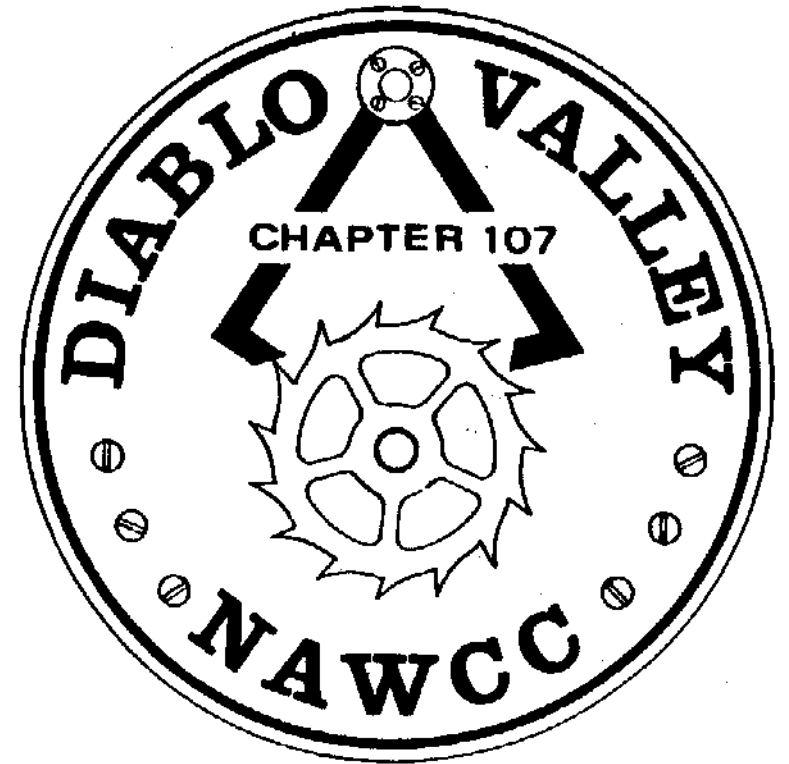


BULLETIN



February 2013
Volume 205

President's Message

The new year is off and running. I trust everyone had an enjoyable holiday season and is ready for whatever 2013 brings us—hopefully only good things. From what I have heard, the December luncheon/auction was a great success. People seemed very pleased with the Back 40 both in terms of the food and the setting. I think letting people pre-bid on auction items was also successful and tended to get the bidding moving. If you have suggestions on improvements for next year, make them now before we all forget. Also I'm quite sure Tina would more than appreciate articles for the Bulletin.

The Executive Board met at my house on the 20th right in the middle of the NFL championship game. Who says our board is not dedicated? Anyone wanting to read the minutes, can get a copy from me. The short summary is that the Chapter membership level is stable and our finances are in good shape. At the national level, membership continues to decline. As Nile Godfrey we want to point out if each and every one of us brought in a new member, the problem would be solved. Be part of the solution.

We have some exciting presentations planned for the year. They start with this month's presentation by Alan Bloore from Santa Monica. Alan has authored at least five articles in the *Watch & Clock Bulletin*. "Standard Electric School Clock Systems" (Issue 391) is particularly relevant to his talk. To get the most out of his presentation, I recommend you read this article before the meeting.

In June we plan to have Jim Haubert talk about his project to build a precision regulator and the tools he made to do it. Some of these tools won prizes at the 2012 National. We are also working on getting a nationally known speaker for February. I am also trying to arrange for one or two visits to see local collections. Suggestions on additional topics, speakers, and places to visit would be most welcome.

Price

Editor's Note's

Special thanks to Dean Thomas for your article The Terry Clock Company and Bob Wahrer for the article on Tide Clocks.

The chapter's library catalog is available on our web site
www.community.nawcc.org/chapter107

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.

Price Russ has free admission tickets for the American Clock & Watch Museum in Bristol, CT. They are available to anyone planning a trip to the museum. Contact Price for more information.

This months speaker Alan Bloore will be talking about Synchronized School Clocks. This would be a good opportunity to bring school clocks and parts to the mart.

NAWCC Business Update



NAWCC ballots will be coming out soon. It is very important that all members vote so please cast your vote.

PLEASE open the [Executive Director's Report December 2012](#) and look at the membership numbers. This is why we would like to see each member of our chapters bring in JUST one new member in 2013. If we don't, dues in 2014 we go up again and again and again.

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The Terry Clock Company From Waterbury to Pittsfield

Census reports for the firm covering the 12 months prior to June 1, 1880 reported \$25,000 capital paid in with 40 employees – 38 males over 16 and two females (this was at the time of the enumeration – a high of 51 had been employed at one period during that year). Some \$30,320 had been paid out in wages during that 12 months and a skilled mechanic received \$2.25 a day and an ordinary worker got \$1.25 (these rates were about 25 cents per hour less than the Waterbury Clock Company was paying). They ran full time during the entire year utilizing \$34,275 worth of materials and produced \$66,497 worth of clocks.

Financial pressures became even greater after Silas Terry's death. By May 21, 1880 a special meeting of Directors was held in which it was noted "whereas the affairs of the corporation are in an embarrassed condition, and the Corporation in unable to meet its pecuniary obligations, as the same fall due and become payable and whereas an assignment in insolvency for the benefit of its creditors in proportion to their respective claims, will best promote the interests of all parties concerned, now therefore voted that this corporation forthwith make such assignment to Edward L. Frisbie of Waterbury, Conn...."

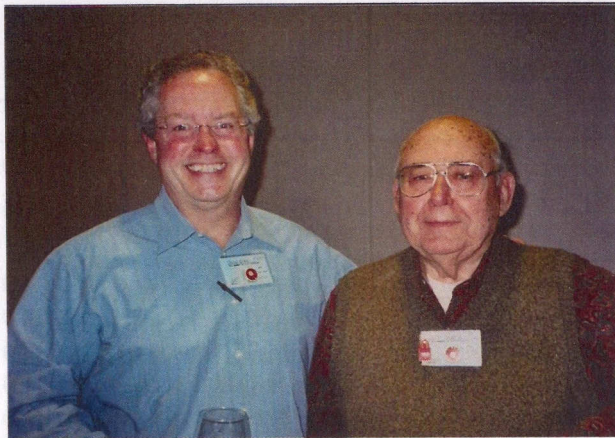
The bankruptcy court ordered an inventory which amounted to 35 legal pages listing hundreds of thousands of items, particularly clock parts, but also fishing reel parts, steam gauge parts and machinery. It cost \$351.33 just for the inventory though the value of the total amounted to only \$4,546.35. Finished clocks were valued at from 50 cents to \$1.25 each and movements ranged from 20 to 70 cents each.

On June 15, 1880 Frisbie was ordered by the court to sell the inventoried material at public auction or by private sale. A private sale was soon thereafter negotiated with Hazekiah S. Russell of Pittsfield, Mass. For \$4,050 which was only \$496.35 below the inventory value. After probate costs were paid only \$3,339.12 was left to satisfy privileged claims (some apparently worker's wages) of \$4,119.80 and common claims totaling \$18,716.32.

Hezekiah S. Russell (d. 1914), a Pittsfield, Mass. Businessman, was in partnership with his brother, Solomon Nash Russell (1822-1899) and one Edward D. G. Jones (1824-1904) in raising the capital needed to purchase the Terry operation and move it to Massachusetts. The Terry Clock Company was reincorporated in Massachusetts in 1880 and clocks, fishing reels and steam gauges continued to be produced.

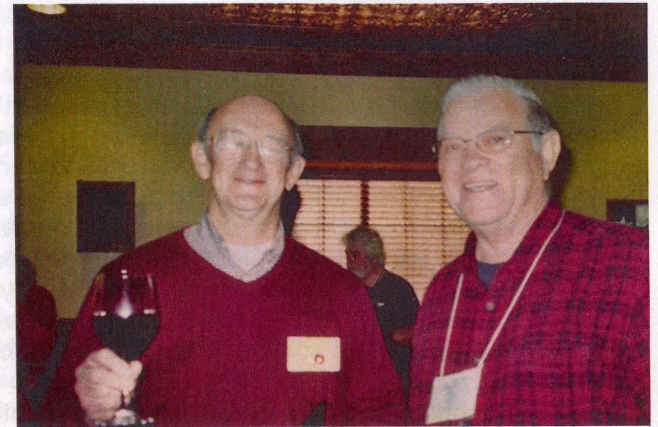
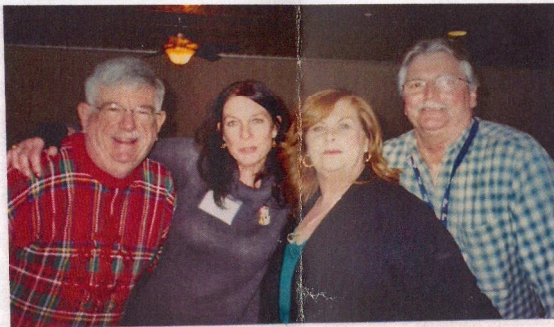
2013 BUDGET

CATEGORY DESCRIPTION	2012 Actual	2013 Budget
INCOME		
CD INTEREST	\$132.70	\$100.00
MEMBERSHIPS	\$1,200.00	\$1,100.00
OTHER		
Auction Sales	\$433.00	\$200.00
Chapter Pins	\$12.00	\$0.00
Library/Tools/Video Sales	\$8100	\$0.00
Miscellaneous	\$0.00	\$0.00
Programs	\$0.00	\$0.00
Refunds	\$0.00	\$0.00
Christmas Lunch	\$840.00	\$800.00
Total other Income	\$1366.00	\$1000.00
TOTAL INCOME	\$2698.70	\$2200.00
EXPENSES		
BULLETIN & NOTICES		
Postage	\$221.53	\$250.00
Other	\$27.43	\$0.00
TOTAL BULLETIN & NOTICES	\$248.96	\$250.00
FOOD & DRINK		
Christmas	\$1,045	\$1,000.00
Meetings	\$0.00	\$50.00
Picnic	\$144.41	\$200.00
TOTAL FOOD & DRINK	\$1,189.61	\$1,250.00
INSURANCE	\$0.00	\$0.00
LIBRARY: Books, Tools, Videos	\$0.00	\$0.00
MISCELLANEOUS		
Bank Charges	\$0.00	\$0.00
Donations	\$0.00	\$0.00
Membership Refunds	\$50.00	\$50.00
TOTAL MISCELLANEOUS	\$50.00	\$0.00
P. O. BOX	\$146.00	\$140.00
PHOTOS	\$0.00	\$0.00
PROGRAMS	\$67.25	\$80.00
REGIONAL	\$0.00	\$0.00
RENTALS (Grange Hall, Danville)	\$480.00	\$480.00
TOTAL EXPENSES	\$2181.82	\$2,200.00
OVERALL TOTAL	\$516.88	\$0.00



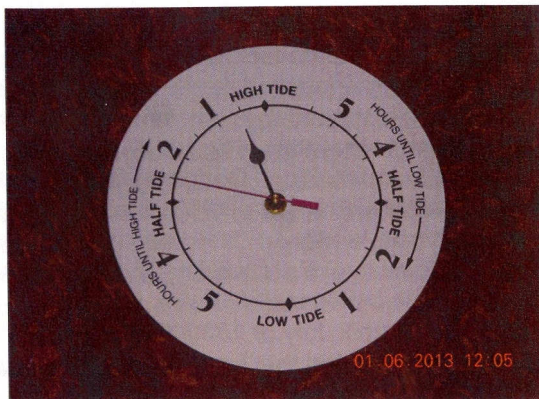
December 2012 Meeting

Photos by Sophia Gardner



THE TIDE CLOCK

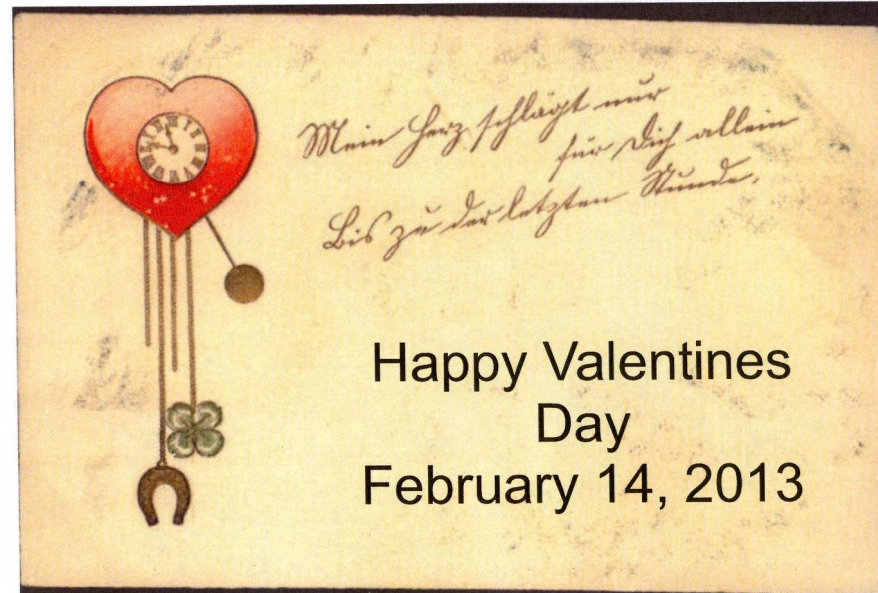
I (Bob Wahrer) acquired this clock last summer at Chapter pick-nick. As we known, the tides are produced primarily by the moon and to a lesser degree by the sun. A common tide clock is intended to follow the lunar (semi-diurnal) cycle and display the hours until high tide or low tide.



The duration of the lunar cycle is 12 hours, 25.4 minutes. The effect of the sun is not considered by a common tide clock since this would introduce much greater complication.

This clock had a standard quartz movement installed and therefore it could not be synchronized with the period of the moon and display the tide status properly. A tide clock requires a movement that is slow by about 50 minutes, & 28 seconds a day, or about 3.5% slow. This is out of the adjustment range for a standard quartz movement, therefore I used an old balance wheel battery movement and slowed it down by adding weights onto the balance wheel. The weights consisted of several turns of copper wire and solder at two diametrical opposite positions of the balance wheel as shown in the picture. Solder was added/removed to obtain the required timing while keeping the balance wheel approximately in balance. Precise balance is not required since the balance wheel is on a vertical axis and the clock remains in a fixed position. Timing was facilitated by observing the second hand while trimming the weights until the clock lost about 2 seconds each minute. Final timing could then be attained by adjusting the existing rate adjustment such that the clock would lose 1 minute during 30 minutes.

The clock should be set to indicate the correct local tide on a day of a full or new moon. This will minimize the effect of the sun. The clock was checked for 5 months against tide tables, which are available on the internet. It continued to be accurate at full and new moon. At the quarter moon phases the indicated error would be about 1 hour. For anyone interested in learning more about the ocean tides, I recommend [<http://en.wikipedia.org/wiki/Tide>]



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.)

CHAPTER #107 MEETINGS

Second Sunday of the Even Numbered Months

Mart: 11:30AM
 Chapter: 12:30PM
 Board: after the Chapter Meeting

Future Meeting Dates

April 14, 2013 June 09, 2013
 August 11, 2013 October 13, 2013
 December 08, 2013 February 09, 2014

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 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 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

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.

NOTICES FOR MEMBERS

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Wanted: Articles for the *Bulletin*. Contact Tina Thomas (209) 481-3930.