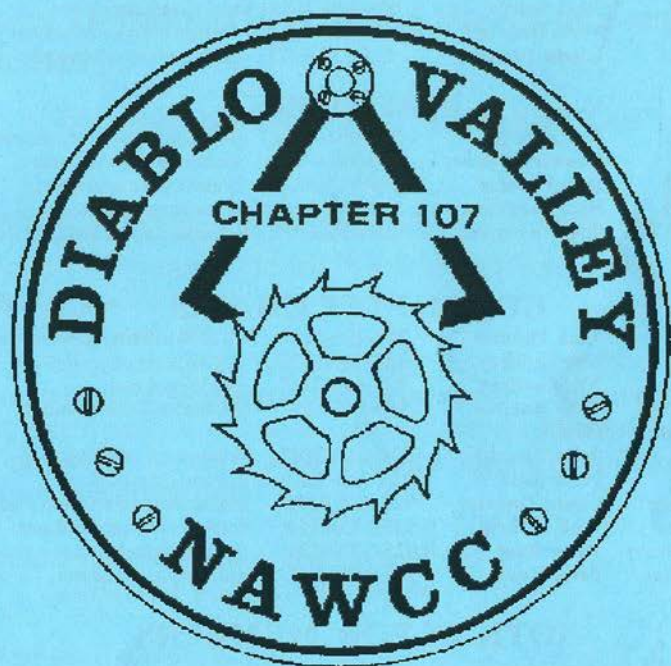


# BULLETIN



April 2019  
Volume 242

## DIABLO VALLEY

### Chapter 107

National Association of Watch and Clock Collectors

[net.nawcc.org/chapter107](http://net.nawcc.org/chapter107)

email account [chapter107nawcc@gmail.com](mailto:chapter107nawcc@gmail.com)

Chapter Established March 5, 1978

**"Accent on Education"**

### 2019 OFFICERS

President	Ron Bechler	408-926-3212	<a href="mailto:ronbechler@comcast.net">ronbechler@comcast.net</a>
Vice Pres.	Price Russ	925-937-9231	<a href="mailto:gpruss@pacbell.net">gpruss@pacbell.net</a>
Secretary	Ross Smith	925-820-2180	<a href="mailto:mainuse@msn.com">mainuse@msn.com</a>
Treasurer	Walt Hubrig	925-685-0260	<a href="mailto:dottiewalt@astound.net">dottiewalt@astound.net</a>
Past Pres.	Linda Towers	925-935-6272	<a href="mailto:lindatowers@hotmail.com">lindatowers@hotmail.com</a>

### DIRECTORS

2019	Vince Angell	916-952-4961	<a href="mailto:phylathome@hotmail.com">phylathome@hotmail.com</a>
2019	Leonard Boone	925-946-1832	<a href="mailto:lenboone@gmail.com">lenboone@gmail.com</a>
2019-2020	Bob Thomas	209-815-3292	<a href="mailto:btclock@comcast.net">btclock@comcast.net</a>
2019-2020	Stan Janczura	925-937-5139	<a href="mailto:sjanczura@aol.com">sjanczura@aol.com</a>
2019-2020	John Koepke	510-236-2197	<a href="mailto:jskoepke@comcast.net">jskoepke@comcast.net</a>

### COMMITTEE CHAIRS

Editor	Tina Thomas	209-481-3930	<a href="mailto:ch107bulletin@comcast.net">ch107bulletin@comcast.net</a>
Library	Nile Godfrey	925-449-2127	<a href="mailto:jng3@aol.com">jng3@aol.com</a>
Mart	Nile Godfrey	925-449-2127	<a href="mailto:jng3@aol.com">jng3@aol.com</a>
Membership	John Koepke	510-236-2197	<a href="mailto:jskoepke@comcast.net">jskoepke@comcast.net</a>
Nominating	OPEN		
Photo	John Koepke	510-236-2197	<a href="mailto:jskoepke@comcast.net">jskoepke@comcast.net</a>
Program	Price Russ	925-937-9231	<a href="mailto:gpruss@pacbell.net">gpruss@pacbell.net</a>
Refreshment	Linda Towers	925-935-6272	<a href="mailto:lindatowers@hotmail.com">lindatowers@hotmail.com</a>
Tool Library	Walt Hubrig	925-685-0260	<a href="mailto:dottiewalt@astound.net">dottiewalt@astound.net</a>
Video Library	Price Russ	925-937-9231	<a href="mailto:gpruss@pacbell.net">gpruss@pacbell.net</a>
Web Master	Price Russ	925-937-9231	<a href="mailto:gpruss@pacbell.net">gpruss@pacbell.net</a>

### NOTICES FOR MEMBERS

(The Bulletin accepts notices from Chapter members for all items/subjects horological - wanted, for sale, give-away, services, and so forth. There is no charge. All you have to do is supply copy to the editor.)

**Wanted:** Articles for the *Bulletin*. Contact Tina Thomas (209) 481-3930. Or email [ch107bulletin@comcast.net](mailto:ch107bulletin@comcast.net).

## Meeting Notice

April 14, 2019

Mart 10:30 Meeting Noon

Grange Hall, 743 Diablo Rd, Danville

April Speaker: Richard Hatch

**Topic: Demonstration of the Basics of French Polishing**

We welcome items for "Show and Tell".

Project Gutenberg's French Polishing and Enamelling,  
by Richard Bitmead

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Title: French Polishing and Enamelling  
A Practical Work of Instruction

Author: Richard Bitmead

Release Date: March 6, 2006 [EBook #17935]

Character set encoding: ISO-8859-1

<http://archive.org/stream/frenchpolishinga17935gut/17935-8.txt>

Continued on page 6

### President's Message

Welcome to the second meeting of 2019. On a sad note, our Santa Cruz Chapter has decided to cease operation in view of declining participation. This is an ongoing trend and one that I hope we can continue to defy.

I was pleased with the Mart activity at our last meeting, and fervently hope to see it constantly increase and thrive. The chapters that continue to do well, seem to all have active marts and several have active training programs as well. Chapter 190 in Ventura is a prime example. Active participation in "Show & Tell" can also spark interest in newer members. One fact is real, we must bring in new members or time and attrition will be our eventual end. The change from "Movie Night" to "Movie Matinee" was successful. Nine people attended. The next one will be in the fall. Those attending got a chance to see the Shortt clock in operation. I encourage our members to take advantage of the "Want Ad/ For Sale" feature of our Bulletin. This feature has been dormant for too long. Let's revive it.

I am pleased to announce that in addition to speaking at the meeting, Richard Hatch will host the picnic and white elephant sale. Remember it will be in June rather than August.

Ron Bechler FNAWCC

John Harrison's super-accurate clock helped solve the longitude puzzle

*Developed over decades in the 1700s, Harrison's clocks were major steps toward a reliable way of calculating longitude at sea* By Rachel Becker Apr 3, 2018, 1:37am EDT

Continued on page 5



Continued from page 4 - John Harrison's super-accurate clock

Harrison was born 325 years ago in Yorkshire, England, and he grew up to become a clockmaker. Before he died in 1776, he developed a series of increasingly accurate clocks that could be used to determine a ship's position on the globe's east-west axis, also known as its longitude. Seamen had long used the position of the sun or North Star in the sky to figure out latitude—that is, the distance from the equator in the north-south direction, according to *The Conversation*. But calculating longitude was much trickier, leading to deadly navigational errors. In 1707, for example, a five-ship pile-up off the Cornish coast killed 1,400 people. So in 1714, the British Board of Longitude announced a competition: £20,000 (or £1.5m in today's currency, *The Conversation* reports) would be awarded to whoever developed the most accurate way to calculate longitude at sea. One way to do that, at least in theory, was to use time. Since the Earth rotates 360 degrees in 24 hours, that means it rotates 15 degrees each hour. So if you know the time where you are and the time at zero-degrees longitude (which is arbitrarily set in Greenwich, England) you should be able to calculate your longitude, the Australian National Maritime Museum explains. Harrison entered the competition with a hand-crafted clock that could accurately keep time even at sea. Over the next 40 years, he perfected the technology. But he didn't win the £20,000 — at least not at first. In 1765, his son, William Harrison, took the fourth-generation clock — called H4, or the sea watch — for a test voyage to Jamaica. The sea watch passed the test, according to the Royal Museums Greenwich. But still, the Board of Longitude wasn't ready to call him a winner and ordered another test run — this time to Barbados, against two teams using methods that relied on astronomy rather than timepieces.

The watch was accurate, but what the Board of Longitude really wanted was a "practical solution," according to an Oxford University Press blog post by science historian Jim Bennett. That meant scaling up production of the watch, which would be challenging with such a carefully crafted device. The Board agreed to award Harrison a partial prize of £10,000. He only received the full amount after King George III insisted, according to Smithsonian's Time and Navigation series.

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### Help parts needed

When Lucy had her recent Auction I purchased a grandmother clock, inoperative. I now have the movement operating. I need some parts to get it fully operational. This is a Jausch 77 movement, and I need a couple of the weight chains as well as three weights (about 5 pounds each). Please help your secretary get this running so he is not late to the next meeting. Money in hand.

Thanks, Ross Smith 925-820-2180 mainuse@msn.com

Project Gutenberg's French Polishing and Enamelling,  
by Richard Bitmead AUTHOR'S PREFACE.

Early in the present century the method generally adopted for polishing furniture was by rubbing with beeswax and turpentine or with linseed-oil. That process, however, was never considered to be very satisfactory, which fact probably led to experiments being made for the discovery of an improvement. The first intimation of success in this direction appeared in the Mechanic's Magazine of November 22, 1823, and ran as follows: "The Parisians have now introduced an entirely new mode of polishing, which is called plaque, and is to wood precisely what plating is to metal. The wood by some process is made to resemble marble, and has all the beauty of that article with much of its solidity. It is even asserted by persons who have made trial of the new mode that water may be spilled upon it without staining it." Such was the announcement of an invention which was destined ultimately to become a new industry.

The pages commence with a description of the art of French Polishing in its earliest infancy, care having been taken by the Author, to the best of his ability, to note all the new processes and manipulations, as well as to concisely and perspicuously arrange and describe the various materials employed, not only for French polishing but for the improving and preparation of furniture woods, a matter of great importance to the polisher. The arts of Staining and Imitating, where by inferior woods are made to resemble the most costly, are also fully treated, as well as the processes of Enamelling, both in oil-varnishes and French polish, together with the method of decorating the same. The condition of the art of polishing in America is dwelt upon, and various interesting articles written by practical polishers in the States, which appeared in their trade journal, The Cabinet-maker, have been revised and printed in this work. A number of valuable recipes, and other instructive matter, useful alike to the amateur and to the practical workman, are also given.

### Shortt Report

The Shortt-Synchronome from the Lick Observatory has been running on my wall since March 6<sup>th</sup>. So far so good. The less than ideal mounting on a less than rigid wall has not had been a major problem. Anyone wanting to see it is welcome to stop by. Just give me a call to arrange a time. The plan is to run it for a considerable period before taking it back to Lick.



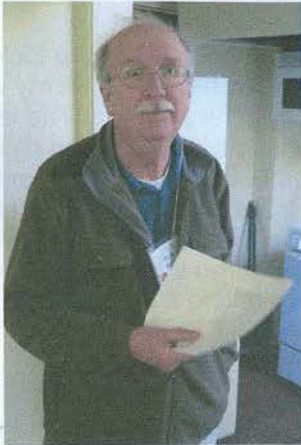
Price Russ

Continued from page 5 John Harrison's super-accurate clock

A compelling version of the narrative is that John Harrison solved the longitude problem, but was slighted by the scientific establishment, Bennett writes in a blog post for Oxford University Press. That version of the story ignores the contributions of other clockmakers in the UK and in France who also were making progress toward developing reliable chronometers. "It is difficult to claim without important qualification that Harrison solved the longitude problem in a practical sense," he says. Harrison's work showed that it was truly possible.

You can see John Harrison's H4 sea watch at the the National Maritime Museum in London. Flickr: Alan Dean

February 2019



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## Do you have the time?

By definition, astronomical clocks sound straightforward. They're timepieces that, in addition to the standard time, also measure and display astronomical information including the phases of the moon, the position of the sun, the zodiac and sidereal time, which is time measured according to the position of the stars, not the sun. By construction, astronomical clocks are much more complicated. Like long-toed shoes and apple wine, these intricately designed and often imposingly large structures that combined art, engineering and a growing understanding of the complex universe around us, were all the rage in medieval Europe. And you better believe that these dazzling, horological statement/timepieces could almost always be found in the hottest spots in town: the town square or inside a large cathedral. While the complex mechanics of astronomical clocks were impressive for the time, it was their eye-popping ornamentation that garnered much of the attention back then as they continue to do today. Many astronomical clocks produced from the 14th through the 16th centuries could be described as super-pious cuckoo clocks with a celestial bent. Crowds still gather for daily shows, which more often than not include a brief but mesmerizing parade of bell-ringing automations representing saints, apostles and other religious figures. It's during these crowd-drawing moments that these centuries-old clocks don't just track time ... they truly come alive.

Amazingly, so many of these ancient astronomical clocks — clocks that have survived war, religious upheaval and the advent of the Swatch — are still very much ticking. A true testament to early European ingenuity, some early astronomical clocks have been functioning nonstop, with most of their original parts, for hundreds upon hundreds of years.



Olomouc astronomical clock —  
Olomouc, Czech Republic

A rare example of an astronomical clock displaying a heliocentric representation of the solar system in lieu of the typical geocentric astrolabe-style display in which the planets revolve around the Earth, the [Olomouc astronomical clock](#) officially dates back to the early 16th century

## Wells Cathedral clock — Wells, England

One of several astronomical clocks constructed from the 14th through the 16th century in the West of England, the Clock at Wells Cathedral, Somerset, is rather legendary. As the [cathedral website](#) notes, it's the second oldest still-in-use clock mechanism in Britain, and likely the world, to survive in its original condition. Dating back to circa 1390, the interior clock face is the "oldest surviving original of its kind anywhere." (The original, still-operating mechanisms are now housed in a museum). Age aside, one of the geocentric clock's most notable characteristics is that it has both interior and exterior dials — that is, there are distinct clock faces viewable from both the interior of the cathedral and from the exterior — the latter was constructed roughly 70 years later but is operated by the same mechanism. In 2010, the clock made the switch from human winding to electric motor-assisted winding when Paul Fisher — aka the Keeper of the Great Clock of Wells — announced his retirement. Fisher, who hailed from a long line of clock-winders dating back to 1919, was tasked with turning a trio of 250 kg (500 pounds) weights 800 times, three times a week. While performing this 600-year-old-plus ritual was no doubt crucial to the clock's operation, it had left Fisher eager for retirement: "I'm a bit sad that all these years of history are coming to an end but winding the clock by hand is just so time consuming," he [told the Daily Mail](#). "By the time you have walked up all the steps and winded the weights it takes at least one hour three times a week."



## CHAPTER #107 MEETINGS

### Second Sunday of the Even Numbered Months

Mart: 10:30AM  
 Chapter: 12:00PM  
 Board: after the Chapter Meeting

### Future Meeting Dates

April 14, 2019  
 June 9, 2019 Picnic and White Elephant Sale  
 August 11, 2019  
 October 13, 2019  
 December 8, 2019

We want to keep our members coming to the chapter meetings on a regular basis. If you have problems with transportation to and from meetings, let a director or officer know so we can help you find a carpool.

**Only NAWCC members can participate (buy or sell) in our Mart. Be prepared to show your current 2019 membership card.**

#### Other NAWCC Chapter Meetings in Northern California

Chapter	Meeting Address	Meetings
De Anza #94	Odd Fellows Lodge 20589 Homestead Rd Cupertino, CA	2 <sup>nd</sup> Sunday even months (except April)
Sacramento #71	Sacramento Garden Center 3330 McKinley Blvd. Sacramento, CA	4 <sup>th</sup> Sunday odd months
San Francisco #5	Boys and Girls Club 401 Marina Blvd. San Leandro, CA	2 <sup>nd</sup> Sunday odd months

## DIRECTIONS TO CHAPTER MEETINGS

*(except August and December)*

### 743 Diablo Road, Danville

Take Interstate 680 to the Diablo Road exit in Danville. Go east on Diablo Road for 0.6 mile. The Grange Hall will be on your right. Parking is available in the front and rear. Enter from the front; *i.e.*, street side. Facing the building from the street, there is a ramp on the right side for handicap and cart access.

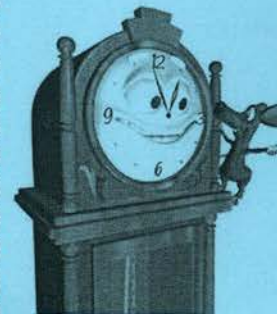
## CHAPTER LIBRARIES

**BOOK:** The Chapter book library is located at Classical Clocks and Antiques, 1082 E. Stanley Blvd., Livermore. Contact Nile Godfrey (925-449-2127) for more information.

**VIDEO:** Chapters 107 and 5 share a DVD video library. Contact Price Russ (925-937-9231) for information.

**TOOL:** Contact Walt Hubrig (925-685-0260) or Price Russ (925-937-9231) for information on the tools and parts available for use by Chapter members.

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