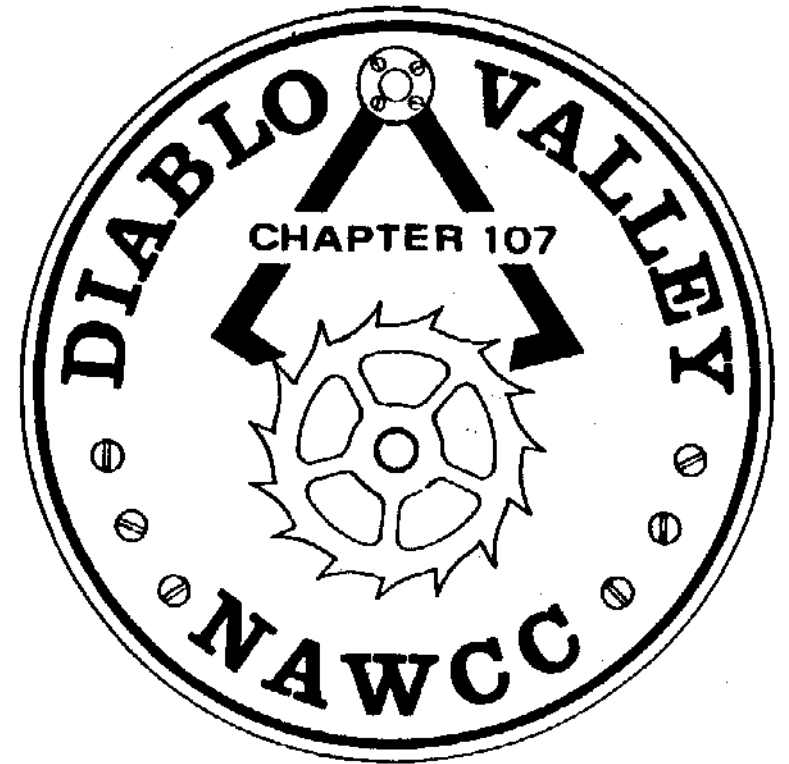


BULLETIN



August 2004
Volume 154

DIABLO VALLEY

Chapter 107

National Association of Watch and Clock Collectors

Chapter Established March 5, 1978

"Accent on Education"

OFFICERS

| | | | |
|------------|--------------|--------------|---------------------------|
| President | Jason Evans | 925-376-0654 | vette66@aol.com |
| Vice Pres. | Dale Gardner | 510-531-7565 | |
| Vice Pres. | Tom Armour | 510-654-3363 | armourtom@aol.com |
| Secretary | John Stohr | 925-376-6476 | jstohr@sbcglobal.net |
| Treasurer | Walt Hubrig | 925-685-0260 | dottiewalt@ca.astound.net |
| Past Pres. | Bob Wahrer | 925-462-4912 | jbwahrer@pacbell.net |

DIRECTORS

| | | | |
|-----------|---------------|--------------|---------------|
| 2004 | Lois Naye | 925-934-4557 | lnaye@aol.com |
| 2004 | Jack Coulter | 925-284-1031 | |
| 2004-2005 | Sandy Cuthill | 925-686-3144 | |
| 2004-2005 | Roy Clark | 925-376-6356 | |
| 2004-2005 | Earl Watrous | 510-569-4175 | |

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 | Tom Armour | 510-654-3363 | armourtom@aol.com |
| 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

Annual Picnic and White Elephant Auction

August 8, 2004

Price Russ's House

(See page 15 for directions.)



Show up about noon. Barbeque will be ready about 1:00. Auction after lunch.

Picnic

1. The chapter will provide the meat, buns, soft-drinks, plates, cups, utensils, and so forth.

2. Please bring one of the following based on the first letter of your surname:

| | |
|-----|----------------------|
| A-E | Salad or veggies |
| F-M | Chips/dips/cut fruit |
| N | Beans |
| O-Z | Dessert |



3. Bring a folding table and chairs if you can.



White Elephant Auction



This is your once a year opportunity to get rid of your horological excess and acquire lots of new treasures. Several clocks that have already been donated.

No item is too humble for this grand affair.

Contribute to the fun by participating

All funds go to support the chapter.

President's Message

The June 13th meeting was unique and entertaining. Jim Herold captivated us with over 70 of his collection of carriage clocks. Jim suggested that we sit in a circle and he handed each of his rare clocks to us to pass around. What a unique and wonderful experience to hold and inspect these treasures up close. He showed us multiple styles such as Greek Gorge and Formal and entertained us with explanations on how to identify each with their recognizable characteristics. Jim's clocks were many different sizes and shapes including oval. He gave us insight on their makers, giving us humorous details of the characters involved. Jim mentioned that several independent suppliers of specific portions of each clock made many of these clocks. Then the maker completed the final finishing and detailing. Many thanks to John Stohr for arranging this program. I am amazed at the masterpieces that these artisans were able to create with the technology and metallurgy available to them. Bob Wahrer, Celest Graham and Jerry Kroeger also brought in several display clocks for our inspection.

Picnic August 8th. We need volunteers to bring chairs, ice chests and big tables. Price Russ has graciously lent us his home for our picnic. Please call or Email Price at 925-937-9231 gpruss@pacbell.net with what items you can bring.

The auction is always a fun event at the picnic. Be sure to bring many clock, watch and tool items for all those hungry bidders. Save up all your money for bidding on the treasures on the auction tables.

Jason Evans



Editor's Section

Bernice and I are pleased to host the picnic. We hope you will have a good time. If anyone has special needs or suggestions about how to improve the picnic, please, don't be hesitant in making your requests and suggestions. Most of you have already met our dog, Jasmine. She is friendly and not prone to venture far from home, but I do ask you not to let her out of the yard and to keep the gates closed. Oh yes, do not let her talk you out of food.

In this issue, in addition to continuing his series on clocks in the Forbidden City, Bob Wahrer generously contributed an interesting book review (page 12). Thanks Bob.

When I travel, I try to keep an eye open for items that I think might be of interest to *Bulletin* readers. The graphic to the right is from an American Red Cross advertisement encouraging people to volunteer. I thought it was pretty clever.



The "Venetian Aviary" shown on the left is in the atrium of a hotel in Orlando, Florida. The bottom portion houses exotic birds. The top portion features a clock and automata. On the hour, a bell strikes and eight conquistadors with pikes move forward from the arches under which they otherwise stand. It was quite a surprise to encounter this in a thoroughly modern chain hotel.

The stamps on the previous page are an Israeli series on clock towers.

Price Russ

TIME IN THE FORBIDDEN CITY (4)

CLOCKS FROM BRITAIN

As mentioned in my previous article, thousands of clocks were brought into China from Europe during the middle 17th century and continuing through to 1911. The Qing Dynasty, which began with Emperor Shunzhi (1644-1661) saw a rapid increase in the number of clocks being imported. By far, most of these were from Britain. An early example of these clocks is this Gilded Copper Clock.

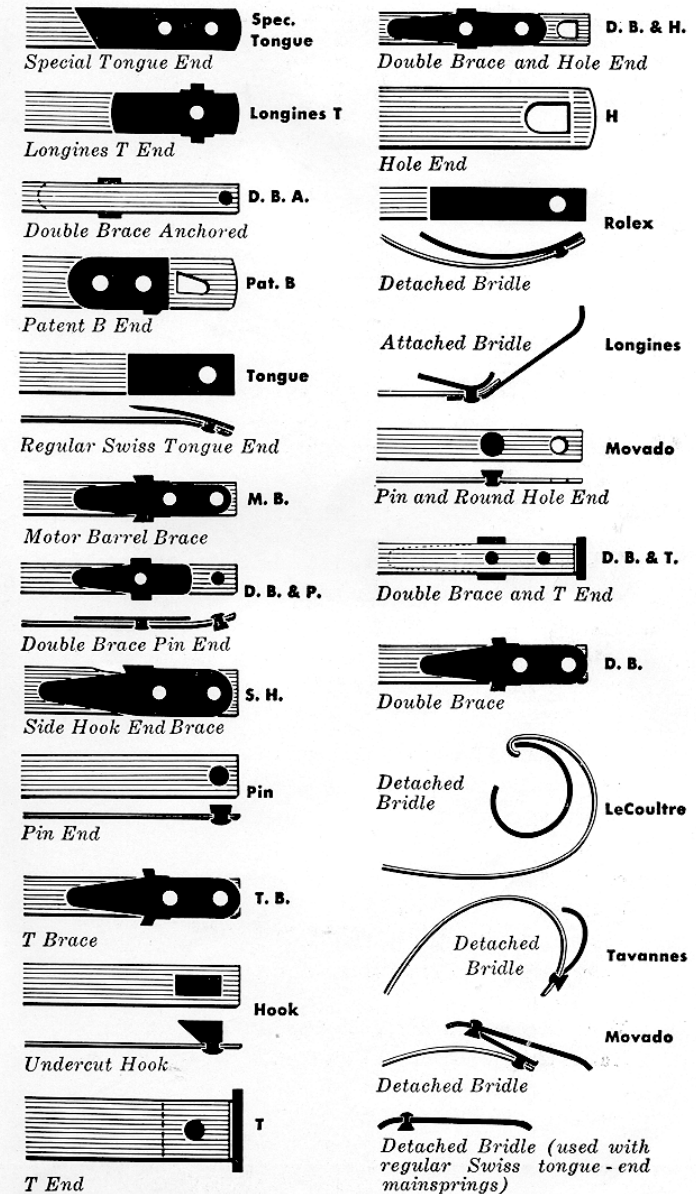
This clock was made by James Cox & Son in 1768. The clock is very elaborate, consisting of a big flower pot supported by four lions. Additional mythical animals on the top of the pot guard a child who is holding a large flower bouquet. A small clock dial is visible at the center of the flower bouquet. The clock mechanism is in the flower pot and causes a butterfly and a dragonfly to flap their wings while a boat moves around the flower pot (presumably every hour). The clock is 28 inches high while the clock dial is less than 3/4 inches in diameter. With this small clock dial, we must assume that this clock was designed primarily for decoration and not for telling the time.



Bob Wahner

MAINSRING TERMINOLOGY

End Braces Used on Sandsteel Crosscurved Mainsprings



from *Sandsteel Mainspring Manual*



Gareth and Jean Busher



Photos by Sophia Gardner



Bert Bradley

June 2004 Meeting



Jim Herold and some of his carriage clocks



Jim receiving membership badge from Jason Evans



Juanita and Paul Benson



Walt Hubrig and Earl Watrous

Wait. Don't Tell Me!

Answers to last issue's questions

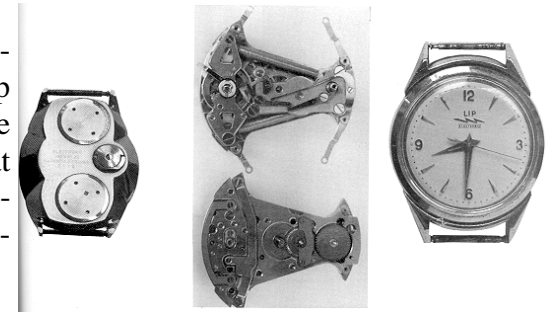
The compensated pendulum shown last time won a 20 guinea prize in 1812 for its builder - David Ritchie. The horizontal bimetallic bars bend inwards or outwards with temperature and thereby alter the length of the pendulum. The amount of compensation is adjusted with the threaded rod in the middle that moves the interconnecting strips in or out. This is one of many interesting pendulums in *Precision Pendulum Clocks* by Derek Roberts (1986). The book is a catalog for an exhibition.

The "number 1 punch" in a staking set is used to align the die plate holes with the punches. The pointed end directly aligns the die plate holes with punches held in the arm. The cut end (top in the picture) is used when punches with no hole are inverted in the die plate to serve as stumps. It is the most important punch in a staking set and never used to actually punch anything. The device labeled "B" is used to extract stakes from the box. (Typically they are stored too close together to pull them out using one's fingers.) A side benefit of using the extractor is that perspiration does not get on the punch and lead to rusting.

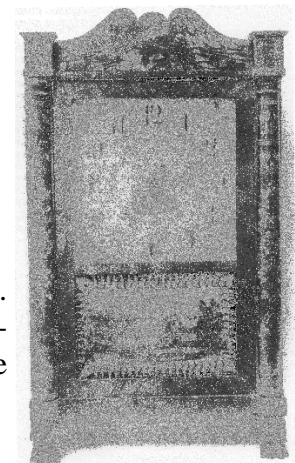
The clock with the pocket watch on top is a *Sympathique* built by Breguet. When the watch is placed in the holder at the top of the clock, it is automatically set to the time indicated by the clock. The rate of the watch is also adjusted. This particular clock, sold in 1814, is described in detail in Daniel's book *The Art of Breguet*. This probably could be considered a carriage clock because of the balance escapement, shape, glass panels, and handle, but being a sympathique trumps a carriage clock any day. By the way the watch has a ruby cylinder escapement and parachute suspension (shock-proofing). These are two of the many refinements developed by Breguet.

New Questions

These are photographs of a Lip watch. (Lip is the brand name.) What was its role in horological development?



This is an Austrian alarm clock from ca. 1770. Can you figure out its rather unique features?



The clock to the right is by Seth Thomas. It is from ca. 1830. What are the noticeable features of the case? To what style is it a forerunner?

BOOK REVIEW

Einstein's Clocks, Poincare's Maps

By: Peter Galison

Publisher: W. W. Norton & Company Inc.

This book gives an excellent account of the problems of synchronizing timekeeping over distances as occurring in Europe during the later part of the 19th and early 20th century.

We have heard about Einstein's work involving relativity, speed of light, space time, etc., but we may have trouble relating these to the more "practical" aspects of day-to-day timekeeping. The author shows how these theoretical aspects apply to the practical and also presents a description of Einstein's "hardware" accomplishments during his early years while he was working at the Patent Office.

Henri Poincaré was a French scientist, mathematician and "all-around Government problem solver". Poincaré was undoubtedly the person most responsible for getting France and most of Europe on standard time. The book describes the chaos of running trains on local time, the various methods used to synchronize the public clocks throughout Paris (first with a pneumatic system), and coordinating time over long distances by telegraph cable, which was required for accurate map making. I found this book to be a very informative and an interesting history of the development of the standard time system in Europe and throughout the world.

Bob Wahrer

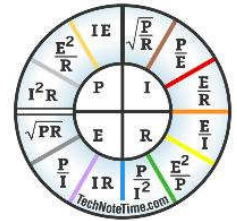
MORE ON EINSTEIN

Speaking of practical problems attacked by Einstein, did you know that he was the developer of an early refrigerator with no moving parts? Actually it was not put in production, but the patent rights (US # 1781541) were sold to several companies.

INTERESTING NEW GADGETS

Many of us have "atomic" clocks and/or watches that use radio signals to synchronize themselves to the National Institute of Standards and Technology. Several companies are now marketing watches and travel clocks that will also synchronize with time signals from the United Kingdom, Germany, and Japan. These could be quite useful if traveling to Europe or parts of Asia. I have not been able to find out the actual coverage areas. Of course they can be used as regular timepieces when the synchronization signal is not available. Prices start at about \$30.

The TechNote Time Watch Co. is marketing watches that display a reference guide for either AC or DC electrical theory on the dial. The idea is to have common formulas readily available. The dial for DC applications is shown on the right. This is an interesting idea, but is it useful? The company's web site implies they plan on issuing dials covering other fields.



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: Bushings and a bushing gauge - Jason Evans

Wanted: Ideas for door prizes - Jack Coulter.

Wanted: Watch crystals - Price Russ. (He has some, but would like to know of other sources within the chapter.)

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

September - None
 November 5, 2004
 January 7, 2005
 March 4, 2005
 May 6, 2005
 July - None

SUNDAY & BOARD

October 10, 2004
 December 12, 2004
 February 13, 2005
 April 10, 2005
 June 12, 2005
 August 14, 2005

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 | Boys and Girls Club 401 Marina Blvd. San Leandro, CA | 2 nd Sunday odd months (1 st Sunday in May) |

DIRECTIONS TO CHAPTER MEETINGS

DIRECTIONS TO THE PICNIC 12 Simpson Drive, Walnut Creek Price Russ (925-937-9231)

From 680 North or South, take the Olympic Ave. exit and proceed toward downtown Walnut Creek. At California Blvd. turn left. At Mt. Diablo Blvd. turn right. In 0.3 m Mt. Diablo turns into Walker. Continue on Walker for 0.5 m. Bear right onto Walnut Blvd. Proceed another 0.2 m and turn left onto Nob Hill. Simpson is at top of hill. Turn left and go to the first house on your left.

From Highway 24, at intersection with 680 take Mt. Diablo Blvd. exit. Proceed toward downtown then follow above directions.

From Ygnacio Valley Road, take Walnut Blvd. south for 1 m then turn left on Nob Hill. Proceed to Simpson at top of hill. Note: Walnut Blvd and Walnut Ave. are not the same.

Friday Technical Meetings

No meeting in September. Enjoy Labor Day.

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.

Closing Thought

“Time makes more converts than reason.”

Thomas Payne in

Common Sense