## BULLETIN



June 2007
Volume 171

## DIABLO VALLEY

## Chapter 107

National Association of Watch and Clock Collectors
Chapter Established March 5, 1978

## "Accent on Education"

## OFFICERS

President
Vice Pres.
Vice Pres. Secretary Treasurer Past Pres.

Clarance Kobel 925-447-3383
Dean Thomas 925-455-0929
Tom Kochmann 925-228-8436
John Stohr 925-376-6476 jstohr@sbcglobal.net Walt Hubrig 925-685-0260 dottiewalt @astound.net Jack Coulter 925-284-1031

## DIRECTORS

| 2007 | Sandy Cuthill | $925-686-3144$ |
| :--- | :--- | :--- |
| 2007 | Earl Watrous | $510-569-4175$ |
| 2007 | Bert Bradley | 510-527-3454 |
| 2007-2008 | Tom Armour | 510-654-3363 |
| 2007-2008 | Bob Wahoo.com |  |
|  |  | $925-462-4912$ |
| jbwahrer @ pacbell.net |  |  |

## COMMITTEE CHAIRS

Display
Editor
Library
Mart
Membership
Nominating
Photo
Program
Program Raffle
Refreshment
Tool Library

## Meeting Notice

June 10

## Mart 11:30 Meeting 12:30

## Room B-8 <br> Acalanes Adult Center

## Measuring Tools

from

to

\&


## by a

## Surprised Speaker*

[^0]
## Hello again.

It is June and getting hot. The clocks are all running faster. Things are moving fast, and I have not had much luck slowing them down. The National meeting is in Tennessee the week before our meeting. We have at least three members attending. I thought it would be nice to have them give us their impressions of the meeting, but they won't be back in time to do it this month maybe later. Fortunately I was able to find a speaker at the last minute. To add a little suspense, he is remaining unnamed for now.

I was sorry to hear that Lorraine Stohr recently had a serious health problem. The good news is that she is on the mend. I'm sure you join me in wishing her a speedy recovery.

I hope you enjoy the meeting and have a great summer. Thank you.

## Clarance

## FAVORITE WATCH

My favorite watch is easy to read, needs no batteries, and is self winding, It is not solar powered but works best in a lighted environment. Like any watch it can be worn on the wrist, kept in the pocket, or worn around the neck. This watch works best in the vertical position and may not function normally in a zero-gravity environment. This style of watch can be used as a stop watch if quickly turned 90 degrees from the vertical position to stop and turned 90 degrees in the opposite direction to resume. There is no quick reset button when in the stop watch mode. See my favorite watch on page 15 .

These watches are available for $\$ 14.95$ + shipping and handling. Please inquire @ P.O. Box 673, San Leandro, CA 94577

Just how reliable sources can be is illustrated by the picture of Perrelet on page 7. Some web sites show the picture reversed from the way I have shown it. This leave one to wonder how accurate other information may be. In the last issue, I noted the similarity between pedometers and perpetual watches. Modern watches use the rotor concept similar to that shown on page 7, but Louis Recordon made one with the weight pivoted more like that in a pedometer around 1780 and Von Loehr patented a somewhat similar winding system in the 1870s.

In the October 2005 issue, I speculated on whether a clock in the Bargello (Florence, Italy) might be the oldest surviving fusee and mentioned a clock belonging to Philipp the Good in about 1430. This clock was fully described by Philip Rasch in the February 2007 NAWCC Bulletin. This clock is in such astoundingly good condition that I asked Mr. Rasch whether it might be a reproduction. He is confident it is original. If so, it is much older than the clock by Zech (1525) that has been credited with being the oldest surviving fusee and probably pre-dates the one in the Bargello. The workmanship is certainly more refined than on the Bargello clock.

Thanks go to Earl Watrous for writing about his favorite clock, to Bob Wahrer for telling us about the tool he invented for adjusting wires in hard to reach location, and to A. Nonymous for his (her) interesting favorite watch article. Keep the contributions coming folks. By the way, it would be nice to learn about some more conventional favorite watches.

I try to schedule the Bulletin for delivery before the first weekend of the month when we will have a meeting; $i e$, the "even" months. In order to do this, I have to put everything together no later than the last weekend of the previous month. It would be a great help if contributions reached me during the third week of the "odd" months.

## Price

## a. Nanymous

## A USEFUL TOOL

This tool has been helpful to hold and adjust the wires in a cuckoo clock in instances where regular pliers won't fit or they grip in the wrong direction. It was made from "junk box" material at hand. I will describe the parts that I used. Obviously, your design will depend upon the material that you have available.

The handle was from a " $\$ 1.00$ Store" eyelet kit.


The original dies were removed from both handles. The hole was opened to $5 / 16$ " in one handle to accept the tube. A small strong magnet was fitted to the other handle to retract the rod. The magnet was obtained from a magnetic badge holder. I first used a bit of masking tape to retract the rod before thinking about the magnet.


The tube is steel, $\mathrm{OD}=0.312^{\prime \prime}$, ID $=0.230 "$, and $5 "$ long. One end of the tube is closed with a plug about $0.140^{\prime \prime}$ thick, brazed in place. A nut is brazed at open other end to hold the tube in the handle. A opening was cut and filed at the bottom to about half of the tube diameter and even with the inside of the plug. The rod is $0.218^{\prime \prime}$ in diameter and slides easily inside the tube. The bottom of the rod is flat while the upper end has been made spherical to engage smoothly with the magnet.

Bal Watrer

## ABRAHAM-LOUIS PERRELET

(1729—1826)
Abraham-Louis learned tool making from his father, a Le Locle farmer and carpenter who made tools for watch making during the winter months. Around the age of 20, Abraham-Louis moved from tool making to watch making. He was the first person in Le Locle to make cylinder and duplex escapements and watches with perpetual calendars and equation of time. He is credited with training many master watch makers includ-
 ing his grandson Louis-Frederic Perrelet, "watchmaker to the kings of France", who patented a split-second precision chronograph, and Abraham-Louis Breguet. Abraham-Louis Perrelet continued making watches until the age of 96 . He lived his entire life in the house where he was born.


In addition to being considered the "founder of the precision watch industry in the Neuchâtel mountains" and the first in a line of Perrelet watchmakers, Abraham-Louis is generally credited with the invention of the self-winding watch. An early model is shown on the left. Neuchâtel makers did not sign their work, so it is impossible to be certain that this one was made by him. There are multiple accounts from the mid-1770s attesting to his making watches incorporating this "fabulous discovery". There is also an account of a watch breaking from over winding and his subsequent introduction of a stop mechanism to prevent over winding.

The watch shown is one of four similar ones with the same basic features - rotor, fusee, and verge escapement. Three are unsigned. The fourth is signed by Berthoud. No one seems to question that they are the oldest self-winding watches known, but there is not universal agreement on the inventor. Based on a document from 1778 belonging to the French Academy of Sciences, Hubert Sarton (1748-1828) may be the actual inventor.


Fred Cuthill and Jim McElroy John Stohr in background

Brian Andresen (speaker)
April 2007 Meeting
Photos mostly by Sophia Gardner


Bob and Jan Wahrer with Sophia Gardner


Bob Thomas

## FAVORITE CLOCK

For you skeptics, eBay does offer opportunity, and he who hesitates is lost. My favorite clock is an eBay purchase followed by an extremely challenging repair/reconstruction. I refer to this style
 of clock as a "Rock" clock because the weight commonly used to power them is a rock. They have no case, a donut shaped dial, and exposed wooden works. They are similar to the more familiar "Columbus" clocks. The seller of this clock advised that it was repaired and ran at a clock shop, but never ran at home.

This clock is $95 \%$ wooden, with vinyl pinions. I found a vinyl pinion was split causing the clock to stop. After numerous failed repair attempts, I finally figured out how to successfully make the repair. The movement was rebushed with brass tubing. The pendulum was rebuilt and eventually replaced, including the hanger and pendulum bob. Originally the clock was powered by a large angular rock that rubbed against the wall. I replaced the rock with a cast iron window weight. The weight was rusty and, in my opinion, fit the looks of the clock. Unlike many "Rock" clocks, which have only one hand, the hour hand, this clock has two hands, and two donut style dials, the small dial tracks the hours, the large dial tracks the minutes. I whittled and colored new hands to fit the look of the clock.

The escape mechanism is a pinwheel and anchor style verge with adjustable pin pallets. Adjusting the pallets, developing the pendulum from stem to Continued on next page


Wait. Don't Tell Me!

What is a "scratch dial" and where are they most commonly found?

In his "favorite clock" article, Earl describes his clock as similar to "more familiar Columbus clocks". What is a Columbus clock?

The Ball Watch Co. describes this watch as having "selfpowered micro gas lights" that "allow easy reading in the darkest environments". What are "micro gas lights"?


This dial signed "Perrelet 1777". "Swiss" is written below the "VI". It appears to have a rotor built into the dial. This dial was pictured on the internet alongside one of the early self-winding watches. Is this a dial from 1777?

## Continued from previous page

stern and trying to find the right size weight to drive the clock, all at the same time was a quite perplexing and a trying experience. This pendulum is 56 " long, keeps good time and has a slow tick....tock at 26 beats per minute.

The repair of this clock was the most challenging and difficult to get running; and therefore the most rewarding clock that I have repaired in my short time as a hobbyist horologist. I can only surmise that a favorite becomes a favorite by how much of yourself you put into it.

Earl Watrous

## OK, Now Tell Me.

"Scratch dial" is the name given to sundials "scratched" into the south walls of Saxon churches in England. This one has been dated to about 1055 . The dial follows the Saxon practice of a day
 consisting of 8 "tides". The four daylight tides are indicated by the + marks. Obviously this is unrelated to scratch finishing, a frosted appearance, that is sometimes used on metal parts.


Columbus clocks were made by Bostic \& Burgess (Ohio) for the 1893 Columbian Exposition. They have foliot regulation and feature an image of Columbus above the dial. The illustration is from the back cover of the October 1992 NAWCC Bulletin.

Micro gas lights are small capsules of tritium and a phosphor that glows when stimulated by the radioactive decay of the tritium. The claim is that they are brighter than other luminous systems. Both Ball and Luminex claim micro gas lights as an exclusive feature. Like all other tritium illumination systems, the intensity will decay with time.

Aside from the fact that the dial looks nothing like typical late $18^{\text {th }}$ century dials, the word "Swiss" implies a modern dial. It is interesting to note, that there are specific legal requirements for the use of "Swiss" and "Swiss Made". This also applies to regional names such as "Genève". Use of such terms is overseen by the Federation of the Swiss Watch Industry. Does anyone know when the term Swiss was introduced as a label?

## HELPFUL HINTS

In the February issue, Earl Watrous asked for advice on "aging" brass. Here are some suggestions.

1. Using a fine emery cloth, produce a fine etching on the surface (use cloth in circles, not in one direction), then apply a salt water solution with a cotton swap or fine paint brush. Wait a few days; wipe off the salty residue. If you don't have a good enough patina, try lemon juice. Be careful to wipe away any saline or lemon juice from the stock.
2. Use "liver of sulphur" or other hydrogen sulfide generating compound. (Careful, hydrogen sulfide is very poisonous.)
3. Proprietary mixtures sold commercially.

## CHAPTER LIBRARIES

BOOK: The Chapter book library is located at Classical Clocks and Antiques, 1086 E. Stanley Blvd., Livermore. Contact Nile Godfrey (925-449-2127) for more information.

VIDEO: Chapters 107 and 5 share a 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.

There is no cost to borrow items from these collections.

## NOTICES FROM MEMBERS

(The Bulletin accepts notices from Chapter members for all items/subjects horological - wanted, for sale, giveaway, services, and so forth. There is no charge. All you have to do is supply copy to the editor.)
Earl Watrous, 510-569-4175, is looking for a Sessions motor assembly of the type shown to the right.


CHAPTER \#107 MEETINGS

## Days and Times

Mart Second Sunday 11:30AM Even numbered months Chapter Second Sunday 12:30PM Even numbered months Board Second Sunday after the Chapter Meeting Evening First Friday 7:30PM Odd numbered months

## Future Meeting Dates

## FRIDAY

July 2007 - None
September 2007 - None
November 2, 2007
January 4, 2008
March 7, 2008
May 2, 2008

## SUNDAY \& BOARD

August 12, 2007
October 14, 2007
December 9, 2007
February 10, 2008
April 13, 2008
June 8, 2008

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.

| Other NAWCC Chapter Meetings in Northern California |  |  |
| :---: | :--- | :---: |
| Chapter | Meeting Address | Meetings |
| De Anza <br> \#94 | Odd Fellows Lodge <br> 20589 Homestead Rd <br> Cupertino, CA | $2^{\text {nd }}$ Sunday <br> even months <br> (except April) |
| Monterey Bay <br> \#70 | Live Oak Grange Hall <br> 1900 17th Ave <br> Santa Cruz, CA | $3^{\text {rd }}$ Sunday <br> odd months |
| Sacramento |  |  |
| \#71 | Sacramento Garden Center <br> 3330 McKinley Blvd. <br> Sacramento, CA | $4^{\text {th }}$ Sunday <br> odd months |
| San Francisco |  |  |
| \#5 | Boys and Girls Club <br> 401 Marina Blvd. <br> San Leandro, CA | $2^{\text {nd }}$ Sunday <br> odd months |

## DIRECTIONS TO CHAPTER MEETINGS

## Sunday Meetings <br> (except August and December)

From Oakland - Highway 24 going East
Take Pleasant Hill Road South exit.
At light, turn right onto Pleasant Hill Rd.
At end, turn left on Olympic Blvd. Go 0.9 miles.
At light, turn right onto Tice Valley Blvd. Go 0.6 miles.
Turn right into Acalanes Adult Center (1963 Tice Valley Blvd.).
From San Ramon - Highway 680 going North
Take Olympic Blvd. exit.
Left on Olympic Blvd. Go 0.9 mile.
At light, turn left onto Tice Valley Blvd. Go 0.6 miles.
Turn right into Acalanes Adult Center (1963 Tice Valley Blvd.).

## From Benicia - Highway 680 going South

Take Olympic Blvd. exit.
Right on Olympic Blvd. Go 0.8 mile.
At light, turn left onto Tice Valley Blvd. Go 0.6 miles.
Turn right into Acalanes Adult Center (1963 Tice Valley Blvd.).
Only NAWCC members can participate (buy or sell) in our Mart. Be prepared to show your current membership card.

Favorite Watch continued from page 4.



[^0]:    * He did not know he was going to do this until two weeks before the meeting.

