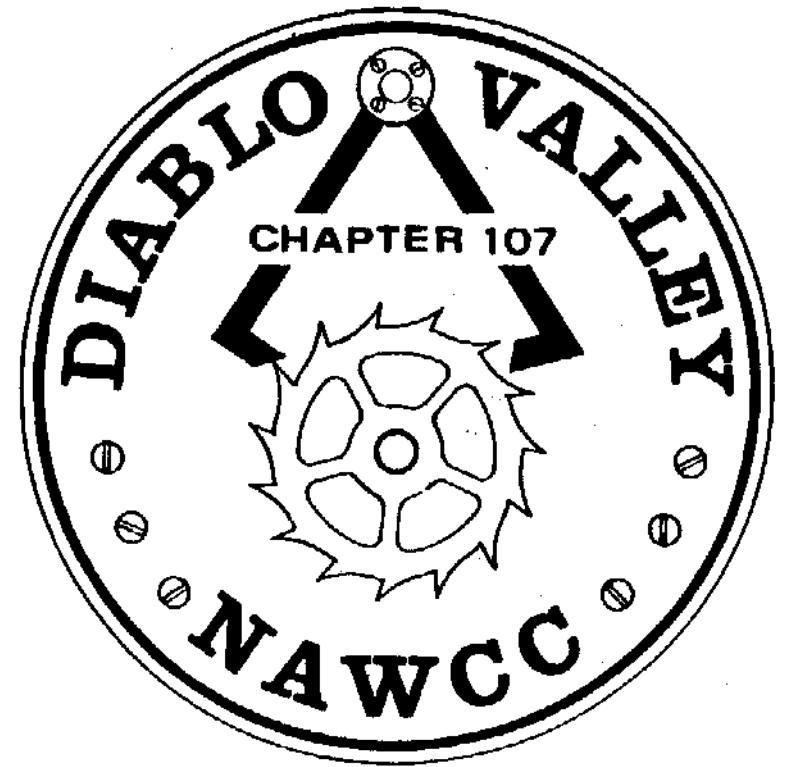


BULLETIN



June 2003
Volume 147

DIABLO VALLEY

Chapter 107

National Association of Watch and Clock Collectors

Chapter Established March 5, 1978

"Accent on Education"

OFFICERS

President	Bob Wahrer	925-462-4912	jbwahrer@pacbell.net
Vice Pres.	Dale Gardner	510-531-7565	
Vice Pres.	Jason Evans	925-376-0654	
Secretary	John Stohr	925-376-6476	jstohr@sbcglobal.net
Treasurer	Walt Hubrig	925-685-0260	dottiewalt@ca.astound.net
Past Pres.	John Stohr	925-376-6476	jstohr@sbcglobal.net

DIRECTORS

2003	Tom Armour	510-654-3363	armourtom@aol.com
2003	Sandy Cuthill	925-686-3144	
2003	Bill Koppel	925-934-9391	wkoppel131@aol.com
2003-2004	Lois Naye	925-934-4557	lnaye@aol.com
2003-2004	Jack Coulter	925-284-1031	

COMMITTEE CHAIRS

Display	****open****		
Editor	Price Russ	925-937-9231	gpruss@pacbell.net
Library	Sandy Cuthill	925-686-3144	
Mart	****open****		
Membership	Roy Holman	510-530-5428	rholmanjr@juno.com
Nominating	John Stohr	925-376-6476	jstohr@sbcglobal.net
Photo	Sophia Gardner	510-531-7565	
Program	Dale Gardner	510-531-7565	
Program	Jason Evans	925-376-0654	
Raffle	Jack Coulter	925-284-1031	
Refreshment	Lois Naye	925-934-4557	lnaye@aol.com
Tool Library	Walt Hubrig	925-685-0260	dottiewalt@ca.astound.net

Meeting Notice

JUNE 8

Mart 11:30 (Bring something to sell)

Meeting 12:30

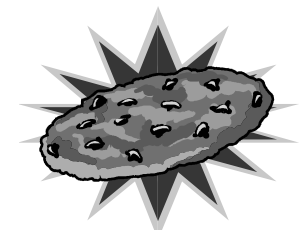
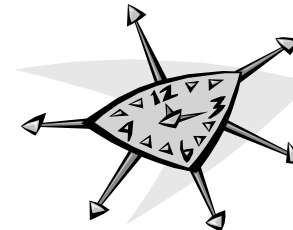
Room B-8

Acalanes Adult Center

Horological Show and Tell

**Share favorite horological objects
Timepieces, Tools, Projects, or Whatever**

**Plus
Those Perennial Favorites
the
Ugly Clock Contest
&
Cookie Bake-off**



President's Message

Let me begin by wishing everyone good health and I hope enjoying the recent spring weather as much as I do. The April meeting of the Chapter was really great. Dorian Clair gave an excellent presentation on the restoration of the clock in the tower of the San Francisco Ferry Building. Much thanks to Dorian and his two helpers, Eric & Sam Saxson. To me, the most interesting (and disturbing) was the attitude of the Port Authority "Officials" regarding the preservation of this historical item. If it wasn't for the effort put forth by people like Dorian, this clock would likely have been dumped into the Pacific Ocean. It has been said that restoring the clock would be too much bother and "The Port Authority is not in the business of preserving antiques". Thank you for a job well done and lets look forward for the formal dedication of this project sometime before the end of summer.

The last meeting was the 25th anniversary of Chapter 107! I must apologize for overlooking this important event. It's a good thing that we have people like John Stohr to keep track of things like this. A wonderful anniversary cake was provided for all to enjoy.

The June meeting will be a show-and-tell. This will consist of several short presentations by various chapter members. We invite everyone to participate. Please bring in one of your favorite horological acquisitions, tell us about an interesting project, show us a new, old, or unusual tool, etc.

In addition, we will have our annual Ugly Clock Contest and Cookie Bake-off. For those who are new to the chapter, the rules for entering the Ugly Clock Contest are simply to bring a clock or watch which you believe is lacking in esthetical or practical design. We will have a panel of judges review the entrants and select the truly most ugly clock. For the Cookie

Bake-off, bring a dozen or so of your favorite home made cookies. These will also be judged by our panel. Worthless prizes will be awarded to all of the winners.

Bob Wahrer

Editor's Section

If you think the Bulletins contain too many articles by the editor, we are in complete agreement. While I enjoy the opportunity to write out my horological meanderings, this publication should not be just a collection of my thoughts and experiences. To paraphrase Lincoln, it should be of the members, by the members, and for the members. I need your help with the "by the members" part. Believe me I am more than happy to include contributions from members. If you have not contributed because you think your writing skill are weak, I will help you edit your contribution. If you think you don't know enough or your contribution would not be interesting, surely it would be as interesting as some of the material I write.

For our Show and Tell, Bob Wahrer is going to discuss "How to Buy a Sundial". (Did you know that the science of sundials is called "gonomics"?) I plan to bring a display of measuring tools used in horological bench work. At this time, I do not know who else is planning to contribute, but I am counting on some interesting surprises.

In mid-May I went to a garage sale at what turned out to be the home of Harvey De Covnick. He used to own a clock shop in Danville. We had an interesting chat. Among other things, he was a radar operator in B17s, B29s, and B36s. He was also involved in the nuclear power industry. In addition to chatting I acquired a few tools and some books.

(Continued on page 12)

OH, WHAT A DIFFERENCE A DIAL MAKES

Quickly, what time is it by the watch in the picture?

It is surprising what a difference the layout of dials makes. For years I have worn an Accutron which has the name written across the middle of the dial. Recently I sent it off to be serviced. While it is away, I have been using another one of the same model but with a different dial and slightly different hands. As shown in the photo, the name on this one is written to one side. Under certain lighting conditions, the hour hand is essentially invisible and the name appears to be the hour hand. One then reads the time as something after 9:00. The correct answer in this case is 11:40. It is hard to capture the effect in a photo, but hopefully you can get the idea. The point is that in designing or selecting any item, one needs to pay careful attention to form and function. *Ed.*



EYE SAFETY

How many eyes do you have? How many can you afford to lose? Just how brittle is fully hardened steel? The first two questions are rhetorical. The answer to the third one is “very”. It breaks almost like glass—hence the term “glass hard”.

One of our members was recently trying to improve the alignment of a steel-rod slide in a tool. He was not really thinking about the part being hardened. The part snapped and hit him just outside the edge of his eye. Fortunately no damage was done, but it might have been a very different story if it had hit a fraction of an inch further over.

Always wear eye protection when using tools. *Ed.*

THERES GOLD IN THEM THERE WATCHES A Compendium of Terms

The following is taken from de Carle’s *Watch and Clock Encyclopedia*

GOLD: Chemically inert yellow metallic element. Alloyed to add hardness. Rated by “carats” with 24K being pure gold. Subject to Hall Marks. (The “K” in carat is from the Greek.)

GOLD FILLED: Another name for rolled gold.

ROLLED GOLD: Layer of gold rolled on to a base metal. Used for cases marked “x years” where “x” is the number of years, typically 5 to 25, the gold layer should last. Five year guaranteed duration has minimum thickness of 12 microns, Twenty-five year is at least 60 microns. Rolled gold is twice as thick as gold plate for the same number of years of expected life. (One micron = 0.000039”).

GOLD PLATED: Base metal chemically coated with gold alloy. Should be at least 10 microns thick.

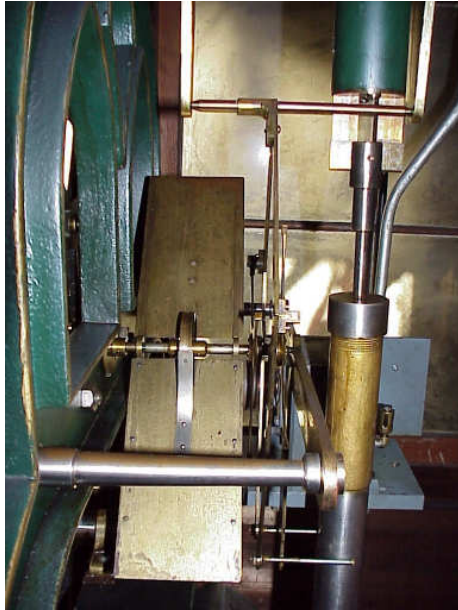
AMERICAN GOLD: Contains higher copper content than English gold. This gives it a reddish color.

RED GOLD: Another name for American Gold

WHITE GOLD: Gold (6 parts) and palladium (1 part) alloy. Graded by carats and subject to Hall Marks. Lower grades contain nickel rather than palladium.

GILDING METAL: Alloy of copper and zinc with gold-like appearance. Also known as Pinchbeck after the inventor.

GOLD SPRING: Soft spring attached to the detent in a chronometer. Also known as passing or discharging spring.



April 2003 Meeting

Photos by Sophia Gardner and Dorian Clair



Eric Saxson, Sam Saxson and Dorian Clair
Surrounded by their work



Jerry Kroeger enjoying the
Silver Anniversary Cake



Bob Wahrer

Wait. Don't

Answers to last issue's questions

Last month's questions were about tower clocks.

Clock No. 1 is quite likely the most famous clock in the world and one of the largest. It is the Great Westminster Clock designed by Edmund Beckett, later Lord Grimthorpe, built by Dent in 1854, installed in 1859, and set going in 1860. Actually the story starts in the early 1840s. Beckett did not enter the picture until 1851. He sets the stage for the story this way.

"I know very well that the tendency of the official mind to get things done with as little trouble as possible is infinitely stronger than to get them done as well as possible. I was only brought into this business originally with the view of saving somebody else trouble; as soon as it was found that by the legal effect of the contract I had real power to direct the work, every possible effort was made to get rid both of it and me."

Sound familiar? The clock, its bells, and the controversies around the project are described in detail in Beckett's book *Clocks and Watches and Bells*.

Clock No. 2 is in Salisbury Cathedral (England). It was made in 1386 and may be the oldest surviving complete clock. Only the anchor escapement is not original. It has a going and strike train but no dial. See Britten's *Old Clocks and Watches and their Makers* for more details about this and other ancient clocks.

Clock No. 3 is none other than the tower clock from the San Francisco Ferry Building. It was the subject of the April meeting so no additional details need to be given here. If you missed the presentation, Dorian is giving it again at the Chapter 5 meeting on July 13. All Bay Area NAWCC members are invited to attend. The entrance fee is being waived for this meeting.

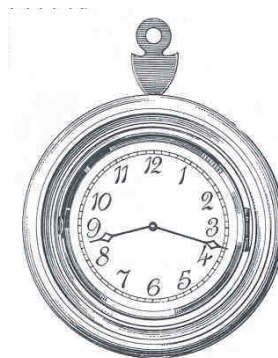
Tell Me!

New Questions



The photo shows two bench micrometers. Both read to the same precision (1 mm/turn of the dial). One opens linearly like a vise or a drawer. The other opens around a pivot like pliers. Which is inherently more accurate and why? (You can examine them at the June Show and Tell.)

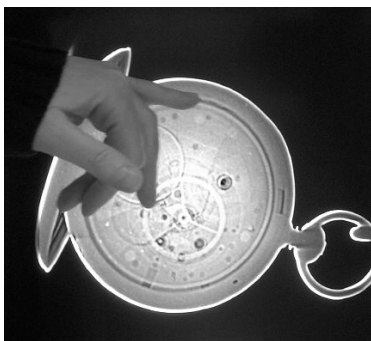
Who invented this sundial, where is it located, and how does it work?



What style clock is this? When were they popular and how were they used?

FOLLOW UP ON DIXON'S WATCH

In the August 2002 *Bulletin*, I discussed the recovery of Lt. Dixon's pocket watch from the CSS Hunley. The photo, an x-ray image of the watch, shows that at least part of the works have survived (Charleston *Post and Courier*). The front of the hunter case was opened in March. The hour hand was broken at the hub but appears to have pointed to somewhere between 6 and 9. The minute hand pointed to 22. The second hand pointed to 20. It seems unlikely the watch will reveal much about the sinking.



The back of the case has not been opened, but serial numbers and hallmarks have been read, presumably from the x-ray photos. The maker has not been identified. The caption with the photo says the person is pointing to the bezel ring. I am not used to looking at x-ray images of watches, but from the orientation of the cover, I would say this was a view from the back. The wheel appears to be the balance, but I see no sign of the balance cock. The barrel appears to be under the person's fingers and a fusee seems to be in the upper right. The watch is clearly key wound. I am betting on an English movement from about 1840. Other bets? *Ed.*

Editor's Section

(Continued from page 5)

Over the Memorial Day weekend, I visited Filoli for the first time. I was surprised to find that of the four clocks repaired by Chapter members only one was operating. Tom Armour is going to check into the situation and report back.

Price Russ

INTERESTING NEW GADGETS

"Atomic Clocks" that is clocks automatically set by radio signals from the National Institute for Standards and Technology are now available in many small, inexpensive models. I recently got one that will fit in my pocket, is accurate to one second, and cost less than \$30. It also has an alarm function and automatically sets to the appropriate time zone within the US. These units allow one to always have the correct time available whether setting a timepiece on the bench, during a house call, or for the compulsive, even on vacation.

Of course there are other ways to get accurate time. These include WWV on short-wave radio, "popcorn" on the telephone, and time servers on the world-wide web. Many VCRs automatically set their clocks, but my experience is that they can be incorrect by several seconds. Currently 10 seconds in my house. *Ed.*

TOOL LIBRARY

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. These are available at no cost.

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.)

WANTED DESPERATELY: Someone to store and transport the library. This is a critical need. Please help. Contact any board member if you can help with at least part of this task.

Wanted: Very small (size 0-2 or equivalent) flat-head wood screws in brass or steel. Contact Price Russ (925) 937-9231.

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 - None
 September 5
 November 7
 January - None
 March 14, 2004
 May 7, 2004

SUNDAY & Board

August 10
 October 12
 December 14
 February 8, 2004
 April 14, 2004
 June 13, 2004

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 #94	Odd Fellows Lodge 20589 Homestead Rd Cupertino, CA	2 nd Sunday even months (except April)
Monterey Bay #70	Live Oak Grange Hall 1900 17th Ave Santa Cruz, CA	3 rd Sunday odd months
Sacramento #71	Sacramento Garden Center 3330 McKinley Blvd. Sacramento, CA	4 th Sunday odd months
San Francisco #5	401 Marina Blvd. San Leandro, CA	2 nd Sunday odd months

DIRECTIONS TO CHAPTER MEETINGS

Sunday Meetings

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.).

Friday Technical Meetings

Location varies. There will be no meeting in July.

Due to our tax exempt status, only NAWCC members can participate (buy or sell) in our Mart - be prepared to show a current NAWCC membership card.

