



## THE INFAMOUS CLOCK OF THE BASTILLE

Reprinted from the September, 1977, Chapter 75 *Valley Regulator*

The Bastille, castle and notorious prison in Paris, was built to the order of King Charles V of France, the same monarch who brought Henry de Vic to Paris in 1370 to construct the clock of the Palais de Justice, one of the earliest clocks of which we have knowledge. On July 14, 1789, the Bastille was attacked by a revolutionary mob and soon thereafter it was demolished.

In the great courtyard of the castle, a structure was erected in 1761, and in its pediment, the Clock of the Bastille was set. Nearly all of the information about the clock and its fate is pieced together from letters, orders, and bills, which have been preserved in Paris libraries and archives.

The front of the clock structure was damaged; a commemorative plaque smashed. The dial had been the target for gunfire. The clock movement seems to have escaped the bullets and remained unharmed, although the dial and other ornamental parts were badly damaged. The framework of the dial was supported by two human figures with chains around their necks, bodies, hands, and feet, and the fetters extended around the dial, the ends meeting in a large knot. The chains and figures were beautifully sculpted in metal. One interpretation is that the figures, which have been called Youth and Old Age, represented two slaves, one a strong young man, the other weak and aged, the significance being that both old and young are equally menaced by the dangers of slavery. In this connection is the story that Breteuil, a royal minister of Louis XVI, became so annoyed when he heard about the chains that he ordered them removed. So says the story, which may be true since this minister is known to have introduced prison reforms. In any event, the figures remained in place.

On the day after the fighting, the clock and the bells vanished, but on the seventeenth of July they were located some short distance away from the Bastille. The next appearance of the clock is at the foundry of Romilly Sur Andelle. Jean Daniel Grimpet, director of the foundry, saw the clock and although it was worn, it was in usable condition. He had it installed at the foundry and the bells chimed hourly until about



The clock - or at least the carillon - from the Bastille seems to be in the [Centre-Musée Européen d'Art Campanaire](http://www.chezjim.com/bastille/b_is.html) in L'isle-Jourdain. From [http://www.chezjim.com/bastille/b\\_is.html](http://www.chezjim.com/bastille/b_is.html)

1896 when the foundry closed permanently.

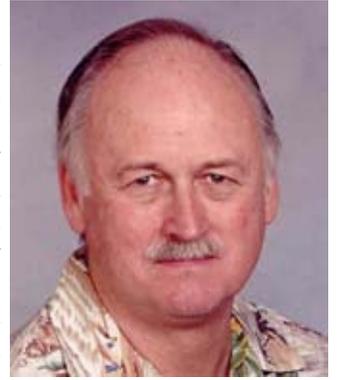
A self described "patriote", Pierre Francois Palloy, managed to get possession of the two metal figures and the old chains which had been cut away from the dial. In Palloy's letter of acknowledgment, the two statues are called "two modeled figures representing slavery." In another letter, he describes them as "two chained slaves carrying on their shoulders the dial which indicates five o'clock and a quarter, the moment of the capture of the Bastille." There is no entry of its sale or disposal in the records.

The last recorded appearance of the clock, but minus the dial, was at the Paris Exposition of 1900 when it was exhibited in the Metallurgical Pavilion; then it was lost to sight.



**It often takes less time to do a thing right than it does to explain why you did it wrong!**

# March 2007 President's Message



Have you voted yet? There is still time to mail your ballot and help make a difference. We have some very good candidates to choose from this time. The first name that comes to mind is, of course, our own Jim Gilmore. Jim has served for years as a Chapter 75 Board Member and Officer. Currently he is our Education Chairman and has organized several clock and watch repair classes for the chapter members and public to attend. He was the Chairman of the Greater Los Regional for several years and still serves as the Facility Chairman. He was also the NAWCC Craft Chairman for many years. His contribution of time and effort to the NAWCC, Chapter 75 and to the GLAR is invaluable. Without his efforts a lot of the great chapter events and marts just would never have taken place. I have had the pleasure of working with Jim for the last 12 years in the Chapter and GLAR. Jim understands that this is a membership organization and the most important job that the organization has is to work to improve membership services and events and then educate the members and public.

John Hubby has been one of the architects of the new NAWCC openness policy. His work on the NAWCC Board for many years has been an important part of the restructuring of the NAWCC and the open Mart policy. He seems to understand that we need to entertain new ideas if the NAWCC is to continue to grow. He is a big supporter of the GLAR and has been enjoying our mart for years. He is a very productive member of the council and we only hope that he will continue to be a director.

We have an interesting Saturday workshop coming in May on the Sherline Lathe by Ken McWilliams. We have yet to fix a date, but think it will be the second Saturday in May. A signup sheet will be at the next meeting. We offer sandwiches & drinks after the meeting and need a head count. Ken has been using the Sherline Lathe for years and recently took the Sherline class that Chapter 75 put on last year. Ken is a big proponent of using modern methods and technology to fix and repair antique clocks and watches. One of the problems of working with an antique watchmaker's lathe is the lack of parts and accessories. When I bought my Levine lathe, I called the factory to buy a 3 jaw chuck. The salesman asked me if I was sitting down. The price he quoted me was around \$1800.00 for a new one and a fully tricked out "instrument lathe" was around \$50,000.00. Needless to say I had to wait several years before I found a used 3 jaw chuck and I paid more for it, then I paid for the lathe. For years, I resisted the Sherline products and was a Jewelers Lathe Snob. But the class cured me of that, in a very short time; a few minutes in fact, as I was cutting half of a watch balance staff! Ken tells me that he has been able to cut the full staff using just the lathe. Ken's workshop will concentrate on demonstrating the usability of the Sherline lathe and different accessories available.

The Stage Coach Inn Antique Faire will be on May 5<sup>th</sup> this year. The Chapter will have a booth for Clock and Watch evaluation. We hope you will drop by and say hi. There is a small antique fair and special interest booths to enjoy: plus, they have lectures and the Inn to tour. If you would like to volunteer to help out at the table, contact Jim Gilmore at the next meeting.

This month's program will be the GLAR power point slide show featuring Huell Howser. I've seen most of the slides and Huell is in a lot of them. Speaking of Huell Howser, his program will air again on March 29<sup>th</sup> at 6:00 p.m. on KCET. I heard that his program was really great. I had to work late that night and missed it, but will be sure to see the repeat. I understand that the tape will be available in the next few weeks for GLAR to sell and we will have them at the next meeting for \$15.00 each. There was a great article in this month's KCET magazine about the "Watch Convention" on Huell's Page.

See you at the meeting - Kim



## Officers and Board of Directors

### PRESIDENT

Kim St Dennis

(818) 349-8031 • cstdennis@earthlink.net

### VICE PRESIDENT

Chris St Dennis

(818) 349-8031 • cstdennis@earthlink.net

### SECRETARY

Virginia Norwood

(310) 455-3028 • vtnorwood@yahoo.com

### TREASURER

Barbara Morse

(805) 499-1657

### DIRECTOR • Public Relations & Editor - Regulator

Robert Gary

(805) 388-1694

homepromousa@earthlink.net

### DIRECTOR • Audio-Visual

Ken McWilliams

(818) 718-8300

### DIRECTOR • Membership

Jim Chamberlain

(805) 495-5349

### DIRECTOR • Mart

Toni Moss

(818) 407-1474 • tdolls@aol.com

### REFRESHMENTS

Open

### OFFICER • Past President

Fred Lipman

(818) 363-8489 • thelippy@socal.rr.com

### LIBRARY

Jim Chamberlain

(805) 495-5349 • jfchamberlain@earthlink.net

Web Site:

[www.nawcc-75.com](http://www.nawcc-75.com)

REGULATOR E-MAIL:

[homepromousa@earthlink.net](mailto:homepromousa@earthlink.net)

# BOOK REVIEW

## Woodward on Time

*Woodward on Time. By Philip Woodward, 1st edition, illustrated, index. Published 2006 by Bill Taylor and the British Horological Institute. 341 pages; Hardcover, 250x195mm. ISBN 978-0-950-96216-3, Order for UKP 45 plus shipping at www.bhi.co.uk. Lending copies available to NAWCC members at the Library in Columbia, PA.*

Horologists who have worked on understanding the exact science behind a clock mechanism are probably familiar with the British engineer and scientist Philip Woodward. His early contributions were in Radar design in wartime England in the 1940s, and subsequently he became a specialist on radar information theory and oscillation theory. In 2005 he won the Lifetime Achievement Award from the Royal Society of Engineering. During the last 25 years, during his very busy retirement, he also became an exceptional horologist, and a key contributor to the obscure corner of science known as horological science.

Like many of us, he became obsessed with thinking how to improve the performance of a pendulum clock, but unlike most of us he set out to design and build a better clock. After four attempts his final masterpiece, known as W5, is a highly innovative and novel, high performance, free pendulum clock that has become somewhat of a cult item among precision clock fans. This occurred mainly after Woodward in 1995 published "My Own Right Time An Exploration of Clockwork Design" (Oxford University Press, ISBN 0-19-856522-4), not only a must read for anyone thinking about designing a clock movement, but the best existing introduction to precision pendulum theory.

Throughout the years Woodward has been a prolific writer and one of the more regular contributors in "Horological Science Newsletter" (published by Chapter 161 of NAWCC) and in the "Horological Journal" (published by the British Horological Institute), as well as some other periodicals. Taken together these many smaller contributions, ranging from short letters to the editor to fully developed scholarly papers, make up a substantial chunk of the newly published horological science knowledge over the last few decades. Unfortunately for horologists who don't keep fully indexed complete back runs of these publications at hand, this fount of knowledge was quite inaccessible.

Woodward fan Bill Taylor has taken the initiative to publish the 63 Woodward papers and letters on horological science in book format. Tim and Amyra Treffry produced the book and the British Horological Institute is selling it. Organized into 7 groups (plus an Epilogue) these papers, finally assembled, form a most

useful textbook on horological science, covering the subjects of:

1. Experimental clocks,
2. Escapement theory,
3. Error analysis,
4. Timekeeping stability,
5. Pendulums and their suspensions,
6. The spiral hairspring,
7. W5 for emulation

Woodward is especially skillful in describing complex mechanics and physics in terms that also a non-engineer can comprehend, although the majority of his papers have a fair share of formula and mathematics. For the scientifically/technically inclined horologist this book must be one of the most important additions to the recent horological literature.

Fortunat Mueller-Maerki (Sussex, NJ), February 24, 2007

Vice Chairman of the Library Collections Committee  
NAWCC

Vice President Museum Relations, US Section AHS  
Publisher of *Bibliographia Horologiae Mundi* Reprinted with permission



---

## HOW DID THEY TELL TIME IN THE ANCIENT PAST?

In ancient times, people lived for centuries in complete ignorance of the processes for measuring time. To be able to tell the exact time, any moment day or night is an essential element of modern civilization.

In other days, the usual day was limited by sunrise and sunset, the only intermediate guide was the position of the sun in the sky. Civil and religious life were mingled, and science and education were in the hands of the church. The canonical hours were observed and church bells called everyone to their daily tasks.

On Saturday, for example, the spinners of silk threads ceased work in wintertime at six o'clock. On Sundays, Millers could not grind meal until after church service had been completed.

But how did the bell ringer know the hours? At night by observing the stars, after daybreak by counting the number of psalms recited; by the pages he read; by the wax consumed on a burning candle. In a rich church, by a clepsydra, a sand-glass, or a sundial by day.

From: *La Mesure du Temps*, Franklin, 1888



# WHAT YOU MISSED AT THE FEBRUARY MEETING!

## A 30 hr. Morbier Clock

Kim St. Dennis gave a fascinating presentation on an usual 30 day Morbier clock.

Ken McWilliams assisted with information on the history and development of this style of clock. Kim used close-up photographs of the movement in a Power

Point presentation to document the workings of this piece of horological history. The photographs augmented the actual clocks that Kim



demonstrated to those in attendance so that all could be seen in great detail.

The photo to the left shows the wheel arrangement that makes this movement into an unusual thirty hour clock rather than the much more common eight day variety.



shows the

movement as it appears when the dial has been removed. Each of the attendees received a time-line chart of Morbier development.



# WHAT YOU MISSED AT THE JANUARY MEETING!

## Dial Restoration Program

At the January meeting Ken McWilliams presented a program on dial restoration. The advantages of using an illustration program to create the dial artwork (Corel Draw & Adobe Illustrator) over bitmap art (Scanner, Digital Camera etc) was explained and demonstrated. He then showed how to marry both formats together to achieve very realistic aged paper dials. Many examples of various types of dials were shown along with an explanation of how each was created

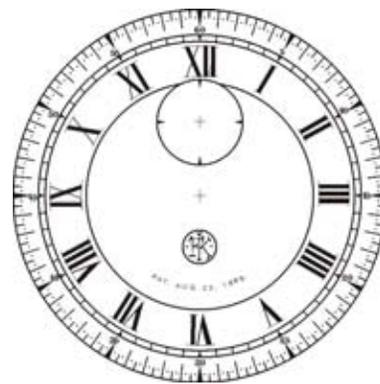
Once the artwork has been created a new dial can be made using various output methods. It can be simply printed on paper, and for metal dials, decals or rub-on transfers can be made,



and if you want to use actual paint, silk screens can be made. All from the same artwork. Examples of these techniques were shown.

Ken then created a dial from scratch to demonstrate how easy and how powerful Corel Draw is.

The examples shown are from a Kroeber quarter second timer. Fig



“A” is the original dial that had been ruined when someone sprayed the clock with WD-40. Figure “B” is the new dial artwork, very accurate but it would be obvious that it was a new dial. (Much like the clock supply houses sell)



Figure “C” is the same dial, but with aging added. Much more in line with what a dial for a clock this old should look like.



# Chapter 75 of the NAWCC Presents The 2007 Watch & Clock Mini-Mart

(The Mart is Open To Current Members Of The NAWCC & Their Guest)

★ OVER 70 TABLES ★  
★ TOOLS ★  
★ CONSIGNMENT TABLES ★  
★ CLOCKS ★  
★ WATCHES ★  
★ BOOKS ★



★ SOFT DRINKS ★  
★ SNACKS ★  
★ FREE PARKING ★  
★ FREE COFFEE ★  
★ HOT DOGS ★

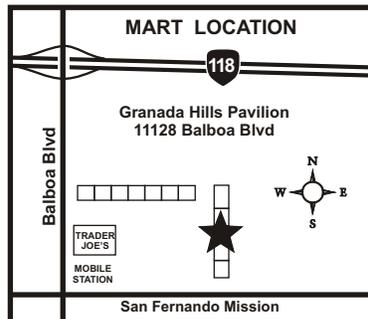
## SUNDAY JULY 22, 2007

At the Granada Pavilion  
11128 Balboa Blvd.  
Granada Hills, CA

**ADMISSION: \$5.00**

**TABLES: \$10.00**

| SCHEDULE   |                  |
|------------|------------------|
| 11:00 A.M. | Mart Table Setup |
| 11:30 A.M. | Mart Opens       |
| 2:30 P.M.  | Mart Closes      |



**TABLE RESERVATION DEADLINE  
JULY 20, 2007**

**Mart Director: Toni Moss**

Phone: (818) 407-1474

Fax: (310) 391-4463

E-mail: tdolls@aol.com

Sign up form

Make checks payable to: **San Fernando Valley Chapter 75**  
Tables assigned on a first come bases.

**THIS FORM MUST BY RECEIVED WITH PAYMENT BY JULY 20, 2007**

PLEASE PRINT CLEARLY

Send this form & check to:  
**Chapter 75 Mini-Mart**  
8800 Eton Ave. #8  
Canoga Park, CA 91304

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

NAWCC # \_\_\_\_\_ Phone: \_\_\_\_\_

|           |                      |                               |
|-----------|----------------------|-------------------------------|
|           | QTY                  |                               |
| TABLES    | <input type="text"/> | X \$10 = <input type="text"/> |
| ADMISSION | <input type="text"/> | X \$5 = <input type="text"/>  |
|           | TOTAL                | <input type="text"/>          |

# Calendar of Events

**Arizona Sunshine Regional** March 24 - 25, 2007

Mesa Community & Conference Center (520) 287-4992 or v.gudenkauf@mchsi.com

**11th Inland Counties Faire** Saturday, April 14, 2007 9:00AM - 1:00PM

Palomares Park Senior Center, Pomona, CA (626) 339-8129 lowall@aol.com

**Central Coast Watch & Clock Show and Sale**

Saturday, May 5, 2007, Arroyo Grande Community Center & Women's Club

(805) 349-2030

**Stage Coach Inn Appraisal Fair** Saturday, May 5, 2007

Stage Coach Inn, Thousand Oaks, CA

**62nd N.A.W.C.C. National Convention**

June 6 - 9, 2007 Chattanooga Convention Center (423) 238-1555 or nawcc2007.org

## 2007 Daylight Saving Time (DST) Changes:

Starting spring 2007, the start and end dates for daylight-saving time will change in the United States.

This change is part of the United States Energy Policy Act of 2005.

Traditional daylight-saving time start date: First Sunday in April.

New daylight-saving time start date beginning 2007: Second Sunday in March, (**March 11, 2007**)

Traditional daylight-saving time end date: Last Sunday in October.

New daylight-saving time end date beginning 2007: First Sunday of November, (**Will be November 4, 2007**)

NOTE: DST is NOT observed in Hawaii, American Samoa, Guam, Puerto Rico, the Virgin Islands, and Arizona.

Also, between March 11 and March 25, there will be a six-hour, rather than a five-hour time difference between London and New York and a seven-hour difference between Frankfurt, Paris, Madrid or Milan and New York instead of six hours.

## REFRESHMENT CHAIRPERSON NEEDED

CHAPTER 75 is in need of a volunteer to organize the coffee and refreshments at the monthly chapter meetings. If you are willing to provide this much needed service to your chapter, please contact Kim St. Dennis at (818) 349-8031, [cstdennis@earthlink.net](mailto:cstdennis@earthlink.net), or at the next Chapter meeting.

## WANTED

Will purchase your clock collection, all or part.  
Call **Jerry** at **(818) 986-1159**

Brewster & Ingram 30 hour movements spring & weight. Also; Seth Thomas advance black adamantine, part or complete.  
Call **Hugh Jay** at **(805) 733-1858**

Welch, Verdi: Case and Dial  
Call **Hugh Jay** at **(805) 733-1858** or write  
P.O. Box 71, Lompoc, CA 93438

E. N. Welch - 8 day T/S & alarm movement mounted on wood blocks for beehive.  
Call **Hugh Jay** at **(805) 733-1858** or write  
P.O. Box 71, Lompoc, CA 93438

Waltham 18s Appleton Tracy ca 1883 with gold flash movement.  
Call **Glen Frizzi** at **(818) 894-1960**

Wanted: LeCoultre model clock in decent condition Rue de la Paix made in the late 70s or early 80s.  
Call **Herman Berman** **(818) 788-4230**

WANTED: Chinese duplex or market pocket watches. Also verge fusee pocket watches and old enameled case watches.  
Call: John Bolen (818) - 892-0633

Ansonia Swinger  
Working Ansonia Swinger wanted.  
Contact Robert Gary by email at:  
robertsclockworks@verizon.net

## SERVICES OFFERED

**Mike Murray**, certified clocksmith, will repair atmos and other clocks.  
E-mail: mikem@atmos-man.com,  
Web: http://www.atmos-man.com

**Allen Perdomo** repairs complicated watches in his new shop in Thousand Oaks. He also buys parts of aircraft clocks or complete aircraft clocks. Call him at **(805) 495-3495**  
235 N Moorpark Rd, Suite D, Thousand Oaks

**Nik of Time Clock Repair**  
Service and restoration of antique cocks and tower clocks. Member since 1991, 26 years experience. **Nik Pliagas** **(800) 313-TIME**  
www.nik-of-time.com • pliagas@aol.com

### **Jorge Montoya** **Complete Watch Service** **Center**

Repair & Restore all American & Swiss watches. 12 years as a Rolex technician. We maintain a complete shop with all the latest equipment.  
Call **Jorge** at **(562) 531-0545 • (562) 688-6171**

Restoration, repair, sales of clocks and watches.  
**Ferdinand Geitner**, mbhi, is owner and operator of "The Montecito Clock Gallery" now located at 1187 Coast Village road, unit 10a Montecito

"Don't cry because it is over; smile because it happened."

## FOR SALE

**BUSINESS FOR SALE**  
Clock, Watch, & Jewelry Repair  
ShopNorthridge area  
Contact Eddy: 818-383-7901

### **OUT OF BUSINESS** **SALE**

Ingersoll's Clocks and Antiques, 62 Palm Dr, Camarillo, CA. Over 50 wall, mantel, and long case clocks. Discounted 30%. Open Thursday, Friday, and Saturday 10:30 to 4:30. Call to confirm: 805-482-9936 or 805-484-8813.

## FOR SALE

Antique Secretary Desk that can be used as a watch repair table, with lamp \$200

Mission Style Clock \$250



Bim Bam Vienna \$450  
**Jeanne Van Ausdall**  
**(818) 886-4063**

# Chapter 75 Ladies Table

Dearest Ladies,  
I would like to thank all the ladies who brought treasured items to sell at the "Ladies Table" last meeting. I hope you had a good time. Because we had so many items, we will have two tables for future meetings, so please join us. I would also like to thank Jeannie Van Ausdell for all her assistance in helping with the "Ladies Table". She suggested that all items be labeled with a price and the name of the seller. That way, if you want to look around, and one of your items sells, we will know whose it is. We look forward to sharing the tables with you and having a good time.  
Chris St. Dennis

**FOR SALE**  
**TIMEX WATCH DISPLAY CASE**  
17" Diameter, 69" Tall  
Excellent condition  
You pick up in Westhills  
Call Ed: 818-346-4688

"Nobody cares if you can't dance. Get up and Dance!"  
Volunteer to help  
YOUR Chapter.

# ANNOUNCEMENTS

## RECEIVE *THE REGULATOR* BY EMAIL!

If you would like to receive future editions of *The Regulator* via email, in a pdf format, send your request to [homepromousa@earthlink.net](mailto:homepromousa@earthlink.net) with *The Regulator* noted in the subject line. By receiving *The Regulator* via email, you will:

1. Receive it days sooner!
2. It will be in full color, including the photographs!
3. You will be able to print copies or save *The Regulator* onto your hard drive for future reference!

---

The deadline for all articles and advertisements for *The Regulator* is the 10th of the month. Anything received after the 10th will be published in next month's edition.

---

## ADD PHOTOS OF YOUR WATCHES & CLOCKS FOR SALE

Email jpeg format (300dpi or greater) with your ad copy to:  
[homepromousa@earthlink.net](mailto:homepromousa@earthlink.net)

---

### MEETING LOCATION



Chapter 75 meets the 4th Sunday of every month, except December. **Visitors are welcome.** For more information, phone Kim St. Dennis at 818-349-8031.

THIS MONTH'S PROGRAM  
"Pictures of GLAR 2007"  
A power Point Presentation"  
Set-up Time: 11:30-12:00 • Operating: 12:00 to 1:30  
MEETING  
1:45 - Notices, Events, Minutes

March 25



**THIS MONTH'S MEETING:**  
The Regulator  
If Undeliverable return To:  
2130 Saxe Court  
Thousand Oaks, CA 91360