

 THE  
OUGHTRED  
SOCIETY  
*Newsletter*

Nov. 12, 2014

**From Your Newsletter Editor - Ed Chamberlain .....**



An apology is in order for the lateness of this newsletter. My internet service and I have been arguing and I think it is winning. Hopefully it will be fixed soon.

Just a few days before I began to prepare this Newsletter, I received the October issue (#48) of the Skidstick from the UK Slide Rule Circle. Peter Hopp does a fine job of putting together this gathering of slide rule and related matters. And sometimes-distant matters! On this side of the Pond, one sometimes needs to be educated in terms like '*Maths*' and '*Propitious*' and '*Promulgate*' to understand what is being presented, but we can easily muddle through and get the jest.

In this latest version of Skidstick, it is obvious that Peter (see recent photo below bottom right) gets lots of contributions from UK and other European slide rule collectors. The reader learns of: 1) possible makers of an early alcohol rule that Tom Wyman had previously discussed; 2) the origins of Reliance slide rules; 3) a Steampunk & a Nivellator; 4) solar energy panels; 5) a discussion of the fate of slide rule collections (no, don't will yours to Bletchley Park); and 6) reviews of: a) an exhibition booklet on John Napier; b) a book on Miners Lamps; c) Ijzebrand Schuitemas' book: *The Slide Rule - Technical Cultural Heritage*; and d) Peter Holland's latest edition of his book on Faber-Castel Slide rules.

Then there was this interesting piece about the members assembling for the Bretton Woods conference to discuss a post-WWII economic settlement: "*... they carried with them pens, papers and slide rules rather than weapons*". Now what is more impressive, slide rules at an international meeting to set the world straight? Or slide rules carried on the Apollo missions? Is it a toss up? . . . By the way, Bretton Woods is north of me in New Hampshire's White Mountains.

Then there was a piece about an '*e-worm*' and another about the disappearance of the UKSRC's Facebook page. I wonder if the two are related! And sightings of soldiers carrying slide rules in WWI trench warfare pictures, and a photo of a Hungarian freedom fighter (after immigrating to the US) using a slide rule at the University of Texas.

Next came the meat of a slide rule discussion - about pocket watch rules. We learn more about Peter's favorite topics: '*pocket watch devices*' and Lords Pocket-Watch serial numbers. Then we got a little education about a '*Maths Club*' for youngsters, and O-levels, and the importance of slide rules for passing '*Maths O-levels*'. Could this be something like the mathematics '*SAT*' test for college admission in the US? This reminds me about taking the EIT and PE exams in my younger days. The only calculator allowed was a slide rule! . . . Whoops, did I forget that was before the invention of the electronic pocket calculator? The slide rule was our only choice!

Then there was more about slide rules: 1) an Archimedes Octolog 11-DL from Brazil; 2) a Phonix System Rietz 3402 slide rule made in Hungary; 3) the Falkirk wheel; 4) a Concise circular



slide rule with Periodic Table on the reverse; and 5) an unusual Hoares slide rule.

We also learned that a horse named '*Slide Rule*' lost by a nose to a horse named '*Shut Out*' in a 1943 race at Pimlico. What a relief the winning horse was not named '*Calculator*'. Think of the implications!



There even was much more, but I will move on with an observation that some have noted when searching German eBay with the keyword '*rechenschieber*'. We are looking, of course, for slide rules with a linear format. But we often get hits on a post card with a lovely picture of a young lady of grade school age. She is carrying an abacus, a backpack and a large decorated cone. I have been meaning to ask my German friends about this, but I think that '*rechenschieber*' is a German word that is also used for the word '*abacas*'.

One can subscribe to the Skid Stick by joining the UKSRC. Payment from outside the UK can be made via PayPal. Send your pertinent data and intent to Dave Nichols, Member Secretary at the email address: [uksrc.membership@btinternet.com](mailto:uksrc.membership@btinternet.com), and make your payment to Rod Lovett's PayPal account: [rod@lovet.com](mailto:rod@lovet.com). More details and the membership fees can be obtained from Dave Nichols at the UKSRC email address.

One can also order the latest '*Slide Rule Gazette*', the journal of the UKSRC. It is hot off the press, celebrating the 400th anniversary of Napier's logarithm. The contents include the following:

- John Napier: 400 Years of Logarithms 1614 - 2014 by Collin Barns
- A contribution to LOGA prehistory by Willy Robbrecht
- A brief history of logarithms by Trever Catlow
- The triangular Quadrant by Werner Rudowski
- A potted history of Abbot Brown & Sons Ltd. by Brian Earl
- Cursors or Curses: Refurbishing Duplex Slide Rule Cursors by Ian Lodge
- and 14 more articles.

See more about this issue of the Slide Rule Gazette at the UKSRC Internet site: [www.uksrc.org.uk](http://www.uksrc.org.uk). The cost is 15 British Pounds + postage. Contact Rod Lovett <[rod@lovet.com](mailto:rod@lovet.com)> or Peter Hopp <[peterhopp678@btinternet.com](mailto:peterhopp678@btinternet.com)> for more details.

- Notes on photos: a) top left, 1st page, Ed on a bike trip in The Netherlands.  
b) bottom right 1st page, Peter on a slide rule hunt in Norway, Skidstick, #48, Oct. 2014  
c) page 2. German post card with girl carrying a '*rechenschieber*', eBay, 2014

*Reported by Ed Chamberlain*

### [News from the Oughtred Society's President - Bob De Cesaris .....](#)



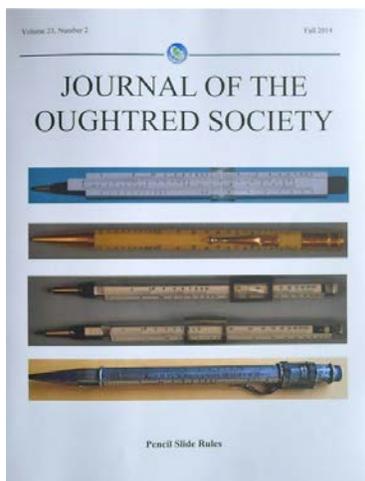
We are closing in on the dates and venue for our International Meeting 2015.....to be held in the Bay Area, California, during a weekend between September 15 and October 19, 2015. The meeting will be close to the Computer History Museum where a half-day tour will be scheduled, as this will be one of our primary highlights and focal points for the meeting. Other local museums are being contacted for possible tours.

The Oughtred Society continues to seek volunteers to assist with planning and preparation for IM2015, especially for the position of IM2015 Proceedings Chairperson to solicit papers and presentations. Kate Matthews has graciously accepted the position of IM2015 Local Site Chairperson where she has begun working the meeting agenda and logistics for hotel, dining, tours, and other necessary arrangements.

In addition, the Oughtred Society Publications Committee (OSPC) continues to seeking additional assistance for a variety of Committee activities, including the coordination and preparation of printed and electronic publications in progress at OSPC related to IM 2015 papers, slide rules, calculators, and collections. Specific needs include coordinating, monitoring, tracking, and reporting the status of various projects.

**Please contact Bob De Cesaris ([robert.g.de.cesaris@intel.com](mailto:robert.g.de.cesaris@intel.com)) or Clark McCoy ([oughtredsociety@comcast.net](mailto:oughtredsociety@comcast.net)) if you are interested and willing to assist with any of our IM2015 events and activities. Thank you!**

*Reported by Bob De Cesaris*



### **The Fall 2014 & Spring 2015 OS Journals .....**

By now all OS members should have received the Fall issue of the Journal of the Oughtred Society. As we are getting used to, David Sweetman has done a fine job of putting together and editing this issue. Ten Oughtred Society members prepared articles. If you have not received a copy, contact the Oughtred Society at [oughtredsociety@comcast.net](mailto:oughtredsociety@comcast.net).

David Sweetman has already been busy assembling the *Spring, 2015 issue of the OS journal*. Look for articles on the following:

- Shadow Box Displays by Clay Castleberry
  - Dietzen's Multiplex by Tom Wyman
  - Slide Rules at NMAH by Amy Ackerberg-Hastings
  - The Math Book Review by David Sweetman
  - Pencil Slide Rules Part 2 by Rodger Shepherd
- Slide Rule Scale Listing Conventions by David Sweetman
  - The Mauser Federfix by Richard Hughes
  - What Happened to Hemmi? by Werner Rudowski
  - Gilbert Small by David Sweetman & Nathan Zeldes
  - Napier Report by Richard Simpson
  - K&E Sperry Update by Peter Hopp
  - Kommerell Logarithms by Klaus Kühn

There is still time for getting committee, and national circle reports in the Spring OS Journal. Contact David Sweetman with details. David's email address is: [<d-dsweetman@att.net>](mailto:d-dsweetman@att.net)

*David Sweetman, Managing Editor JOS, reporting*

### **Past Oughtred Society Journals Are Available on DVD .....**



All past issues of the Journal of the Oughtred Society are now available in digital format on a DVD. The new DVD archive contains all Journal issues published since vol. 0, no. 0 in 1991. The DVD also includes three special publications: *The Slide Rule*, a reprint of the booklet published by Edwin Thacher; *Slide Rules in K&E Catalogs*, by Bruce Babcock; and *A Slide Rule Bibliography*, by Peter M. Hopp. Individual journals are presented as PDF files at high resolution. Price (including postage) for all OS members: \$95. Yearly updates for OS members will also be available for \$10. To order a DVD go to the OS website and click on the **Journal page** and pay for the disk via PayPal.

*Information from the OS web site as edited by your OS Newsletter editor*

### Announcement of Oughtred Society Awards and Fellowships for 2014.....

The Oughtred Society Award for outstanding contributions to the slide rule collecting world has been given to David Sweetman and Karl Kleine. David, of course, is the Editor of our journal, and is being recognized for his outstanding job in fielding and editing papers and for preparing the JOS. Karl has made many important contributions to the German slide rule community and most recently chaired the International meeting - IM2013 - in Berlin, Germany. Congratulations go to these two outstanding stewards of slide rule collecting.



**David**



**Karl**

The Oughtred Society also announced Fellowships to the following:

- **Ian Lodge:** for his contributions to the JOS and the UKSRC Gazette
- **George Schreiber:** for his book: "*Koch, Hoxhold & Hannemann*"
- **Daniel Toussaint:** for his International Meeting publications and his website: "*Lineals*"
- **Pierre Vandermeulen:** for his many papers in the JOS, IMs & the UKSRC Gazette
- **Detlef Zerfowski:** for his bibliography on mechanische Rechenmaschinen, Rechenschieber und andere Rechenhilfsmittel
- **Jorge Fabregas Zazza:** for his contributions to the JOS and his educational website: "*Reglas de Calculo - ARC*"

Congratulations go all for their outstanding contributions to the slide rule community.

*Details from the OS web site as edited by your OS Newsletter editor*

### New Oughtred Society Members in October are .....

Roi Gift, Gold Bar, WA  
John Murray, Cypress, TX  
Michael MacKay, Newark, DE  
Larry Byrnes, Atlanta, GA  
Bruce Gowan, Belmont, NC  
Ray Lopez, San Antonio, TX

*Welcome to the Oughtred Society!*

**Joining the OS is easy & rewarding.** Just visit the [Oughtred Society](#) website and select Membership in the main menu. Pass the word to non-members who you know that collect slide rules and other historic calculating instruments. Encourage them to join.

*Clark McCoy, Membership Secretary, reporting*

### News from the German RST.....

The exhibition of slide rules from the Dutch Schuitema collection in the Arithmeum Museum in Bonn, Germany has closed. By all accounts, the Schuitema exhibition was a great success. Continuing with the calculator theme, on November 8th, the Arithmeum will open an exhibition of OS member Werner Rudowski's extraordinary collection of Asian abaci (Suanpan, Soroban, Tschu Pan, and Stschoty). Werner, a member of the German slide rule Kring, loaned many rare examples in his collection to the Arithmeum for this exhibition. A catalogue will be available soon. Further information is at:

<<http://www.rechenschieber.org/Abacus.pdf>><http://www.rechenschieber.org/Abacus.pdf>

( <<http://www.arithmeum.uni-bonn.de/en/home/>><http://www.arithmeum.uni-bonn.de/en/home/> )

*Peter Holland Reporting*

## News from the Dutch Kring .....

### **The Proceedings of IM2014 Meeting in Delft**

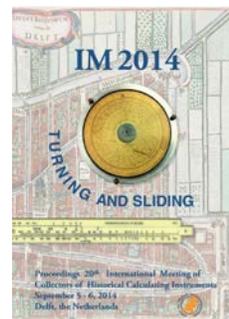
After the successful IM2014 Meeting on Historical Calculating Instruments in Delft, the Netherlands, 5 – 6 September 2014, we would like to draw your attention to IM2014 Proceedings and its companion CD. You can obtain copies from our remaining stock by placing an order with the Dutch Kring. Copies are limited, so order soon, so not to be disappointed later.

The details and costs for the Proceedings in both print and CD form are below:

- 40- euro without shipping, payment in cash
- 45- euro shipping by letter post to the Netherlands, payment by bank transfer (IBAN/BIC)
- 50- euro shipping by letter post to EU (European Union), payment by IBAN/BIC
- 52 - euro shipping by letter post outside the EU, payment by PayPal

Details of costs of the CD only:

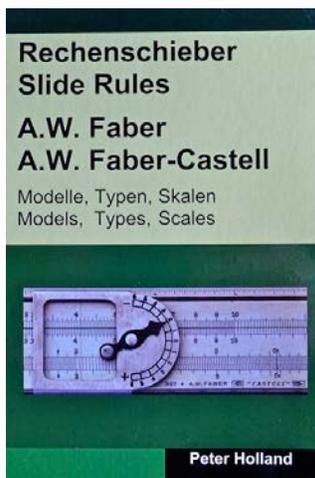
- 10 - euro without or with shipping anywhere worldwide, payment by IBAN or PayPal



Orders with full address information can be sent by email to [ovpoelje@rekenlinialen.org](mailto:ovpoelje@rekenlinialen.org) and by direct payments to bank account of HR O E VAN POELJE, BIC = INGBNL2A, IBAN = NL13 INGB 0000 1252 07. Payments from outside EU to the PayPal account of [ovpoelje@rekenlinialen.org](mailto:ovpoelje@rekenlinialen.org)

*Report from Otto van Poelje*

## New Edition of the 'Encyclopedia' of Faber-Castell Rechenschieber.....



In collaboration with the late Dieter von Jezerski, and Gunter Kugel and David Rance, Peter Holland recently published the 7th edition of his book on Faber and Faber-Castell slide rules. This a hard cover edition that includes 16 pages of new information obtained from many recently found sources. If you collect Faber and Faber-Castell slide rules, this book is a 'must have'. It includes everything that you want and need to know about F-C slide rules, including model numbers, types, scales, cursors, special features, materials used, dates of production, cases, instructions, and patents. More details, including purchasing information for the book, are on Peter's web site:

<http://www.peterholland.de/fc/Flyer7e.pdf>

The cost is just 15 Euro. It is a bargain to US purchasers due to this year's fall in the value of the Euro currency.

### *Ed Chamberlain Reporting*

#### Notable Slide Rule Sales on eBay in October .....

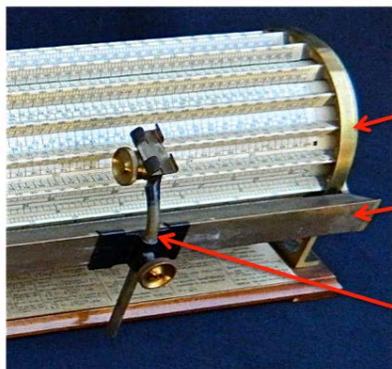
#### **The Thacher Calculating Instrument**



This month, rather than a list of individual slide rules sold on eBay this past month, I decided to feature recent sales (including some that did not sell) of Thacher cylindrical slide rules on eBay. At the left is a photo of a model 4013/Type 2 Thacher

Calculating Instrument in my collection. Note the magnifying glass supported by an adjustable fixture on a bar attached to the supports that hold the calculating cylinder to the wooden base.

The Thacher is very much a commodity in slide rule and calculator collecting circles, because they are an early signature piece of the Keuffel & Esser Company, and because so many were made over a period of 70 years, and so many have survived. In JOS, Vol. 3, No. 1, 1994, Wayne Feely and Conrad Schure, estimated that there were as many as 7000 made from the early 1880s to about 1952. Early models were made by W. F. Stanley in London. K&E was their marketing agent in the US. There was a transition period when K&E made the devices and glued on the paper scales provided by Stanley. Then sometime in the early 1900s K&E took charge of the complete process. Those made before c1900, we call Type I Thachers; those made after c1900 up until about 1927, we call Type II Thachers; and those made after 1927 Type III.



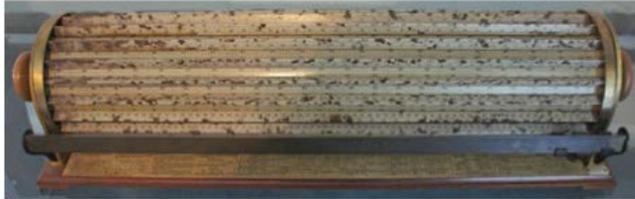
- Type II Thacher cylinder support stand
- support bar fixed to cylinder support stand
- fixture to support magnifier

Each Type is distinguished by distinctive brass end supports ('book ends') for the cylinder. Most Type I versions have only a Stanley label. All of the Type II & Type III models, have Keuffel & Esser labels. The Type III models are distinguished by large knurled rings and white number range bands at the ends of the fixed cage structure. The earliest versions were given the model number 1740 in the K&E catalogs. Sometime around

1900, K&E included an option of an attached magnifier, and changed their model number system to Model #4012 (without magnifier) and model #4013 (with magnifier). All models and versions have the same scale set. I leave it to the reader to research for more details.

I noted 16 Thachers posted over the period July 15th to October 12th, this year.

- a) no Type I versions were offered,
- b) 8 model 4012/Type 2; 5 sold for prices from \$900 to \$2176; 3 had no bids,
- c) 2 model 4012/Type 3; 1 sold for \$1379; 1 had no bids,
- d) 4 model 4013/Type 2, 2 sold at about \$1100 and \$1383; 2 had no bids,
- e) 2 model 4013/Type 3, 2 sold for \$600 and \$1384.

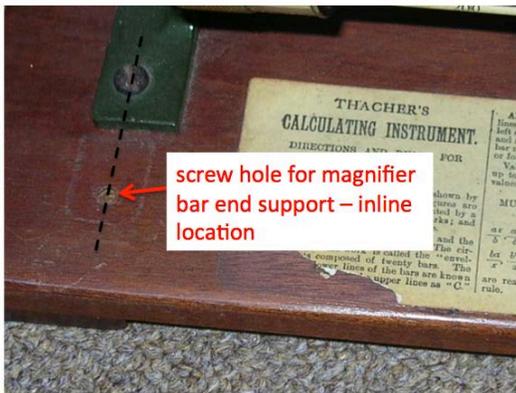


Thacher Model 4012/Type 2 – did not sell



Thacher Model 4012/Type 2 – sold for \$1396

Note that 6 offerings received no bids, and that the sale prices of the 10 that sold ranged from \$600 to \$2176. No Type 1 Thachers were sold in this time period. Condition was very much a factor in the sale price. All of the 6 model #4013s were missing their magnifying glasses, and some were missing parts of the fixture used to support the magnifiers. One would expect a model #4013 Thacher, in very good condition and complete with the original magnifying glass, to sell for more than \$2000.



I found it interesting that there were 3 different methods of mounting the 'bar' that supports the magnifying glass. One attached the bar to the two the 2 brass 'book ends' that support the cylindrical slide rule (as shown on p.6 above). Another, that was missing the bar, had screw holes in its wooden base that lined up with the 'book end' supports (as shown to the left). This indicated to me that the bar had its own 'feet', and, thus, was attached to the wooden base. In a third example, also missing the bar, there were screw holes in recesses machined into the wooden base (as shown below). These recesses were not in line with the 'book' end supports.

screw hole for magnifier bar end support – staggered location



Even more interesting to me was one Thacher example that had a small brass clip attached to one of the vanes in the sliding cage. I have never seen this clip before. Apparently it was used as a place marker for 'string' calculations.

*Reported by Ed Chamberlain*

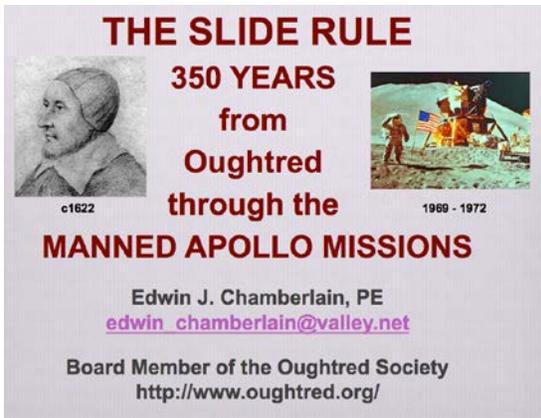
[More from Your Newsletter Editor.....](#)

**1) Appeal for Contributions to the OS Newsletter.** It has come to my mind that this Newsletter could use more contributions from the OS membership. It is quite a task to put together a newsletter every month and keep it interesting. I am sure that there are many OS members that have mulling over details of a particular slide rule, and have some questions that need answers. Or want to announce to the slide rule world a local or regional slide rule relevant that they have noticed or participated (or will participate) in. So I encourage all to send your contributions to me at [<edwin\\_chamberlain@valley.net>](mailto:edwin_chamberlain@valley.net) .

I will do my best to include all contributions sent to me. Include picture files in jpg format if possible.

**2) Appeal for someone to take charge of Papers for IM2015.** The reader should take note of Bob De Cesaris' appeal in this Newsletter for volunteers to assist with planning and preparation for IM2015. Especially critical to the success of this meeting is for someone to step forward to solicit papers and presentations. Contact Bob to express your interest, and to get details. Contact Bob at: [<robert.g.de.cesaris@intel.com>](mailto:robert.g.de.cesaris@intel.com)

**3) Announcement of Talk at the Goddard Space Center.** On March 2nd I will be giving a talk at the Goddard Space Center: "The Slide Rule - 350 Years from Oughtred through the Manned Apollo Missions. This is the same presentation that I attempted to make after the Las Vegas slide rule meeting earlier this year, but was thwarted by a snowstorm in the Washington, DC area and the resulting closing of the Space Center.



**4) Space Slide Rules.** Related to the above talk at the Goddard Space Center, I have been collecting information of 'Space' slide rules. I have scoured the Internet for any slide rules that played a role in the US Space program in the 1960s, and

found a few examples. They include:

- V2 Rocket Ballistic Ranging Slide Rule, c1942, Werner von Brauns?
- Korolëv's Nestler Slide Rule
- Von Braun's Nestler Slide Rule,
- Pickett 600-T Dual Base Log log Slide Rule, carried on the Apollo missions,
- Apollo 11 "Space Faring" Slide rule; a sky chart for determining position from the stars,
- Breitling Navitiner watch carried by Scott Carpenter in Mercury - Atlas mission,
- Pickett Deci Log Log Vector Slide Rule used by Werner von Braun,
- Gary Peach Moon Temperature Slide Rule for calibrating an Australian tracking telescope,
- Aristo #80123 Martin Space Slide Rule for time of travel, velocity, etc to reach planets,
- Space Vehicle Pocket Designer, circular slide rule for three stage rockets,
- Rand Corp. Rocket Performance Computer, circular slide rule for 1 & 2 stage rockets,
- Space Propulsion Calculator, for missions to the moon and all the planets.
- 

The reader should take note that the role of the slide rule in NASA's Apollo mission program was not trivial. For instance, 4 University of Toronto scientists made important calculations with their slide rules after an oxygen tank exploded in the spaceship on the Apollo 13 mission. This was the mission that had to abort its attempt to land on the moon, but not before continuing to and around the

moon back to the earth. The Toronto engineers made calculations of the pressure required to eject the lunar module, without further damaging the space ship. They were honored in 2010 for their successful efforts. Their calculations saved the astronauts' lives.

**5) Appeal for the Loan of an Aristo Martin Space Slide Rule** I will appreciate any additions to the above list. I also appeal to the readership for a loan of an Aristo Martin Space Slide Rule. I would like to show a real space slide rule to the NASA space scientists and engineers. There are few, if any, that remain at Goddard, from the time of the Apollo missions, and for most it is a great surprise that slide rules were used in the US space program. Contact me at <edwin\_chamberlain@valley.net> if you are willing to loan a Martin Space Slide Rule.

*Reported by Ed Chamberlain*

On The Lighter Side .....



You're a pluggers if you know not only what a slide rule is, but how to use it.

*Credit to Pluggers, Henrico, VA*

*..... Send Contributions to: edwin\_chamberlain@valley.net .....*