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## CHAPTER MOTTO: ACCENT ON EDUCATION

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#### THE PRESIDENT'S MESSAGE

At our last meeting, we learned much about Japanese Stick Clocks through a program given by Chick Luna of the Dr. Stephens Chapter. It was quite an honor to have 5 of these rare clocks at our chapter meeting.

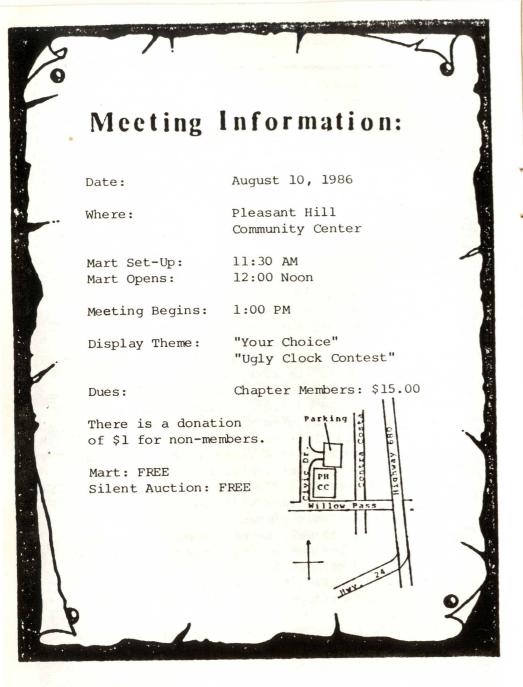
Our next program is sure to be a fun one. It's our annual White Elephant auction and it is always a lively event. Bring Horological items to be auctioned by some very energetic auctioneers. Bring your check book and/or cash. Some items are simply irresistable. All Proceeds go to the club treasury. The display theme for the meeting is ope

The display theme for the meeting is open to any type of clock. Please bring a card describing your clock filled out. The "Ugly Clock Contest" will also be held and a prize will be given. So bring your winner out of the closet and put it up against other 'winners' in this lively contest. Last Year's winner is not eligible for this contest.

I'd like to welcome new members who joined at our June meeting; Thomas Guy, William Hoover, Michael Golden, H.C. Cox, and Walter Hubrig. Also, welcome back to Tom and Carolyn Armour who have renewed.

Don't forget to bring items for the White Elephant Sale, The 'Ugly Clock Contest' and for display.

Jane



# Chapter Motto: Accent On Education

## TAKE PART IN CHAPTER'S ACTIVITIES!!!!!!!!

August Meeting Display Theme

### UGLY CLOCKS AND WATCHES!!!

Our Ugly Clock & Watch display and contest has been so overwhelmingly received and enjoyed by the Chapter members that it is now an annual event. Thus the display theme for August will be Ugly Clocks & Watches. Bring your hideous, gruesome, horrid, deformed, shocking, revolting, awful or not pretty timepiece so we can all offer our sincere condolences, pity or compassion, as needed.

The Ugly Timepiece display theme goes well with our annual White Elephant Sale. Be Careful you don't mix your Ugly Entry with the White Elephants. (This might be a sneaky way to get rid of the monster.)

A Bias Committee of Clock Art has been selected to judge the Uglies and a suitable (?) prize will be awarded the unlucky winner.

DON"T BE LEFT OUT:BRING YOUR UGLY TIMEPIECE!

Phil Russell Display Chairman

# De Anza & Dr. Stephens Meeting Dates!

Below are the next meeting dates for the De Anza (San Jose) and Dr. Stephens Chapters:

De Anza meets at the McKinnon School at 2390 Moorpark Ave, San Jose. Their next meeting date is Oct. 5th with Mart set-up at 12:30 and Mart starting at 1:00 PM.

Dr. Stephens meets at the San Mateo College just off of highway 92 in San Mateo.

Their next meeting date is September14th with the Mart starting at1:00 PM.

The history of Time machines and methods to mark time in the U.S.A. before 1500 A.D. is essentially non-existent. From the time of Christ to 1300 A.D. the American Indian certainly understood the Lunar (moon) cycles and perhaps used the Moon phases to set times for work parties, hunting expeditions, games, etc. Yet, the Agrarians (farmers) based their survival on timely planting of crops which was not related to Moon phases.

Long ago-at least 1100 years-at the Chaco Canyon pueblos in New Mexico the Indians made the most sophisticated astronomical device ever found in the Southwest. On a mesa over 400 feet high, stone slabs were placed and sunlight shining through openings in the slabs onto a petroglyph (chipped outlines on a rock) the Chaco Indians precisely determined the summer solstice (longest day) and the winter solstice (shortest day), also markings halfway for the equinoxes when day and night are equal (Spring and Summer).

The Indians could safely and timely plant crops and plan sacred ceremonies. Firewood, clothing, building repairs could be timed for winter. How long did it take the Indians to make the Lunar and Solar studies to make the astronomical device-who knows.

Perhaps, the Chapter could make a similar solar clock-how long would it take us?

Phil Russell

# TIME MARCHES ON

I thought a little history on Time Frames would be of interest. Especially since Time has been with us a long time.

1. Before the year 4236 B.C. the Egyptians

used the Lunar calendar, using 29.5 days.

2. In 4236 B.C. (earliest recorded year in the history of mankind) Egypt went to a 365 day calendar based on rising of Sirius, the dog star in Canis Major.

3. 2900 B.C. Egypt invented the OBELISK, a slender 4 sided, tapering monument. The moving shadow from the Obelisk indicated mid-

day, also the longest and shortest days.

4. In 1500 B.C. Egypt invented the portable shadow clock-same idea as sun dial. Egypt is credited with segmenting the day. The shadow clock divided the day into 10 units, plus a mid-day line. The clock was reversed at noonflipped for afternoon shadows.

5. From 2000 B.C. until 1500 A.D. the Central American Mayans used the sun, the moon

and Venus for 260 and 365 day calendars.

6. In 1500 B.C. an Egyptian B.C. Amenemhet is credited as the first clock maker. He made a water clock. Controlled flow into a vessel marked on inside with hours. The Greeks called these clocks CLEPSYDRAS and used them in 325 B.C.

7. Elaborate and impressive mechanized water clocks were used between 100 B.C. and 1300 A.D. by Greek, Roman and Chinese.

8. Sun Dials goes back to 1300 B.C. Hemicycle to about 300 B.C. Other early timers were the hourglass, marked candles, oil lamps. incense burning sticks, etc.

9. In 1088 A.D. Su Sung, Chinese invented the forerunner of the verge and foliot type escapement for his water clock.

And to think, we thought Willard was an early clock maker.

Phil Russell

# Accuracy in Time Keeping

Once an idea is invented there seems to be no bounds on making improvements. Time keeping is no exception as shown below:

# Type of Timekeeper

Lunar (Moon)
Stolice-early device
Water Clocks
Obelisk, Sundial
Inexpensive Watch
Pendulum Clock
Quartz Clock

Atomic Clock

Laboratory Atomic standard

# Accuracy - Day

Few Hours
1-2 days year
Few minutes
Few Minutes
Minute
Few Seconds
millisecond
(1000th of second)
Micro-second
(Millionth of second)
Nano-second
(Billionth of second)

Phil Russell

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# From Your Executive Board:

At our last meeting, we had discussion concerning Mart Tables. The outcome is that Mart tables are free to Chapter #107 members, but there will be a charge of \$5.00 for non-Chapter members.

This change in policy will be effective at the August meeting.

# **BOOK REVIEW:**

Misc. Factory Catalog Reprints.

most of you may be aware that several reproduction catalogs of exact manufacturers clocks or watches are being reprinted for many of the numerous companies. These catalog reproductions not only offer a wealth of information, but also provide a unique historical aspect to any clocks in your collection. Catalogs are also available for different years as well covering a variety of different models. The price of these books usually is in the \$4.00 to \$7.00 range, so it won't break your clock fund.

Bob Prochnow



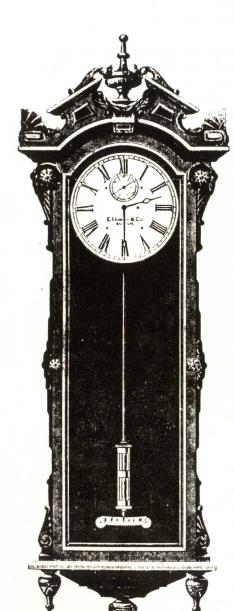




ANNUAL WHITE ELEPHANT AUCTION

YES! It is that time of year again when we ask you to dig up those dusty old Horological items which are no longer fitting on the clock shelf and donate them to the Diablo Valley's Fund Raiser. This event has always been one of the highlights of the year for both the donating members as well as those who pick up those treasures.





Would you believe that this clock is for sale for just a mere \$100.00?

Now, that I have your attention;

No! The clock on this page is not for sale but there must be some that are.

You'll never know unless you place your ad. Send me the ad early enough and I'll try and even put a picture of the item from the original catalog!!!!

The price is right, too. It's free to all Chapter #107 members.

Bob Prochnow

From Your Editor:

Don't forget to keep those cards and letters coming in. The more material included in the bulletin, the more fun it is for the whole Chapter.

Remember, Just about anything Horo-logical is accepted.

Let's hear from more of our Chapter members.

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