” He later served several years in the State House of Representatives.38 George L. Newcomb (1812–99) began his apprenticeship under Currier
at age 16 and, after his majority, worked two more years in his shop. He then devoted himself to the study of general mechanics, especially to the steam engine, and he began manufacturing hydraulic presses and other machinery used in tanneries and shoe factories. He served in city government and the state legislature. William Archer (1815–74) served an apprenticeship with Currier as a jeweler and silversmith, after which he established himself in that business in Beverly, Gloucester, and Salem once again, just a few doors down from his former master (Figure 9). In his twilight years, Archer became an auctioneer, real estate agent, and insurance agent. Finally, Gilbert L. Streeter (1823–1905), after attending Salem English High School, learned the watchmaking trade through Currier. He went into business as such, and then around 1850 he turned to journalism and served as editor of the Essex County Freeman and the Salem Observer. An avid antiquarian, Streeter wrote extensively for the Essex Institute Historical Collections.

Proper deserves credit for pointing to the existence of a daguerreotype of Edmund Currier, though he did not reproduce it in his article, perhaps because it had “fogged” somewhat with time. It was displayed, however, at an exhibition at the Essex Institute in 1965, along with the only extent example of a Currier tall clock made in Salem, dating from the late 1820s. Otherwise, the image of Currier has not been republished until now (Figure 10). The daguerreotypist remains elusive. For what it may be worth, in 1840 François Fauvel Gouraud arrived in Salem to discourse on daguerreotypy and give demonstrations of the new craft as well as take portraits and capture scenic views for local patrons. Less than a year later, several daguerreotype studios appeared in the city. By 1851, there were at least five full-time “daguerrian artists” (“Prices, from one dollar upward.”), thus any one of them might have been responsible for Currier’s image.

Finally, as Currier’s obituary makes clear, he “possessed strong religious feelings and was deeply interested in the concerns of the denomination with which he was connected.” He was clerk of the Hopkinton Baptist Church, while his purported master Philip Brown was a deacon, which perhaps strengthens the bonds between the two men. Proper has pointed out that Currier joined the First Baptist Church of Salem upon his arrival in his newly adopted town and eventually served for many years as its deacon. Given his strong traditionalist views in matters of religion, he must have bristled when his daughter and her mariner fiancé elected to be wedded by a Unitarian minister. Near the end of his life, Edmund Currier became involved in missionary endeavors. He was drawn to the temperance movement and was elected treasurer of the Salem Temperance Society. Advocates of the movement saw a direct link between alcohol consumption and a panoply of contemporary social issues.
ills. Currier’s interest in temperance fit his lifelong profile of discipline and self-sacrifice. However, unlike neighboring towns such as Lynn and Beverly where frugality and sobriety were watchwords, Salem was a more “cosmopolitan, mercantile community” that “maintained an implacably cool attitude toward the temperance movement.” By 1851, there were five dealers of “Wine and Liquors,” two “Distillers,” and one dealer of “Bottled Porter, Ale, Cider and Small Beer.”

Sometimes the hostility of Salemites was more overt, punctuated by incidents of assault against those who dared to voice opposition. The adverse social context makes Currier’s stand more principled and fits his *modus operandi*, as his obituary once again evinces: “He was reserved in his manners, and more ambitious to excel in his calling than to court popular favor or to secure public position.”

Edmund Currier closed his days on May 17, 1853. His passing was noted, of course, in the First Baptist register (Figure 11). A funeral was held two days later at his late residence on Cherry Street. In addition to invitations extended to relatives and friends, the secretary of his former guild published a notice in the newspaper: “The Members of the S. C. M. Association are requested to attend the funeral of their former President, Edmund Currier, Esq.” The title “esquire” seems unusual for an artisan who worked on the bench his entire career. In England, it is traditionally given to noblemen, court officers, and other gentlemen. In 19th-century America, however, it appears to have become “merely an expression of respect,” and indeed Currier had earned the respect of his community.

Astonishingly, though, given his work ethic, community standing, and civic involvement, when an inventory of his estate was taken, it was discovered that his debts, allowances, and other charges exceeded his personal estate by over $2,000. His widow had to petition the court to sell the whole of his real estate to pay off his debts. Currier’s financial troubles are perhaps indicative of the difficulty that clockmakers and watchmakers had in eking out an existence at the time, which also explains why three of his apprentices eventually left the trade for other pursuits. Currier had not been able to purchase property and a dwelling of his own until the twilight of his career in 1847 and 1851, respectively.

At any rate, Proper did an analysis of Currier’s probate records and inventoried a great many gold and silver watches, optical goods, and tools. He concluded that “his shop stock and materials indicate that he was very much in business and active until the last.” What Proper does not mention about the probate records is that Currier’s remaining work possessions had to be liquidated to pay off debt. They were consigned for sale with George B. Appleton, a fellow watchmaker and jeweler (Figure 12). It was an ignominious end to an otherwise exemplary career. Nevertheless, Currier’s stature as a clockmaker continues to grow, and the prices his handiwork currently fetches at auction are a kind of latter-day vindication.

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Hopkinton Historical Society and the New Hampshire Historical Society for their assistance in composing this article. Special thanks also go to the reviewer for providing additional references and images. All infelicities are the author’s own.

Notes and References


3. This was a local chapter of the Massachusetts Charitable Mechanic Association, established in 1795, with Paul Revere elected as its first president. Throughout much of the 19th century, the organization held conferences and presented exhibitions devoted to innovation in the mechanical arts. On the horological side, some of the more prominent members included Aaron Willard (clockmaker), Samuel Curtis (dial manufacturer), William C. Bond (watchmaker), Aaron Willard Jr. (clockmaker), Nathaniel Munroe (Concord, clockmaker), Charles Bond (watchmaker), George P. Foster (watchmaker), Joseph Cranch Bond (watchmaker), Richard F. Bond (watchmaker), and Edward Howard (clockmaker and balance maker). See Annals of the Massachusetts Charitable Mechanic Association, compiled by Joseph T. Buckingham (Boston: Press of Crocker and Brewster, 1853), 15, 135, 243, 405, 415.


6. On Dr. Edmund Currier, see C. C. Lord, Life and Times in Hopkinton, NH (Concord, NH: Republican Press Association, 1890), 97, 120, 347.

7. Lord, Life and Times in Hopkinton, NH, 45.

8. Lord, Life and Times in Hopkinton, NH, 45. Likewise, Currier was equally exigent with respect to those whom he apprenticed. In early ads for “a lad, 14 or 15 years of age,” he wrote, “N.B. None need apply, except such as can come well recommended for steady habits” (New Hampshire Patriot & State Gazette, December 8, 1823, 3; December 15, 1823, 4; December 22, 1823, 4).

9. Concord Gazette, September 12, 1815, 3; September 19, 1815, 1; September 26, 1815, 1.

10. This is both Proper’s and Parsons’s view. Another possibility is John Chase (1766–?) who advertised as a watch and clock cleaner and repairer based in Hopkinton: Courier of New Hampshire, July 18, 1804, 4; July 25, 1804, 4; Political Observatory, August 11, 1894, 3; August 25, 1804, 1. He remained in Hopkinton at least through 1811. See Parsons, New Hampshire Clocks and Clockmakers, 305.

11. New Hampshire Patriot & State Gazette, January 18, 1820, 3. On the courts held in Hopkinton and the courthouse, see Lord, Life and Times in Hopkinton, NH, 88–89.

12. Concord Gazette, January 5, 1819, 3; The Farmer’s Cabinet, January 16, 1819, 3; January 30, 1819, 4; February 2, 1819, 4; New Hampshire Patriot and State Gazette, January 12, 1819, 4; January 19, 1819, 4.


15. According to C. C. Lord, “David Young is said to have been the maker of the first clock-case constructed here,” Life and Times in Hopkinton, NH, 251–52. Several of Young’s labels survive, all found within cases housing Concord movements, made most notably by the Hutchins brothers. For an example of a label from a Timothy Chandler clock, see William H. Distin and Robert Bishop, The American Clock (New York: Bonanza Books, 1983), 62.


18. Parsons, Edmund Currier Account Book, Appendix, 18. There were a number of transactions with fellow clockmaker Philip Brown, especially cases. As Brooks Palmer remarked, “Those clock cases, at $16 each, got passed back and forth” (“Philip Brown, N.H. Clockmaker and the Lottery,” 28).


22. The stated belief that his removal to Salem in 1825 coincided with his marriage to Laura Jones of Lyndon, VT, is in error since the two were married in 1816. See Phillip Joseph Currier, Currier Family Records of U.S.A. and Canada, vol. 2 (Henniker, NH: P. J. Currier, 1984), 50.


27. Salem Literary & Commercial Observer, August 18, 1827, 2.


29. Penniman had himself become a member of the Massachusetts Charitable Mechanic Association in 1818 and had designed the new state certificate of membership. See Annals of the Massachusetts Charitable Mechanic Association, 151–52.


31. Reports or the First Exhibition of the Salem Charitable Mechanics Association, at the Mechanics Hall, in the City of Salem, September 1849 (Salem: Streeter & Porter Printers, 1849), 3–4. See also Salem Gazette, September 28, 1849, 2; January 3, 1850, 2.

32. Reports or the First Exhibition of the Salem Charitable Mechanics Association, 38–39.


36. Salem Gazette, April 26, 1831, 3; May 10, 1831, 3. A new Currier ad four years later shows that the partnership was dissolved: Salem Gazette, July 3, 1835, 1.


40. Bulletin of the Essex Institute 7, no. 6 (June 1875): 92.

41. The Salem Directory (Salem: Henry Whipple, 1846), 110.


44. Fales, “Essex County Furniture,” Essex Institute Historical Collections, 220. See also Fales, “Two

45. *Bay State Democrat*, April 20, 1840, 2.


51. Thomas Dean Jr. and Ann E. S. Currier were married by Rev. A. D. Jones of Brighton, MA (*Salem Register*, March 14, 1842, 3).

52. By his donation of $100, he became a life member of the American Baptist Missionary Union (*The Baptist Missionary Magazine* 28, no. 1 [January 1848]: 294).


58. *Salem Register*, May 19, 1853, 2.


60. *Essex County Registry of Probate*, June 7, 1853, 36634:1–28. Among sundry other debts, Currier owed $2,072 to his son-in-law Thomas Dean Jr., $1,030 to Benjamin B. Reed, and $750 to Michael Shepherd.

61. *Salem Register*, June 30, 1853, 3. Currier’s widow did end up selling the land at auction to the highest bidder (*Essex County Registry of Deeds*, 482:220).


64. See the ad to that effect in the *Historical Collections of the Essex Institute* 1, no. 1 (April 1859): 38.

**About the Author**

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The Atlantic Clock Works of Birmingham, England, Revealed
Part 1: Charles Cartwright & Sons

BY PETER GOSNELL (UK)

Introduction
During the Bulletin’s Research Activities & News column’s editorship by the late Dr. Snowden Taylor, many small pieces of information on 8-day spring-driven movements were presented. For convenience, the movements will be referred to as “Early Production” (“E.P.”), “Square Nut” (“S.N.”), “Tempus Raptor” (“T.R.”); roughly translated as “time is a thief”), and “The Caledonian Registered” (“T.C.R.”) throughout this article.

The possible origin of these movements, and in particular “T.C.R.” movements, has been a subject much discussed within the pages of past Watch & Clock Bulletin issues.¹ The first of what was intended to be a two-part review appeared in the January/February 2014 Bulletin, where it was first suggested that Charles Cartwright & Sons of Birmingham, England, may well have been the manufacturer of all these so-named movements.² It was also tentatively proposed that the Cartwrights, wanting to expand their business by manufacturing their own American-style movements, started producing close copies of E. N. Welch Manufacturing Co. (Forestville, CT) movements. Part 1 of this 2014 article then went on to present “E.P.”, “S.N.”, and “T.R.” movement examples, showing a selection of their cases and labels. It was the intention in Part 2 to look at “T.C.R.” movements, but due to unforeseen circumstances this was never completed for publication. Since the 2014 publication, research into this whole area of study has continued, and it now seems appropriate to revisit, expand, and update this topic comprehensively, from the beginning.

Charles Cartwright & Sons from Published Sources
Author Joseph McKenna, in his excellent reference, informed us that from 1846 to 1866 Charles Cartwright was engaged in the clock trade at 22 Edgbaston St., Birmingham.³ The History, Gazetteer & Directory of Warwickshire, dated 1850, adds that Charles Cartwright was an “Importer of American Clocks.”⁴ Figure 1 shows one of two known examples of a 30-hour weight-driven Ogee clock ascribed to “Charles Cartwright, Birmingham,” with the name having been cleverly pasted over the original name of “Jerome & Co., New Haven, Conn. [USA]” (Figure 2). As these Jerome & Co. labels were used just after Chauncey Jerome’s 1856 bankruptcy, this dates these two Ogee clock examples with some certainty.⁵ Such a blatant act of hiding the original name strongly suggests that Charles Cartwright was quite prepared to elevate his status by deception in the hope of selling more clocks.

Figure 1. Label from a 30-hour weight-driven Ogee clock with “Charles Cartwright, Birmingham” pasted over the original label. IMAGE COURTESY OF GOLDING, YOUNG & MAWER AUCTION ROOMS.
By 1861 Charles Cartwright (then 40 years old) had taken both his sons, Charles J. (age 19 years) and Henry (age 16 years) into the business. In 1867 the company was renamed Charles Cartwright & Sons with what now appears to be another subsidiary company named Charles & Henry Cartwright (C. & H. Cartwright) created in 1869 with an address of 15 Cumberland St., Birmingham. A half-page advertisement taken out by Charles Cartwright & Sons in The Jeweller and Metalworker (J&M) on December 15, 1875, informs that they were “Manufacturers of Machine Made English Eight Day Timepieces and Strikers” and gives details on the extent of their stock at that time as well as illustrating one of their wall clocks (Figure 3). Another advertisement found in both the 1872 and 1875 editions of The Post Office Directory of the Watch and Clock Trades (on pages 15 and 20, respectively) shows an artist’s bird’s-eye view of C. & H. Cartwright’s Atlantic Clock Works in Cumberland St. (Figure 4). Two large-scale map sheets (10.56': 1 mile) from The Ordinance Plan of Birmingham, dated 1887, give a complete plan of the Atlantic Clock Works at that time (Figure 5). From measurements and calculations from these map sheets, the width of the Atlantic Clock Works frontage would have been approximately 50’, with the total depth of the site approximately 200’. These map sheets also give an indication of how well located the Atlantic Clock Works would have been for sourcing the raw materials needed for clock production; notice the Brass Works opposite and the James’s Foundry (“Iron & Brass”) on the corner of Oozells St. Unfortunately, the whole area encompassing both Edgbaston St. and Cumberland St. was heavily bombed during World War II, resulting in no buildings now remaining from the Cartwright era.
Four published accounts describing the activities of C. & H. Cartwright at the newly built Atlantic Clock Works at 15 Cumberland St. are now known. The first was printed in *The Jeweller and Metalworker* of December 15, 1875, and then three more appeared in *The Ironmonger and Metal Trades’ Advertiser* (IMTA) on June 29, 1878, January 11, 1879, and April 10, 1880. These four articles add up to a valuable source of primary information on the activities of what now appears to be the first company in Great Britain to manufacture clocks employing the American factory system some 18 years before the startup of the British United Clock Co. in 1885.

Until this discovery, the British United Clock Co. had always been regarded as the first company to industrialize the manufacture of clocks in Great Britain. Unfortunately, these four published articles do not identify the specific movements or cases manufactured by C. & H. Cartwright at the Atlantic Clock Works in Cumberland St., Birmingham. They do tell us that they were American spring-driven-styled movements that were housed within typical Anglo-American wall cases. I recommend that anyone wanting to further research this subject should consult the four original articles. However, to move this article forward, a synopsis of the original texts has been created in the form of 22 key points extracted from the four articles; these are listed below. My comments are bracketed in italics, and each statement’s reference is also given.

1. The manufacture of machine-made clocks at C. & H. Cartwright, Atlantic Clock Works, 15 Cumberland Street, Birmingham was started in 1867 after visits by “Mr. Cartwright” to some of the principal clock manufactories in the U.S. (IMTA 1878)

2. Their plant and Machinery were based on the American model. (IMTA 1878)

3. The first attempts at machine made clocks during the first few years produced crude and imperfect results which resulted in a prejudice towards their products. Under the direction of a skilled German foremen [sic] the manufacture is now rapidly recovering its lost prestige. (IMTA 1878)

4. During the visit of the J&M correspondent in December 1875 both striking and timepiece movements were being manufactured.

5. To make the mainsprings long bands of spring steel are cut by circular shears into strips that were then edged, tempered and buffed and then cut to length, punched at the ends, coiled and coloured and are then ready for placing in the barrel of the clock [As will be seen, the proposed movements now thought to have been manufactured by C. & H. Cartwright do not have their mainsprings contained within barrels, a troubling anomaly that perhaps originated from an error made by the reviewer who would have been more familiar with English movements, all with barrels]. (J&M 1875)

6. The brasswork for movements [plates], wheels, pinions etc. are all manufactured on the premises. The composition of the brass used is controlled by one of the principals and is one of the firm’s secrets. (J&M 1875)

7. They made their own brass bezels from rolled brass strip. (J&M 1875)
8. Movement manufacture took place in a distinct block of buildings with the respective processes being carried on in at least six separate rooms. In some rooms 25 to 30 persons were employed. (J&M 1875)

9. Movement plates were made in the cutting room with apertures and pinion [probably large pivot] holes formed with a steam press. (J&M 1875)

10. Wheel blanks were also formed with the aid of a steam press. (J&M 1875)

11. The wheel cutting machine was about 2-foot square and could cut 30 to 40 wheels simultaneously. (J&M 1875)

12. Wheel arbors were cut from steel wire and then collets driven on by hand. The partly completed arbor was then finished again by hand on a lathe. (J&M 1875)

13. A machine produced the holes in pinions by indexing and drilling each hole in a single operation [obviously lantern pinions]. (J&M 1875)

14. In the fitting room the workman assembled the clock movement by taking each component one-by-one from its box. A skilled workman then properly adjusted the parts and affixed the escapement to put the movement in going order. Movements were then tested for two to three weeks with one to two hundred movements on test at any one time. Afterwards they were transferred to the finishing shop to be fitted into a case and then proceeded to the warehouse ready for sale. (J&M 1875)

15. Basic cases are made with deal [pine] planks with oak, mahogany, rosewood, and walnut logs converted into veneers that could then be applied to bodies. (J&M 1875)

16. The wood shop had ribbon saws and steam driven planing machines. (J&M 1875)

17. Two European patterns of wooden cased wall clocks for shops, offices and dining rooms were produced: large dials [dials would have meant drop dials, too] with marquetry or inlay, and Vienna Regulator styled cases with mirror-backed pendulum box and imitation mercury pendulum [these are both typical Anglo-American case styles]. (IMTA 1878, 1879, 1880)

18. Complete clocks could be exported to India, China, Japan, Australia, and America. (J&M 1875)

19. By December 1875 the factory was capable of producing 600–700 clocks a week. (J&M 1875)

20. By June 1878 the factory had been re-organised with skilled practical men, new machinery, and a one-third price cut. (IMTA 1878)

21. By January 1879 production could be as much as 800–1,000 clocks a week. (IMTA 1879)

22. In April 1880 “Mr. Cartwright” had a cheap one-day duration wooden cased cottage or kitchen clock in hand, that was expected to end the reign of German examples of the same style of clocks, costing less than the original American examples. (IMTA 1880)

Additionally, according to the 1871 and 1881 British Census Records, Henry Cartwright was described as a “Clock Manufacturer” while his father, Charles, and elder brother, Charles J., were listed as “Clock & Clock Case Dealers.” This would seem to confirm that Henry oversaw clock manufacture at the Atlantic Clock Works and was probably the “Mr. Cartwright” who had initially visited some of the principal clock factories in America (point 1 above) and by 1880 also had a cheap one-day duration clock in hand ready for production (point 22). In contrast, Henry’s father and elder brother probably concentrated on sales and delivery at Charles Cartwright & Sons on Edgbaston St.

By 1871 the Cartwrights had 94 employees, and in 1881 that number had risen to 100 employees just at the Atlantic Clock Works. In 1887 production of both movements and cases was still ongoing at the Atlantic Clock Works at 15 Cumberland St. By 1892 C. & H. Cartwright had moved to new premises at 19, 31 & 32 Cumberland St, where they were then importing American-manufactured movements and fitting them into their own made cases. Finally, by 1897 C. & H. Cartwright had downsized and were then just occupying 19 Cumberland St, where they only made cases for imported American movements.
but were not actively engaged in the importation of movements or the assembling of the clocks. By 1901 all clockmaking/assembling activities had ceased, and Henry Cartwright was described as a “Hardware Merchant and Employer.” By 1916 the new company of Charles Cartwright & Sons Ltd. had become manufacturers of metallic bedsteads at The City Works, Hertford St., Birmingham.

In the next issue of the Watch & Clock Bulletin, Part 2 of this article will look at possible movements and cases manufactured at the Atlantic Clock Works.

Notes and References
10. The Jeweller and Metalworker and The Ironmonger and Metal Trades’ Advertiser, accessed at the British Library.

About the Author
Peter Gosnell joined the NAWCC in 1997 and between 2001 and 2008 made yearly visits to the US to study the development of the Connecticut brass clock movement with the guidance of the late Dr. Snowden Taylor. Subsequently, Peter’s research has focused on early industrialized clockmaking in England, with a number of articles on the subject published in the Bulletin.
Time’s Lullaby

Porch-bound and alone
On Sunday afternoons
When my playmates were off
(Most of their families had cars)
I’d feel glum
Not knowing then
That Time had circled my porch
And was singing a secret lullaby
I’m here I’m here my little child
It will be dark out some days
Yet in the darkness there will be light
And it will be sunny some days
Yet in the sun there will be clouds
I’m sometimes slow
And full of sadness and heartache
But then I’m fast
And full of hope and possibility
So sing with me my little child
I’ll be your playmate from now on

© Raymond Comeau, May 2022

NAWCC members often have a fascination with time. One of the questions they may ask is: “How do we human beings experience time?” Here is a poem that gives a hint about that. Ray Comeau is a former dean and director in Harvard Extension School, where he currently teaches courses on the intersection of philosophy and management with literature. He is a member of NAWCC Chapters 8 and 87 in his native Massachusetts. His email is comeau@fas.harvard.edu.
Keep track of time and the NAWCC

Check out our monthly e-newsletter!

Each issue provides a quick snapshot of the Association’s activities. Learn about the latest Museum and Library projects, upcoming NAWCC events and classes, updates on our new online content, and much more!

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The 2022 NAWCC Ward Francillon Time Symposium took place on October 21–23 at the General Society of Mechanics & Tradesmen in Midtown Manhattan, NY, in association with the Horological Society of New York and sponsored by Sotheby’s. With a theme of “Horology’s Great Collectors” (www.greathorology.com), eminent speakers from around the world gave presentations on the lives and collections of people who have expanded our appreciation of horology and enlivened the conversation about what makes a collection great.

Organized by Chair Bob Frishman and the NAWCC Symposium Committee, the educational event featured 17 scholars, collectors, curators, and horologists leading the audience through a survey of collectors, no longer living, who have left their watch and clock legacies to us in various forms. From these legacies we can learn about the social and technological world in which the objects were created and collected. To aid in understanding the scope of horological collecting, Frishman created a companion book with an annotated and illustrated list of more than 200 watch and clock collectors (Figure 1). Contact him (bell-time@comcast.net) if you would like to request a copy while supplies last. If you were not able to attend this year’s Symposium, the lectures were recorded and are available on YouTube: https://www.youtube.com/playlist?list=PL3o2Rcvjc5EAwLufDczOdRO2VHitPhUuJ.

Friday, October 21

On Friday morning, 32 attendees participated in a two-hour private tour of horological objects at the Metropolitan Museum of Art (Figure 2).

Figure 2. Wolfram Koeppe (right) led a special tour of the Met’s timepiece exhibits for a small group of Symposium attendees. COURTESY OF BOB FRISHMAN.

Figure 1. PDFs of this compilation are also available at https://www.greathorology.com/greatcollectors. Frishman will continue expanding these files to update the information printed in the book.

Figure 3. Attendees enjoyed seeing this beautiful 17th-century French watch. Case: rock crystal with engraved and enameled floral designs, set in enameled gold mounts; dial: champlevé enamel on gold. METMUSEUM.ORG.
The tour was led by Wolfram Koeppe, Marina Kellen French Senior Curator of European Sculpture and Decorative Arts. This department was established in 1907 by J. Pierpont Morgan and now includes not only sculpture of all kinds but also horological and mathematical instruments, jewelry, ceramics, woodwork, and textiles. The tour’s participants enjoyed seeing a number of important European watches and clocks donated to the Met by Morgan, one of the greatest horological collectors and essentially the first curator of the Met’s collection. Morgan delighted in timepiece complications that performed well, though he may not have thoroughly understood their intricacies. Koeppe noted that only about 5% of the museum’s collection of clocks and watches are on exhibit. Attendees viewed pieces such as an exquisite watch by 17th-century French watchmaker Pierre Vernede (Figure 3) and an intriguing 18th-century German longcase clock by clockmaker Johann Schmidt and casemaker David Roentgen (Figure 4).

Not only did attendees see incredible timepieces on public display, the group also had access to the museum’s restricted storage area where several clocks and pocket watches were on view for everyone to see up close. One such clock was a 17th-century German astronomical table clock, which features 10 dials, the four seasons depicted in repoussé scenes on the base, and a top obelisk that can be removed and used as a winding key (Figure 5).

On Friday afternoon, a special bonus program was presented as a tribute to the late John Redfern’s animated horological illustrations of escapements and movements. Hosted by the Antiquarian Horological Society (AHS)—American Section in the library of the General Society of Mechanics & Tradesmen of the City of New York, the program was opened by AHS Chair Dr. James Nye (Figure 6). Noting that Redfern had accessed digital libraries in supporting his illustration work, Nye emphasized the importance of horological inquiry and access to digital archives in aiding horological research. Bob Frishman, “Horology in Art” scholar, provided an overview of horological illustration from the
beginning of mechanical timekeeping (Figure 7). He touched on several key works, from the replica of Giovanni Donni’s 1364 astronomical clock, da Vinci’s remarkable clock illustrations, and Ferdinand Berthoud’s illustrations of marine chronometer movements, to Tran Duly Ly’s illustrations of Ingraham movements and Henry Fried’s drawings from his Watch Repairer’s Manual.

Martin Conradi (Figure 8), a computer graphics entrepreneur, noted that he had met John Redfern in 1993 and was amazed by his innovative animation of Harrison’s H1. Redfern had an abiding interest in anything mechanical, Conradi said, as seen in his love of fast cars and his work in restoring them. His early career was spent as a film editor and then in the 1970s he began learning about clocks. Redfern started his own clock restoration business, and then in the 1990s launched Redfern Animation where, said Conradi, Redfern could “take the viewer into the beating heart of a timepiece.” After Redfern’s death in 2019, Conradi gathered the bulk of Redfern’s work on a website (https://redfernanimation.com/) to teach and inspire the public through these horological animations. A panel discussion followed (Figure 9), exploring Redfern’s career and technical prowess and answering the audience’s questions.

The Symposium’s formal program began on Friday evening in the library of the General Society of Mechanics & Tradesmen. Chair Bob Frishman introduced the 59th James Arthur Lecture and provided an overview of its history since it began in 1932. Daryn Schnipper, Sotheby’s senior vice president/chairman, International Watch Division, gave the 2022 keynote lecture and was the second woman to do so (Figure 10). She discussed several key collections that she handled at Sotheby’s and her experiences meeting many of horology’s eminent collectors.

In her lecture, Schnipper described several remarkable auction experiences, including pieces from King Farouk’s collections, auctioned in 1954 and then sold by the buyer’s descendants at auction in 2016. She spoke on Sotheby’s Antique Automatons of Maurice Sandoz, of which the singing bird bottle sold for $2.1 million and is now at the Patek Philippe Museum. Between 1999 and 2004, Sotheby’s sold Seth Atwood’s collection of pieces from The Time Museum in Rockford, IL. Schnipper recounted how Atwood wanted the Patek Philippe Henry Graves Jr. Supercomplication—a pocket watch with 24 functions—and was able to buy it from Pete Fullerton, grandson of Graves, in 1969 for The Time Museum. The watch was later auctioned by Sotheby’s for $11 million.
million, the most expensive ever sold at the time, to Sheikh Saud bin Mohammed Al-Thani of Qatar. Then in 2014, the watch came back to Sotheby’s and was auctioned for a record-breaking $24 million.

Schnipper also spoke on master watchmaker George Daniels and the only watch he ever made by commission, when Seth Atwood asked him to make a watch with a frictionless escapement, requiring less oil and making it more accurate. She ended her lecture by sharing details of the auction of Andy Warhol’s collection of watches, art, and jewelry in 1988. It was a nine-day auction, and clients lined up around the block to see the exhibition. Included in the collection were three quartz wristwatches, each with a well-known character (Fred Flintstone, Judy Jetson, and Gumby). The Gumby watch, with an estimated auction price of $60–$80, sold for $2,400.

**Saturday, October 22**

Saturday was a full day of stimulating lectures presented in the library of the General Society of Mechanics & Tradesmen. The Society was founded in 1785, and its library is the second-oldest in New York City. Nicholas Manousos, executive director of the Horological Society of New York (HSNY), provided opening remarks welcoming the Symposium attendees (Figure 11).

The first presenter of the day was Johannes Graf, curator of the German Clock Museum in Furtwangen, Germany (Figure 12). Graf spoke on Oskar Spiegelhalder (1864–1925) and his collection of Black Forest clocks. Spiegelhalder viewed clocks differently from other collectors, seeing more value in them being excellent examples of the culture in which they were built, rather than in the clocks having high-quality craftsmanship. Graf suggested that Spiegelhalder should be considered a great collector because of the excellent quality of the collections’ objects, the detailed documentation he
kept, the preservation of the collections by selling them to museums, and his positive impact on the image of Black Forest clocks.

Oliver Cooke (Figure 13), curator and conservator of horology at the British Museum, discussed Courtenay Adrian Ilbert (1888–1956), whose horological collections arrived at the British Museum in 1958. Ilbert collected not only watches and clocks but also prints of makers, watch papers, horological literature, and scientific instruments, and maintained excellent records in several ledgers. He built very good relationships with horological auction houses and businesses, which certainly aided in his acquiring pieces for his collection. Ilbert had a tremendous impact on the British Museum, as his collection—which stayed intact—comprises half of its horological holdings.

Jonathan Betts (Figure 14), horological scholar, conservator, and author, provided an overview of the 5th Lord Harris’s life and collection. While in his professional life Lord Harris (1889–1984) was a stockbroker, he had a broad, informed, and passionate interest in watches and clocks. He was the founding president of the Antiquarian Horological Society (AHS). His collection includes timepieces from the English Golden Age (1650–1750s), the French Golden Era (1780–1820), and clocks with some sort of novelty element. If Lord Harris could not purchase the original timepiece, he would buy a reproduction of it. He decided upon the future of his collection by creating a charitable trust so that much of the collection stayed at Belmont, which opened to visitors in the 1980s as a museum with the clock collection on display. Betts invited everyone to visit Belmont and participate in a special horological tour there.

Robert C. Cheney Jr. (Figure 15), executive director and curator of the Willard House & Clock Museum in North Grafton, MA, discussed collector J. Cheney Wells (1874–1960). He was one of three brothers who ran the American Optical Co. Cheney Wells was awarded more than 50 patents for eyeglasses and lenses. The Wells brothers founded the Wells Historical Museum in 1935 and later established Old Sturbridge Village to showcase their collection of everyday items used in a New England village setting. The living history museum opened in 1946 and includes the clock and paperweight collection of J. Cheney Wells.

Will Andrewes (Figure 16), horological scholar and author, spoke about collectors Seth Atwood and Winthrop K. (Kelly) Edey. Atwood (1917–2010) promoted innovation, having funded and helped develop a three-wheel car, a super yacht, and several clocks. In addition to collecting outstanding watches and clocks for The Time Museum, Atwood’s goals in commissioning clocks were to create replicas of pieces whose details existed only in manuscripts, to recreate clocks that he could not buy the original of, or to show people a potential future of clockmaking. Starting in his boyhood, Kelly Edey (1937–1999) was a passionate collector of watches and clocks, particularly French clocks, eventually becoming an expert in the field. Though he inherited the family fortune, Edey still worked for Getty and Christie’s in order to fund his collecting habit. He directed that his watches, clocks, and related materials be donated to the Frick Collection upon his death.

Tom McIntyre (Figure 17), technical administrator of the NAWCC Forums, presented the story of Paul Chamberlain (1865–1940), watch and clock collector...
and author of nearly 200 articles, as well as the book *It’s About Time*. Chamberlain purchased his first watch at age 48 and donated his first collection of more than 300 pieces to his family’s Chamberlain Memorial Museum. His strong relationships with collectors and makers helped him buy or trade pieces and see others normally kept from public view, such as Queen Charlotte’s Mudge lever watch. Chamberlain’s collection has been dispersed over the years, with some items having been housed at various times at Michigan State University, the American Clock & Watch Museum, and the Mariner’s Museum, and many others are currently at the NAWCC’s National Watch & Clock Museum.

Russ Oechsle (Figure 18), scholar, author, and collector, examined the common ground collectors of all kinds may find by focusing on their motivations for collecting horological items. Oechsle described the extraordinary American wooden-works shelf clock collection of Christopher R. Brown (1936–2012). From his first purchases of miniature clocks at yard sales, Brown amassed an impressive collection of more than 300 wooden-works clocks, all stored in his own home. Brown was among the first to carefully examine and research wooden clock movements, sharing his findings with others and in the NAWCC’s *Bulletin*. Oechsle summarized Brown’s collecting objectives as trying to obtain an example from every individual or firm who made or cased a wooden
works clock and trying to get an example of each type of wooden movement made by every maker. John Reardon (Figure 19), watch expert, author, scholar, and collector advisor, spoke about several passionate Patek Philippe collectors. He described former clubs run by Patek Philippe in which members could participate in drawings to win a free watch. Reardon shared the stories of several noteworthy Patek Philippe collectors, including Orville Hagans (1897–1988), Seth Atwood (1917–2010), James Packard (1863–1928), Henry Graves Jr. (1868–1953), Reginald “Pete” Fullerton (1933–2012), Joe Ben Champion (1917–2012), Peter Knoll (1943–2018), Sheikh Saud Al-Thani (1966–2014), Sultan Qaboos bin Said Al Said of Oman (1940–2020), Lee Kun-Hee (1942–2020), and Henri Stern (1911–2022).

Saturday ended with a reception and banquet at the elegant Harvard Club on West 44th St. After brief remarks from Bob Frishman, Rory McEvoy, and James Nye, the banquet’s keynote was given by Marsha Malinowski (Figure 20). She is a professional appraiser of rare books and manuscripts who recently worked with Fortunat Mueller-Maerki on his large donation of horological books, catalogs, technical articles, and ephemera to the Horological Society of New York. Malinowski shared four case studies of remarkable collections she’s dealt with, the first being that of Mueller-Maerki's donation. The second was Barry Halper’s massive collection of baseball-related items, including Mickey Mantle’s game-worn baseball glove, which Billy Crystal bought for $239,000 at a Sotheby’s auction. An eccentric, impulsive mystery collector was the third case study Malinowski provided. This collector amassed a silver trophy collection, possibly to atone for never earning a trophy as a child. He also collected manuscripts, such as 35 papers signed by George Washington. The fourth study focused on a new collector who won a very special historical document at his first major auction. The document—one of the originals of the 1297 Magna Carta—had been owned by US presidential candidate Ross Perot and on loan to the National Archives. There were no restrictions on its sale, so there was a chance the document would end up in private hands in another country. This new collector won the bidding and promptly placed the Magna Carta on long-term loan to the National Archives for public display.

Sunday, October 23

Some attendees extended their stay to participate in an all-day field trip to the Morris Museum in Morristown, NJ (Figure 21). The museum is home to the world-class Murtogh D. Guinness Collection of mechanical musical instruments and automata. Special presentations and tours were offered by conservator Jere Ryder, internationally renowned for his technical and historical expertise with these rare, antique objects.
The 2023 NAWCC Time Symposium

Plans are underway for the 2023 NAWCC Time Symposium, “Horology Treasures of Lancaster and the NAWCC Museum.” The event will take place on July 16–17, immediately following the 2023 National Convention. Lectures will be held at the historic Hamilton Club at 106 E. Orange Street in Lancaster, PA, just a short walk from the Convention venue.

Figure 20. (Left) The banquet’s keynote address was provided by Marsha Malinowski. COURTESY OF JAMES NYE. (Right) Symposium attendees enjoyed fellowship and a wonderful meal at the Harvard Club. AUTHOR’S PHOTO.

Figure 21. Several Symposium attendees, including Fortunat Mueller-Maerki and Susan Foreman, participated in the bonus trip to the Morris Museum on Sunday. COURTESY OF BOB FRISHMAN.
As a bonus program of the 2022 NAWCC Time Symposium held in New York City, several attendees participated in an all-day field trip to the Morris Museum in Morristown, NJ. The group enjoyed seeing the Murtogh D. Guinness Collection of mechanical musical instruments and automata.

Jere Ryder, Guinness Collection Conservator at the Morris Museum, now shares that the museum has recently opened its new exhibit *Musically Timed: Continental Clock Makers and Their Markets*. As Ryder stated, the exhibit includes “an impressive grouping of automatic music with timekeeping from Austria, Germany, Switzerland, and France.” Visitors will learn how clockmakers used music in their creations in the 18th and early 19th centuries, allowing the wealthy to experience a variety of music in their own homes.

The exhibit runs through March 26, 2023, and details about visiting the museum are available at https://morrismuseum.org.

(Top) A view of the exhibit at the Morris Museum. (Bottom) Trumpet Organ Clock and Wherle Trumpeter. PHOTOS BY JERE RYDER.
Winter 2023 Classes at the School of Horology
Columbia, PA

January 28 – 29: Introduction to Antique Clocks
Instructor: Ken De Lucca
Scope: Covers the basic function of a time-only mechanical clock movement. All participants will disassemble and reassemble the movement several times. Participants will be introduced to a mainspring winder as well as the clock-cleaning process. The assembled movement will be lubricated and put into beat on a movement test stand.
Member Cost: $695  Nonmember Cost: $820

March 6–10: Mentorship in Clockmaking
Instructor: Ken De Lucca
Scope: This mentorship is designed for beginners, and the subject clocks will be limited to time-only or time/strike pendulum clock mechanisms. Learn everything from diagnostics to repairs and restoration in a hands-on, guided workshop environment.
Member Cost: $1,350  Nonmember Cost: $1,500

Visit nawcc.org/education to register!
Questions? Contact Ken De Lucca, Education Director, at education@nawcc.org or (717) 684-8261 ext. 237.

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The William Hardy Transit Clock

BY RORY MCEVOY (PA)

Last March, I took one of my first walk-throughs of the storage spaces in the Museum and was amazed by the extent of the NAWCC’s reserve collections. I became keenly aware that we have a lot of work ahead of us to make these collections available to our members to facilitate research and discovery. An unassuming-looking regulator (or astronomical clock) dial caught my eye. Despite the heavy tarnish on its silvered dial (Figure 1), the unusual and elegant layout of the dial piqued my interest. Somehow it looked familiar.

Close inspection revealed that the dial is signed by Wm. Hardy of London, which opens up a significant and interesting history. The story starts with the fifth Astronomer Royal, Nevil Maskelyne (1732–1811), who worked at the Royal Observatory in Greenwich, London, from 1765 up to his death. Throughout his tenure, Maskelyne worked with the famous early pioneers of the marine chronometer, including John Arnold, Thomas Earnshaw, and Larcum Kendall, to make improvements to the principal transit clock that is known today as Graham 3.

A transit clock was used to time observations of the passage of bright stars across the meridian. For the astronomer, the meridian was delineated by a fine silk line running down the center of the telescope’s field of view. Hardy made a transit clock with a new spring pallet escapement that was tested by Maskelyne in 1808. The clock performed brilliantly and never deviated by more than half a second. Maskelyne was so impressed by the clock’s performance that he encouraged Hardy to spare no expense in making a new transit clock for the Observatory.

Fun Fact: There is a peculiar device in the Observatory’s collection that is crudely constructed from bent wire. This was used by the assistants to collect spiders’ silk from the Observatory’s gardens for use as crosshairs in the telescopes.

Figure 1. (left) The silvering on the clock dial has suffered from mercury contamination, causing the bluish-gray appearance. (right) The backplate of Hardy’s clock.
Having the Astronomer Royal’s endorsement for his clock design was good for business. It opened the door to a lucrative commission to supply clocks of the same design for the American Coastal Survey. F. R. Hassler published a technical description of the clocks in 1824 in which he provided a detailed description of the function of the spring pallets (Figure 2). While the performance recorded by Maskelyne was exceptional for its time, the escapement had some notable weaknesses. The fine spring sections of the pallets were susceptible to damage when setting the clocks up, and the timekeeping was dependent on the good lubrication. Consequently, most of Hardy’s clocks suffered conversion to deadbeat escapements. The NAWCC’s example, however, is exceptionally well preserved. The original jeweled pallets survived, but the springs were replaced with pivoted arms and two brass weights to provide the restoring force (Figure 3).

Hassler’s description of the clocks provided some intriguing additional information. He noted his decision to opt for brass bushings rather than jewel holes for the train wheels, and the NAWCC’s example conforms to this specification. Hassler added:

The other pinion holes are boxed with brass from a piece brought to England from Bengal as a sample, which was given by the Board of Longitude to Mr. Harrison, the first inventor of chronometers. At his death, Mr. Hardy bought it, and uses it with the greatest economy for such purposes.³

So, not only do we have a very well-preserved example of Hardy’s regulator movement, but also one that conforms to Hassler’s description and is therefore likely to have been one of the clocks purchased for the coastal survey. Furthermore, we have a little piece of history in our Museum that relates directly to the celebrated John Harrison (Figure 4).

Acknowledgment
Thanks are due to Royal Museums Greenwich Librarian Penny Allen for her assistance with this article.

Notes and References
1. This clock was donated to the National Watch & Clock Museum in 2001 by Dr. Ray Davis.
3. Hassler, Papers on Various Subjects Connected with the Survey of the Coast of the United States, 143.
Your purchase supports the NAWCC’s mission to be the leading educator and advocate in the field of horology.

Visit our store in Columbia, PA, shop online at nawcc.org>Shop, or call to order: 717-684-8261, ext. 211.
Whether you’re looking for a new hobby or just interested in mechanical things, this clockmaking mentorship is your starting point. The NAWCC School of Horology is offering a five-day introductory clockmaking workshop with Ken De Lucca, Education Director.

This mentorship is designed for beginners, and the subject clocks will be limited to time-only or time/strike pendulum clock mechanisms. Learn everything from diagnostics to repairs and restoration in a hands-on, guided workshop. Additionally, participants will visit the National Watch & Clock Museum’s Conservation and Study Collection and the Fortunat Mueller-Maerki Library & Research Center for individual research opportunities.

For details on the workshop syllabus, subject clocks, and supplies, or if you have any questions about the mentorship, please contact the Education Director at kdelucca@nawcc.org.

Ready to take the first step toward your clockmaking future? Sign up today by visiting www.nawcc.org/education
The NAWCC, Inc., is holding its election for three seats on the Board of Directors and two seats on the Nominating & Elections Committee (NEC).

To help you in the voting process, all Board and NEC candidates are presented alphabetically on the following pages of this issue of the Watch & Clock Bulletin with a photograph and a biography, which includes the hopeful’s professional and horological experience as well as his or her goals if elected. The biographies were limited to 500 words or less and are presented with approved edits by the candidates. The order of the candidates on the ballot will be determined by a random draw. The three candidates who get the most votes will be automatically placed on the Board of Directors. The remaining three positions will be appointed by the NEC.

As first advertised in the NAWCC Mart & Highlights, July/August 2020, page 17, all NAWCC elections are now conducted online only, with no paper balloting. Those who do not have email addresses are encouraged to create an email address and provide it to Headquarters or to make alternate arrangements to vote online.

The election ballot will be distributed 30–45 days prior to April 1, 2023, by methods determined by the NEC. All ballots must be returned by 12:00 midnight EDT on April 1, 2023. Only ballots received by that time will be considered.

The NEC recommends that you consider the following expectations of the directors:

• The Board’s primary functions are to set broad goals and directions, establish policies, and ensure management’s performance. Day-to-day operations of the NAWCC are the responsibility of the Executive Director. Directors are asked to assist fundraising efforts as agreed upon by the Board.

• The Board regularly meets or holds electronic meetings as it believes necessary, with one such meeting held in conjunction with the annual Members’ meeting at the National Convention, when feasible. Directors are expected to participate in all meetings, do the homework to understand the NAWCC’s mission and issues, and contribute to the Board’s work by using their particular skills and resources. Board members also serve on committees, task forces, or both. All should be willing to serve as an officer if elected.

The Board needs a balance of skills and experience to function effectively. Each director should be capable of contributing visible strength and leadership to the Board with respect to some set of the following:

• NAWCC familiarity and service
• Professional skills in education, finance, horology, information technology, law, marketing, museum management, planning, public relations, and publishing
• Business management, particularly in complex organizations
• Board experience, particularly in complex nonprofit entities
• Community and public leadership and contacts with such leaders
• Large-scale fundraising

In addition, each director should be good at listening, analyzing, learning, and working constructively with others individually and in groups. A director should be computer literate and have access to the Internet to participate in NAWCC Board work.

AT A GLANCE

NAWCC Board of Directors
Openings: Six
Term length: Four years
Candidates:
• Robert Burton (KY)
• Eliel Garcia (PA)
• Jarett Harkness (TX)
• Rhett Lucke (NE)
• Geoffrey Parker (TN)
• Jeff Zuspan (TX)

Three additional seats will be filled by direct appointment after the election. For information about appointed Board positions, see page 69.

NAWCC Nominating & Elections Committee
Openings: Two
Term length: Four years
Candidates:
• Jay Dutton (FL)
• Rich Newman (IL)

The candidate receiving the most votes will automatically be placed on the NEC. One additional seat will be filled by appointment by the NEC after the election.
Candidate for Board of Directors

Robert B. Burton
Louisville, KY

I was appointed to the Board of Directors in late 2019, not long after the resignation of our previous Executive Director. And then, within just a few months, everything closed due to COVID-19. This included bringing in our new Executive Director, Rory McEvoy, who was unable to join us until February 2022 due to the shutdown of immigration.

Thanks to a great staff at headquarters and the Oversight and Advancement Committee of Directors, with special thanks to Jay Dutton, Rich Newman, and the late Jim Price, we were able to weather the COVID-19 pandemic.

I have been a member of the NAWCC for 40 years and have thoroughly enjoyed being a member of our organization. I have been the Vice President and President of Kentucky Bluegrass Chapter 35, Chairman of the Louisville Bluegrass Regional for many years, and belong to several other Chapters.

I am Chair of the Chapter Relations Committee. COVID is hopefully behind us, and I look forward to helping our Chapters get back on their feet. We can promote in-person meetings again, which our members have really missed.

I feel that I can offer a lot to the NAWCC by serving a second term on the Board of Directors, and I would appreciate your support.
Candidate for Board of Directors

Eliel Garcia
Marietta, PA

I would like to introduce myself to you. My name is Eliel Garcia. My wife, Kathy Kissinger, and I live in Marietta, PA, just down the road from the NAWCC headquarters in Columbia. I am the Sales Manager for Brent Miller Jewelers & Goldsmiths in Lancaster, PA.

I studied at the University of Guadalajara in Mexico, where I earned a bachelor's degree in tourism and hospitality along with a minor in marketing. Additionally, I hold several credentials with the Gemological Institute of America and the American Gem Society.

I have a strong belief in community involvement, which led me to become a graduate of “Leadership Lancaster,” a program that helps to develop up-and-coming leaders in the community. I'm currently a board member of the Boys & Girls Club of Lancaster. Because of this involvement, I have been able to connect with many leaders in our community in both the private and public sectors.

My passion for watches has allowed me to travel and learn. I have visited the Institut Minerva de Recherche en Haute Horlogerie in Villeret, in the Bernese Jura, Switzerland. I have also made a visit to Montblanc’s twin watchmaking facilities in Le Locle, both situated in the Vallée de Joux, the historical heart of Swiss watchmaking.

I have been fortunate enough to establish connections around the country with various watch manufacturers as well as luxury retailers, selling these special products. In turn, I have gained a strong understanding of the watch industry and the folks who are also passionate about horology. I have attended several regional training sessions with Omega, located in Chicago, Orlando, and Miami, along with training in New York at the Olympic Tower for the Cie Financiere Richemont SA group. I have been a Montblanc and Omega ambassador for Brent Miller Jewelers & Goldsmiths since 2018, and I also lead their team of Fine Timepiece salespersons.

I recently became a proud citizen of the United States of America, and several years ago I joined the NAWCC. I currently serve on the NAWCC Development Committee. I enjoy learning and teaching about the historical value of Lancaster County, PA, as it pertains to the watch industry.

Serving on the NAWCC Board of Directors would allow me to provide exciting and new marketing ideas, thus attracting a new generation of collectors. I want to support the growth of the NAWCC by expanding our social media visibility on Facebook, Instagram, Twitter, TikTok, and other platforms, as well as working to create special events and memorable experiences for the members.

My passion for horology continues to grow, and I look forward to sharing that with current and future members.

Thank you for your vote.
Candidate for Board of Directors

Jarett Harkness
Tatum, TX

My experiences as a professional wristwatch dealer, watchmaker, and passionate collector have been significantly enhanced by my NAWCC membership, which I’ve had since 2005. The friendships, the exchange of knowledge, the regional and national events—all have been invaluable to me. I now welcome the opportunity to help ensure that the same opportunities and experiences will be available for other enthusiasts in the future. I believe I can help expand outreach to the wristwatch community. With declining membership, it is more important than ever to establish the NAWCC as a thriving resource and nexus for this passionate, growing watch cohort.

My journey to a career in watches had many turns, and the path I took highlights my adaptability, curiosity, determination, and strong work ethic, all of which I will apply to my Board responsibilities.

I received my BS in wildlife biology in 1991 from Pittsburg State University, then worked in the family paint contracting business. I later returned to school and pursued a career in pharmacy at Southwestern Oklahoma State University. I graduated in 1998 and worked full time in pharmacy through 2011. My wife and I moved to Texas in 2004 and have been in East Texas since then.

It was around 2005 when I became interested in watches. I have always been fascinated with mechanics, and from my youth worked on everything from bicycles to motorcycles to cars. Naturally, I wanted to learn how to service my watches, so I bought manuals and tools and developed relationships with mentors. Soon my business, Unwind In Time, was born.

In 2007 my watch life changed when I bought a bag of watches that contained a Hamilton Electric Pacer—a new and puzzling beast! Through the NAWCC Forums, I met Rene Rondeau, the man who literally wrote the book on Hamilton Electrics. I was hooked. I mentored under Rene until he retired in 2015, and I acquired his business and merged it with Unwind In Time. As a full-time watch dealer, I have seen firsthand the growing enthusiasm for wristwatches and the development of a passionate community.

I hope to offer a fresh perspective to the Board that will attract this younger, engaged demographic. If we can better communicate the value of NAWCC membership—if we can entice them to our events, Museum, and online resources—they will join not just to attend one event (then let their membership lapse). We need the Watch & Clock Bulletin to feature more articles on vintage watches. We should be fostering relationships with future watchmakers by offering free membership to them while they’re in school, so they will become dues-paying members and a voice of outreach in our community. I hope we will investigate partnering with some of the top social media influencers in the watch community to promote our upcoming events.

For the events, we should analyze different entry and fee models.

The NAWCC has unique and wonderful assets like its Museum, watch information archives, and network of Chapters and events. In addition, it has the great wealth of knowledge of NAWCC members themselves. If we can more effectively leverage and communicate these invaluable assets, I see a bright future for our organization.
Candidate for Board of Directors

Rhett Lucke
Grand Island, NE

I have been an active member of the National Association of Watch & Clock Collectors since 1984. Since 2019, I’ve had the privilege of serving on the NAWCC Board of Directors as Secretary, Vice Chair, and Chair. My goals are to continue working as a team with the Board, Executive Director, headquarters staff, and our National Committees to update and execute a cohesive strategic plan for the NAWCC and its future. This includes continuing the improvement and expansion of our website, forums, and online presence, improving the value proposition for our members, Chapters, and the horological community, and improving our financial stability.

Professionally, I hold an engineering degree from the University of Nebraska and 36 years of progressive experience in a variety of technical and managerial roles associated with the development and manufacture of capital goods. This varied experience in managing large and small teams, projects, and multimillion dollar budgets gives me a strong background in helping the NAWCC develop and implement a plan for meeting the challenges ahead.

Since joining the NAWCC, I’ve had the opportunity to participate at both the Chapter and national levels. At the Chapter level, I have helped coordinate a regional display and given numerous presentations at Chapter meetings. At the national level, I’ve contributed and loaned watches to the 1995 Symposium on railroad timekeeping and the 2006 Symposium on Webb C. Ball, coordinated a project and the funding to digitize and make available online the Hamilton Watch Co. factory ledgers, co-authored and contributed to numerous Bulletin articles, and actively participated in and promoted the NAWCC on social media and other online venues, including the NAWCC Forums. I’ve also been an active member of both the Museum and Library Committees.

My interest in timepieces began while in high school, and I joined the NAWCC while in college. My primary horological interests are in American pocket watches and marine chronometers, with a particular interest in the history and products of the Hamilton Watch Co. In over 40 years of collecting and 38 years of membership in the NAWCC, however, what I’ve really collected is friendships. Most of these resulted from my involvement with the organization and its activities. This is what the NAWCC is all about.

In summary, the past few years have been challenging times for everyone. Nonprofit organizations, like the NAWCC, have been particularly challenged. I’ve been fortunate in getting the chance to work with an incredible group of dedicated and talented Board members and am proud to say that as a team, we have been able to weather the storm. We still have much work ahead and I believe my experience, skills, and passion can help continue the work that’s been started. I ask for your vote.
Candidate for Board of Directors

Geoffrey S. Parker
Soddy Daisy, TN

I have a BA from the University of Massachusetts, an MSc from the SANS Technology Institute, and a PhD in computer science from the University of Honolulu. I also hold certifications as a Microsoft Certified Trainer, a Microsoft Office User, and Global Information Assurance.

I have been a member of the NAWCC for eight years and was originally a member of the Florida Gold Coast Chapter 60. Currently, I am a member of San Jacinto Chapter 139, Lone Star Chapter 124, Middle Tennessee Chapter 42, and Atlanta Chapter 24. As a member of these Chapters, I have served as Treasurer, Regional Finance Chairman, and Regional Pre-Registration Chairman.

I did a TV commercial to promote the Mid-South Regional in August 2022. Also in 2022 I gave presentations on how to build your own wristwatch, one at the All Texas Chapters Regional and another at the Mid-South Regional. I received the NAWCC Fellow Award in 2022.

As a wristwatch and pocket watch collector, I have presented numerous programs on such topics as waterproof-testing watches, watch crystal replacement, and watch repair, as well as how to identify and value real and fake luxury watches.

Recently, I joined the NAWCC Governing Documents Committee and have been involved with updating and modernizing the technology, procedures, and methods used by the committee.

I am a firm believer in contributing whenever and wherever possible to the organization to which I belong. I have a significant background in training and in public speaking, including radio and television. I have participated in a number of classes, both in and out of the NAWCC, and have traveled to several regional and national NAWCC events to share information and knowledge.

In summary, I feel that if elected to the NAWCC Board of Directors, I can make significant and sorely needed contributions to our organization through my expertise in the fields of computers and technology. I would love to have the opportunity to devote my time and energy toward making the NAWCC an even more innovative organization in the 21st century.
Candidate for Board of Directors

Jeff Zuspan
Houston, TX

Please let me say that it is an honor to be asked to run for a seat on the NAWCC Board of Directors. I have had a lifelong love for horology and feel with my background and education I can help make the NAWCC an even stronger organization.

I grew up in Crystal Lake, IL, and lived there until I graduated from high school. In 1980, I attended Gem City College in Quincy, IL, to study horology, watchmaking, clockmaking, and jewelry design. After completing my studies in 1982, I moved to Houston, TX, where my family and I still live. My plans were to be a jeweler and watchmaker. Then one day I walked into Chappell Jordan Clock Galleries and applied for a clock repair position. Ralph Pokluda was the owner of Expert Clock Repair Inc. and a week later I was hired. I never left! In fact, in 1996 Chappell Jordan retired and Ralph and I teamed up to purchase the retail business and properties. We grew the business over the next 25 years, at times employing 15 people. Clock sales and repairs were booming in Houston. In 2019, we decided it was time to step aside and retire. Bernardo Maya, who had worked for us for many years, bought Chappell Jordan Clocks from us and continues to run it to this day.

In 1983, I joined the NAWCC and in 1986, I was a founding member of San Jacinto Chapter 139 in Houston where I served as Director, Vice President, and President over the years. I also chaired a variety of committees for the All Texas Chapters Regional and volunteered at the National Conventions as well as served as Publicity Chairman for the Ward Francillon Symposium in 1990. While I have an interest in all forms of horology, my main interest is American clockmakers.

I have been married since 1988 to my lovely wife, Babette, and we have two grown sons, Nicolas, who is 28, and Jeffrey, who is 30.

I serve as President of an HOA board and am involved with my church in a men’s group and Bible study. Currently, I am President of Chapter 139 here in Houston. I also enjoy giving horological programs and lectures at Regionals and different venues. Public speaking comes naturally to me because I love being around people who share our hobby.

If elected, my goal as a Board member is to stabilize and reverse the decline in our membership as well as formulate a plan to reach out to inactive members and let them know we care. I also want to work on national outreach to promote the NAWCC and the value of understanding horology and the science of time.

Thank you for your vote and support.
Candidate for Nominating and Elections Committee

Jay Dutton
Saint Augustine, FL

Fifty years ago, I joined the National Association of Watch & Clock Collectors. I was fortunate to have been appointed to the Board of Directors in 2019, elected Treasurer in 2020, and to have worked on various committees within the Board to bring a great level of stability by leveraging our presence on the web, identifying opportunities, and securing significant financial resources for the organization.

I will continue to work for the preservation, growth, and success of the NAWCC, although another term on the Board of Directors is not a possibility at this time. The Nominating and Elections Committee strategically influences the future of the NAWCC by securing talent within our membership for placement on the Board, whether through election or direct appointment. I ask for your vote to be elected to the Nominating and Elections Committee.
Rich Newman  
DeKalb, IL

I joined the NAWCC 30 years ago and have volunteered and held positions with Chapters, regional events, National Conventions, national committees, and the Board of Directors. While on the Board, I was Treasurer for two years, Vice Chair for two years, and Chair for four.

We’ve done many good things, including improving our financial reserves and balancing budgets, focusing on member services and quality, raising our presence and reputation to the internet community, and removing needless bureaucracy and rules. Much progress has been made, and I hope you agree that the NAWCC is heading in the right direction.

However, few accomplishments would be possible without the work of the Nominating and Elections Committee (NEC). My term serving on the Board of Directors is up. With your support, I would like to continue to volunteer as a member of the NEC to ensure that the Board is composed of dedicated and skilled members who will work collaboratively to advance our educational mission, improve value to members and Chapters, and achieve a sustainable collectors’ organization.
2023 NAWCC Election

Call for Nominations

Appointed Members—NAWCC Board of Directors
2023–2027 Term

This is a call for nominations for appointed positions to the NAWCC Board of Directors to be filled in the spring of 2023. Three directors will be appointed to four-year terms, with the term beginning in July 2023.

Director appointment is the way in which individuals with special experience and proven skills may be placed in service on the Board to fill needs that may exist. Special qualifications may include financial planning, legal counsel, museum management, fundraising and development, organizational leadership, as well as others.

Candidates for appointment may be self-nominated or may be nominated by others. If you want to discuss your nomination, please contact NEC Chair Carroll Wolfe at carrollw1102@gmail.com or 870-692-0529.

You may obtain a nomination form by:

- Visiting the nawcc.org home page and clicking on the About tab. From there, click on Corporate Documents in the drop-down menu. Once in Corporate Documents, click on NAWCC Member Documents to see the reference to Board of Directors Nominations Forms.
- Contacting NEC Chair Carroll Wolfe at carrollw1102@gmail.com or 870-692-0529.
- Checking page 66 of the Mart & Highlights, January/February 2022.

Nomination forms should be submitted as soon as possible for full consideration, but must be delivered no later than 12:00 midnight EDT on April 1, 2023, to Carroll Wolfe at carrollw1102@gmail.com or 870-692-0529.

The Nominating & Elections Committee (NEC) will interview candidates regarding their interests and eligibility. By mid-April 2023, the NEC will select from among all candidates three who are best qualified to serve special needs, and recommend them to the Board of Directors for appointment. If any of these are not approved for appointment by the Board, then the NEC will present additional candidates, one at a time, until all three positions are filled.

—NAWCC Nominating & Elections Committee
In Memoriam

Dennis D. Roberts

Dennis D. Roberts, 81, of Geneseo, IL, passed away on October 22, 2022. He was born on November 8, 1940, in Galesburg, IL, to Virgil and Gertrude Nelson Roberts. Dennis, or “Denny,” graduated from Winola High School and professional trade school in Minneapolis. He was a rate clerk in the trucking industry. He married Barbara McCurdy on July 24, 1960, in Viola.

Denny enjoyed gardening and restoring antique clocks. He had an extensive collection of E. N. Welch and china clocks. In the 1990s, Denny and his wife, Barb, traveled to NAWCC Regionals around the country where he purchased many of his clocks. He was a self-taught clock repairer with an extensive library, and he ran a repair business out of his home. Denny also taught clock repair and stressed patience when addressing a new issue.

He was the president of Iowa-Illinois Chapter 29 for more than 10 years. He always contributed and enriched our meetings. He would share clocks from his collection, provide additional information related to the program, and of course tell at least one joke. Denny was a treasure who will be missed.

—David Lewis (IL)

Available at the NAWCC Store

Cozy up with some horological reading this winter

Without Equal: The Clocks of Abner Jones of Bloomfield, New York
By G. Russell Oechsle

Passing Time Across the Water: Irish Clock Makers in America
By Killian Robinson

The Appreciation & Authentication of Civil War Timepieces
By Clint B. Geller

Lasser’s List: The Hamilton Watch Company
By Dr. Howard Lasser

Timepieces: A Lifelong Love and Passion
By Laurent Martinez

Don’t miss our newest publication!

S-Town Exquisite Clocks: Celebrating the Artistry of John B. McLemore, Horologist
By Philip E. Morris Jr. & William R. Tatum

The book and the corresponding exhibit at the National Watch & Clock Museum celebrate the talents and vision of clockmaker and restorer John B. McLemore, whose story was shared on the podcast S-Town.

Email giftshop@nawcc.org or call 717.684.8261 ext. 211 to order
Robert E. Burr

Robert “Bob” E. Burr, 90, of Muscatine, IA, passed away on September 16, 2022. He was born on September 1, 1932, in Muscatine, one of eight children of Albert and Wanda Loga Burr.

Bob was a pressman for the Muscatine Journal, working there for 48 years. He was a veteran of the Korean conflict and a lifetime member of the VFW, and he enjoyed going on the Honor Flight of the Quad Cities. He liked gardening, photography, bowling, and walking along the Muscatine Riverfront.

Bob is remembered as a knowledgeable collector who enjoyed attending Iowa-Illinois Chapter 29 meetings. He is also remembered as an eclectic clock collector who bought what he liked. Several members recalled attempting to outbid him at local auctions with no success. I credit Bob with suggesting an upgrade to the Chapter’s presentation format by installing a public announcement system, and he provided the inspiration for the Chapter’s November meeting competition.

Bob had always wanted a violin clock but was unable to secure one. Resolved to have one, he purchased a used violin and fitted it with a quartz movement with a pendulum.

Bob is survived by his brothers, Gerald Burr of Lone Tree, Ralph Burr of Muscatine, and Frank Burr of Muscatine, and many nieces and nephews.

—Gary Wolber (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 (no PDFs). 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 or TIF 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.
- An In Memoriam will be printed in the next Watch & Clock Bulletin. Deadlines are the first of the month, 60 days prior to publication (e.g., the deadline for the March issue is January 1).
- Send Word docs and JPGs or TIFs to editor@nawcc.org.
In Memory Of
We recognize here those individuals and Chapters whose gifts to the NAWCC were given in memory of fellow members.

Robert Burr given by the Trosen Family
H. William “Bill” Ellison given by Anonymous
Harry Granzow given by Heart of America Chapter 36

Roberta Reupke given by Heart of America Chapter 36
Lu Sadowski given by Damaris Dargay Scafidi & Tony Scafidi
Leonard Simon given by Los Angeles Chapter 56

Obituaries

Richard Beckner
185326 Bozman, MD

Robert “Bob” Burr
34977 Muscatine, IA

Henry P. DeSimone
57810 Wilmington, MA

Charles F. Dietzel
11386 Burke, VA

Delbert A. Eisch
41005 Racine, WI

Ernie Ensalaco
26958 Naperville, IL

Harry Granzow
145486 Sioux City, IA

John D. Griffin
118290 Franklin, TN

James M. Hudnell
34868 Columbia, MO

Phyllis Ingalls
123007 Boise, ID

Lester R. Johnson
138062 Miami, FL

Phil B. Jones
16032 Richview, IL

Chappell Jordan
7130 Nacogdoches, TX

Dr. Norman Stephen Levine
175936 Edmond, OK

Jerrold L. Ludwig
88873 Pasadena, CA

William L. Moore Jr.
128951 Lovettsville, VA

Don Noffsinger
176859 Newburgh, IN

Roberta Reupke
179462 Kansas City, MO

Dennis D. Roberts
91461 Geneseo, IL

Samuel Schiavone
155989 Tampa, FL

Leonard R. Simon
67744 Camarillo, CA

Edward Smith Jr.
45522 Wichita Falls, TX

Eddie L. Starr
138250 Shongaloo, LA

Mary Ann Wahlner, FNAWCC*
58019 Scottsdale, AZ

FNAWCC* denotes a recipient of the Silver Star Fellow Award.
NAWCC Committees

**Awards**
Bob Pritzker, CAN, Chair (timeman@live.com); James Gilmore, CA; Tim Glanzman, TX; Douglas Minty, AUS; Janet T. Oechsle, NY; Laurence E. Pearson, WA; Dennis Radage, CAN; Peter Recourt, VA; Barbara B. Volk, NC; Craig White, WI

**Chapter Relations**
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**Convention**
Leroy Baker, WI, Co-Chair (lebaker@chorus.net); Sherry Kitts, TN, Co-Chair (sacutts@comcast.net); Anita Bikowitz, FL; Paul Davis, MO; Judy Draucker, VA; Bob Geier, TN; Fran Geier, TN; Gregory D. Gould, MO; John S. Koepke, CA; Christopher Martin, GA; Staff: Marlo Davis, PA

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**Development**
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**Ethics**
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**Finance**
Jay Dutton, FL, Chair (jamesdutton@gmail.com); Tom Compton, OH; Cathy Gorton, NC; Staff: Jessica Hutchinson, PA

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**Library Collections**
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**Museum Collections**
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**Nominating & Elections: Voting**
Carroll Wolfe, AR, Chair (carrollw1102@gmail.com); Chris Miller, MO; Tim Orr, CO; Jerry Thornsberry, MO

**Symposium**
Bob Frishman, MA, Chair (bell-time@comcast.net); Mary Jane Dapkus, CT; Cathy Gorton, NC; Katie Knaub, PA; John Kovacik, NY; Keith Lehman, VA; Rick Merritt, PA

**Ex Officio All Committees**
Executive Director Rory McEvoy, PA

**Ex Officio All Committees, except Awards, Ethics, and Nominating & Elections**
Board Chair Rhett Lucke, NE

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**NAWCC Dates to Remember**

All Regional meetings must be scheduled through Convention Committee Coordinator John Koepke by emailing him at jskoepke@comcast.net, calling 510.236.2197, or mailing 2923 16th Street, San Pablo, CA 94806-2362.

For complete information about Regionals, the National Convention, and the NAWCC Ward Francillion Time Symposium, please see the Mart & Highlights or go to nawcc.org.