

December, 2015 / January, 2016

From Your Newsletter Editor - Ed Chamberlain



Note that this issue of The Oughtred Society Newsletter covers the months of December, 2015 and January, 2016.

If you were lucky, the month of December was highlighted by a slide rule in your Christmas stocking. If not, note below the two important slide rule meetings in 2016 where you are certain to find new slide rules for your collection.

First in May, there will be a meeting in Las Vegas featuring three talks and a sale of more of Tom Wyman's famous slide rule collection. The meeting will be held at the Atomic Testing Museum. Details are given below. May is a busy time in Las Vegas, so get your hotel reservations early to get the preferred rate.

The second meeting this year is one to really take note of. For the first time, our Italian friends will be hosting an international meeting — this one IM2016. The venue for IM2016 will be in a spectacularly modern museum setting, the Science Museum (MuSe) of Trento. The theme of the meeting is: *Someone's Trash is our Treasure: The Collector as a Preserver of Material Culture.*

The setting will be Trento, an alpine city in northern Italy, just south of the Alps in the foothill range of the Dolomite Mountains. The last time (50 years ago) that I was in this area of Italy, it was to ski the Dolomites. Trento (Trent in English) is an old town long predating its conquest by the Romans in the first century BC. Padua and Venice are just a little more than a two-hour drive by auto from Trento, so it will be easy to combine IM2016 with visits to other special places in Italy. [Nicola Marras has taken the lead in organizing this meeting.](#)

News from the Oughtred Society's President - Bob De Cesaris



It is time to celebrate the Oughtred Society's 25th year! We have accomplished a great deal over the past year: We held a very memorable International Meeting IM2015 in Burlingame, CA. We established the Archive of Collections on our website, where members can present their collections and preserve them for posterity. And the year culminated in the completion of the donation of key examples of Tom Wyman's excise rule and book collection to MIT Museum in Cambridge, MA. These items were all safely received in Cambridge, MA, and are now being catalogued by OS member, Dr. Debbie Douglas and her staff. While Dr. Douglas has a conflict in May with our Annual Meeting, she will provide an update of the museum's plans for the collection.

One of our most significant accomplishments of 2015 was the organizing, cataloguing, scanning, and placing 'on-line' a large portion of the Thomas Wyman Collection of slide rules, books and related scientific instruments. The on-line collection of thumbnail pictures, seen together, are memorable; most of the thumbnails lead to additional scans of each of the items. Check out this most fascinating collection at the link:

<http://osgalleries.org/collectors/wyman/wyman.cgi>.

And don't forget to thank members Clark McCoy, Rod Lovett, Richard Davis, and Ted Hume for playing key parts in making this wonderful site—a key part of the Oughtred Society on-line presence!

We are looking forward to the following key OS activities in 2016:

- Completion of the listings and scans from the Wyman Collection Archive.
- Our Annual Meeting, scheduled for May 7, 2016, at the Atomic Testing Museum in Las Vegas, NV, where 70 additional pieces from the Tom Wyman collection will be offered at auction. As always, members are strongly encouraged to bring their own items for display or sale at this meeting. With two dinners and a great day at the Museum with some of the most interesting people on the planet, this meeting will certainly not disappoint!! See more details below.
- IM2016, being hosted by Oughtred Society-Italy—planned for September 16-18, 2016 in Trento, a historic town in northern Italy. This should be an exciting meeting in a beautiful place. Our OS member friend—Nicola Marras—is taking the lead in organizing this meeting. See details below in the announcement for IM2016. Nicola is asking for papers, so all OS members are encouraged to contact him for more details.
- We are working with the Wyman estate and auction houses in USA and UK to expedite the sale of some of the remaining items from Tom's collection. These are items not offered at the Las Vegas meeting. One venue under consideration for some key items is the Skinner Spring Scientific Auction, scheduled for April 29, 2016 in Marlborough, MA. Check out their site at:

<http://www.skinnerinc.com/auctions/2890M>

We also are considering David Stanley Auctions in the UK for other key items:

<http://www.davidstanley.com/specialist-tool-auction-dates>

- Our Education Committee will be developing ideas to spur new interest in slide rules and calculating devices. The purpose is to attract new members to the Oughtred Society. Current OS members are encouraged to submit ideas, and join in this activity.

Finally, all OS members are strongly encouraged to volunteer their time to write an article for our journal or by taking a position of interest within the Society. All volunteers (and their ideas) are welcome; the experience will be rewarding!

See you at the May—Las Vegas—meeting!

Bob

Reported by Bob DeCesaris

ANNOUNCEMENT: Oughtred Society Spring Meeting—May 7, 2016 L_{SEP}



The Oughtred Society's Annual Meeting for 2016 will be held in Las Vegas, NV, on May 7, 2016. The new Spring Meeting will combine the Winter Meeting and the June Annual Meeting traditionally held in the Bay Area. We will not be holding a meeting in the Bay Area in June, so mark your calendars and make plans to attend our Annual Meeting on Saturday, May 07, 2016 in Las Vegas, Nevada, at the Atomic Testing Museum. The Museum is located

just 1.3 miles east of the Las Vegas “Strip” on the campus of the University of Nevada, Las Vegas. **Registration will be \$45 (registration for spouse or significant other is free of charge).**

A block of rooms has been reserved at the Four Points by Sheraton Las Vegas East Flamingo at a special OS rate of \$89/night for the nights of May 6 and May 7. **A limited number of rooms have been set aside, so early reservations are recommended.** The special rate will expire on April 6, 2016 or when rooms at the special rate are no longer available, whichever occurs first.

An optional dinner will be held on both Friday and Saturday evenings at the hotel in a private room with a fine selection of food supplied by Buca di Beppo Italian Restaurant. Cost will be \$30/person for each dinner. These dinners have been popular at past meetings with lots of interaction and discussions! **Please make your reservation for each dinner by April 7, 2016 so that we can get the food ordered and the space reserved.**

This meeting is open to Oughtred Society members and non-members. You do not need to be a member of The Oughtred Society to attend, but participation in the auction does require membership. Registration for the meeting is only \$45 and an Oughtred Society membership is only \$35.



All attendees are encouraged, but not required, to bring slide rules and/or calculators to display and to sell or trade. The meeting will feature displays of slide rule collections, an auction, buying, selling and swapping, three live presentations and the opportunity to meet and talk with fellow slide rule enthusiasts, many of whom are experts in their areas of interest. **Items from the Thomas Wyman collection will also be offered at the auction. See in a separate document (sent to you by email) a listing of the slide rules up for auction at the Las Vegas meeting.**

Registration

The meeting registration fee is \$45. The registration fee is used to pay meeting expenses ... meeting room rent, refreshments, tables, etc. **The optional dinners (at \$30 per person per evening) may also be paid for along with the registration fee. Please try to register and pay for your dinners before April 7 so we can plan and order food and spaces.**

You may register for the meeting (by clicking on Meetings) on the Oughtred Society's website.

<<http://www.oughtred.org/>>

Or you also may register by postal mail and send your fee(s) by check or money order to:

**The Oughtred Society
9 Stephens Court
Roseville, CA 95678**

Please indicate that you are registering for the Spring Meeting, Las Vegas, May 07, 2016. Upon receipt of your registration, we will send you an Email of acknowledgement. The first week in April we will send you a meeting packet containing complete detailed information and a list of attendees.

Hotel Reservations

Reservations may be made by calling the Four Points by Sheraton Las Vegas East Flamingo Hotel at (702) 473-6400. Be sure to mention The Oughtred Society \$89 rate. Also note that, if for

any reason one cannot attend after making hotel reservations, one must cancel their reservation 48 hours in advance of the first night of our event to avoid hotel room charges. Additional dates on both sides of our meeting date may be granted at this rate if the reservation is made early and rooms are still available.

Additional details of the Las Vegas meeting will be sent via email to Oughtred Society members. If you have any questions or suggestions please Email us at: <secretary@oughtred.org>

Reported by Richard Davis and Bob DeCesaris

ANNOUNCEMENT: International Meeting of Historical Calculating Instruments – IM 2016 will be held in northern Italy, 16-18 September 2016



The meeting will be hosted at the Science Museum (MuSe) of Trento (www.muse.it). This event will be held next to the museum's collection of calculating instruments [*Technorelics*] and the display of dinosaur skeletons. The Italian office machines collectors group (www.ufficiodepoca.it) will co-sponsor the meeting, together with Italian members of The Oughtred Society. [Nicola Marras](#) has taken the lead in organizing this meeting.

The theme of IM2016 is: *Someone's Trash is our Treasure: The Collector as a Preserver of Material Culture*. Following on this idea, the contributions to this year's meeting should possibly give **reference to the provenance of the described objects**, be the reference anecdotal or scientific. Moreover, an analysis could also include **some consideration of the relation of early techniques to actual knowledge or procedures**, i.e., *in times past, user manuals were the "programs" to be learned ("compiled") by man, and "executed" by hand (operating a crank or handle or sliding a wooden rule), and then noting the result*. In the depths of today's computers, tablets, and smart phones, the underlying algorithms are invisible to the normal user. A mere button press delivers an immediate result. Antique procedures may therefore usefully serve as a didactic methodology for explaining the internal functioning of modern devices. Apart from these recommendations, all kinds of contributions concerning traditional (non-electronic) calculation devices are welcome. As in previous meetings, short articles (for example, "one offs" or "posters"), are invited. These could present an opportunity for newcomers to join the established historic calculating instruments collector's community.

The comparison of extinct species to the extinct technology of mechanical calculating devices led to the idea of reconsidering these historical calculation-related artifacts, putting the main emphasis, not on the achievements of past technology, but on the **material culture**, taking into account the historical context that makes these artifacts worthy to be collected, analyzed, and used to explain the evolution of material culture. Consequently, the actual collector, who often lived and worked with these instruments, may be considered as having the same perspective as a paleontologist who digs for fossil remains or an archaeologist who searches for human artifacts. Some collectors already

have their collectibles at home; others have had to rummage in forgotten cellars and flea markets. What someone has discarded becomes the collector's treasure.

To help contributors, support for correct English style will be provided by volunteer native English speakers. The deadline for submission of papers is 30 June 2016. All contributions will be printed in a Proceedings and recorded on a CD. **Please send contributions to:**

[<mailto:oughtredsociety.italy@gmail.com>](mailto:oughtredsociety.italy@gmail.com)

in *.doc format and A4 page size with high-resolution (≥ 300 dpi) photos. For additional information, the official meeting website will be:

[<http://im2016.eu>](http://im2016.eu) or on Facebook at www.facebook.com/oughtreditaly.

The financial processing will be handled directly by MuSe under the direction of Dr. Lanzinger, the museum's director. MuSe's experience with holding meetings and their transparent separate accounting guarantee a perfect organization. Details of the costs and hotel arrangements will be updated soon.



The city of Trento (<https://en.wikipedia.org/wiki/Trento>) is located 90 km from the Verona airport, 150 km from Venice, and 35 km from Lake Garda. The main highway Autostrada del Brennero (Brenner Highway, A22 north, or E45 south) and fast trains facilitate access from north and south. A number of Alpine tourist and historical attractions in the surrounding areas suggest that a longer stay will be entertaining and educational.

The conference hotel NH Trento (www.nh-hotels.it/hotel/nh-trento) is nearby the MuSe in a new district, featuring the architecture of Renzo Piano (<http://lealbere.it/ilquartiere>). This is a 4-star Hotel with rooms at preferential prices. The hotel may host parts of the meeting; however, the main meetings will be at the MuSe. Trento's historic city center is within a 15-minute walk of the MuSe, where other accommodations can be found, such as the Aquila d'Oro (www.aquiladoro.it) and the Grand Hotel Trento (www.grandhoteltrento.com).

Reported by Nicola Marras with help from David Sweetman & Ed Chamberlain

ANNOUNCEMENT: Archive Your Collections on The Oughtred Society's Web Site

INTRODUCTION: The purpose of this Archive is to preserve the collections of members for posterity and for viewing by slide rule enthusiasts worldwide.

The initial collection posted is that of Tom Wyman, who specialized in old English gauging rules and other top quality rules of many types. The slide rules in Tom's collection date back to the 1700s, and his slide rule books date back to Oughtred's book of 1633. Over 338 items are pictured and described. Detailed photos are available for all items. This archive was created by Clark McCoy, who photographed and listed the items in Tom's collection, and by Rod Lovett, who created the display on The Oughtred Society web site, and by Richard Davis and Ted Hume, who created the thumbnail images and wrote the captions. Please visit this new page on The Oughtred Society's web site: [Archive of Collections](http://osgalleries.org/collectors/). See <http://osgalleries.org/collectors/>

INVITATION: We invite you to consider posting your collection on the OS website for posterity. For more information, please contact us at oughtredsociety@comcast.net

Reported by Richard Davis and Ted Hume

The Spring and Fall 2016 OS Journals



David Sweetman reports that the *Spring, 2016 issue of the OS Journal* is well on its way through the editing process. Below is a list of the articles and their authors. Note that there will be six papers about Louis Ross and his slide rules. The paper by David Lee Ingram includes a discussion of the Ross Meridiograph circular slide rule. The other five papers are about Ross slide rules, and are authored or co-authored by Ed Chamberlain and Richard Davis. Note that Ed and Richard try to solve the mystery of look-a-like circular slide rules: the Louis Ross Rapid Computer and the John Ross Dempster RotaRule.

Slide Rule Problems	Gary Flom
The Surveyor and Slide Rules	David Lee Ingram
The Ross Precision Computer	Edwin J. Chamberlain
The Ross Rapid Computer	W. Richard Davis
The Ross Student Rapid Computer	W. Richard Davis
A Biography of Louis Ross	Edwin J. Chamberlain
The Ross Rapid Computer/Dempster RotaRule Mystery!	Edwin J. Chamberlain and W. Richard Davis
Pencil Slide Rules—Part 5: The Digital Transition	Rodger Shepherd
The Gerber Derivimeter	Paul McConnell
New to Slide Rules in the 21st Century	Phil Rodley
Recommended Reading: Napier Tercentenary Mem. Vol.	David Sweetman

David reports that the *Fall, 2016 issue of the OS Journal* is also in good shape with a full compliment of papers committed. The titles and authors are below:

World's Largest Bibliography	Detlef Zerfowski
Damien Slide Rules	Ian Lodge
Crompton-Gallagher: Boiler Efficiency Calculator	Stephan Weiss
Tavernier-Gravet Slide Rules	Marc Thomas
A Poor Man's Collection	Roger Dollarhide
The Hemmi 154	Richard Hughes
More on Sterling Adders	David Riches
The Kally Slide Rule	Nathan Zeldes
Slide Rules Made in Spain	Jose G. Fernández

David also reports that he also has a good start for the **Spring, 2017 issue**. Authors are encouraged to contact David Sweetman at: d-dsweetman@att.net with proposals for additional papers.

Reported by David Sweetman

Report from Membership Secretary: Clark McCoy

We ended 2015 with a membership of 409, slightly up from 2014. Renewal for 2016 is well underway with 250 members so far. The list includes 9 new members. Their names are below:

Charles Horan	Glendora, CA
David Hilton	Westchester, CA
George Harvey	Brattleboro, VT
Ira M. Stone, MD	Saint Augustine, FL
James Crawford	Colton, CA
James Moses	Virginia Beach, VA
Matthew Russell	Indianapolis, IN
Muriel Williamson	Burlington, NC
Lim Chong Yea	Singapore

Welcome to The Oughtred Society. Congratulations to our new members. We hope that you enjoy the rewards of your OS membership, and encourage you join in The Oughtred Society activities.

REMINDER: To old members, if you have not renewed your membership yet, it is easy to do. Just go to The Oughtred Society homepage at:

<http://www.oughtred.org/>

and click on "**Membership**" and follow instructions. You can pay online by Credit card or PayPal, or you can pay by check the old fashioned way.

Reported by Clark McCoy

Some eBay Slide Rule Sales in December and January

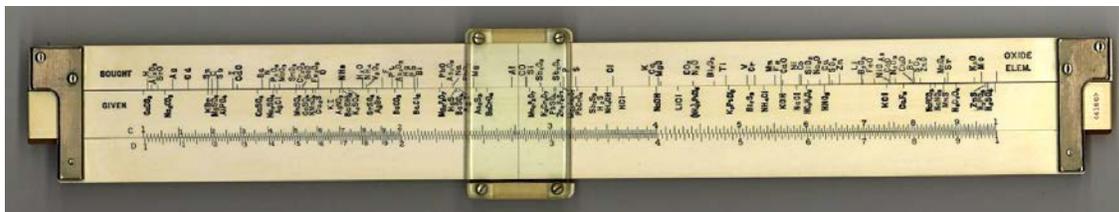
In this issue of the OS Newsletter, I show a selection of slide rules sold on eBay in the past two months. I have tried to pick a selection of slide rules; mostly expensive, scarce, or special.



Pilot Balloon Mark 11 Meteorologist's Slide Rule, c.1943; with case. \$164

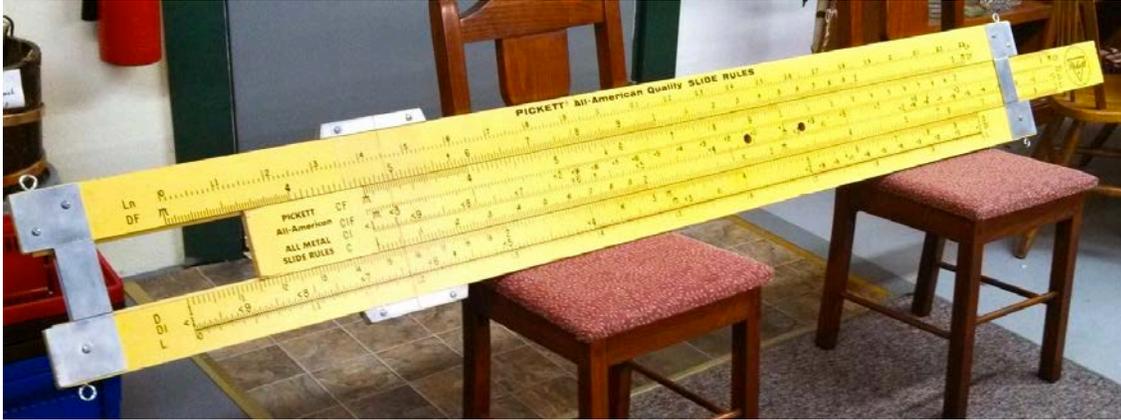
Pilot Balloon slide rules like this were used by meteorologists in the weather services and military units of the UK to determine the upper atmosphere wind velocities from ascending hydrogen or helium filled Pilot Balloons. The Pilot Balloon slide rule is used to convert the observed azimuth and elevation readings into wind velocity and direction records.

Ref: <http://www.pilotballoon.com/slide.htm>



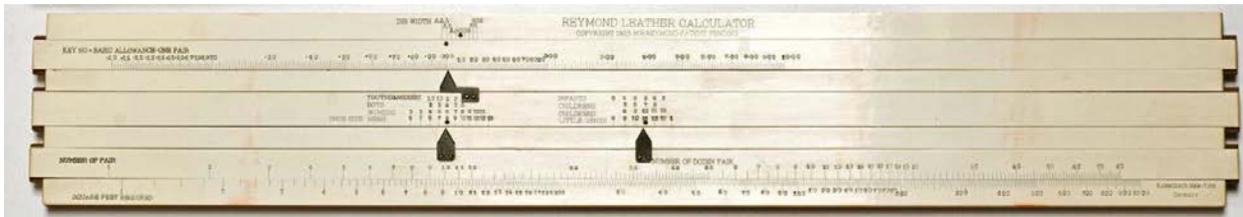
Keuffel & Esser 4160 Chemical Slide Rule, Case & Manual. \$168

This slide rule has gauge marks for numerous elements and atomic weights. Richard Smith Hughes described the use of this slide rule in his paper, "A Layman's Guide to Chemical Slide Rules," JOS, v. 22, no. 1, Spring 2013.



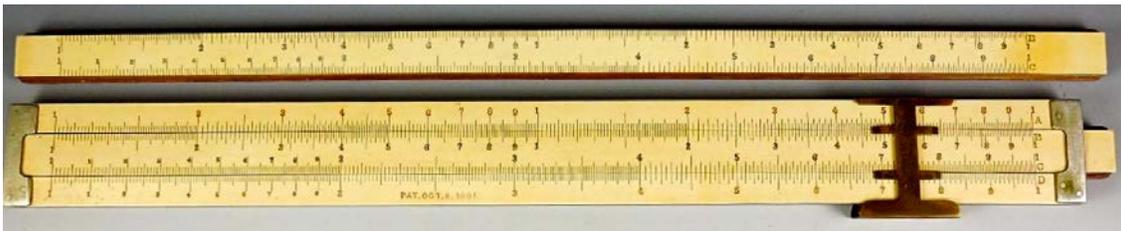
Pickett Demonstration Slide Rule, 7-ft long, Model N 1010 ES TRIG. \$450

This slide rule was often found hanging above the blackboard in a classroom. Note the two holes in the slide enabling a transom-rod hook to be used to work the slide. Those old enough will remember that there often was a shallow transom window over the door to most classrooms in the US that could be tilted open to help ventilate the classroom. The rod used to open the transom window did double duty, also being used to position the slide to make calculations.



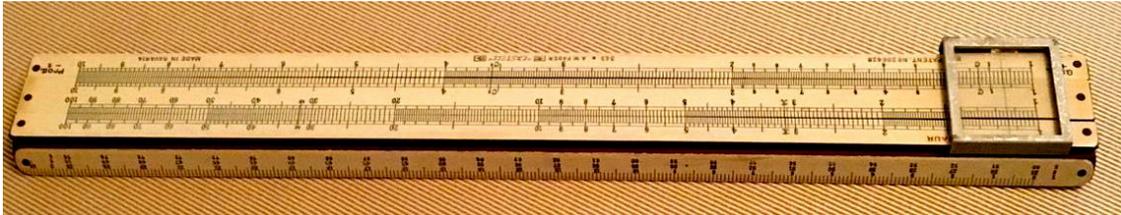
Reymond Leather Calculator, c1923, in mahogany box. \$361

With three slides, this rare shoemakers slide rule was used for calculating the number of pairs of shoes that can be made of a given shoe size with a given sized leather hide. This example is marked Kolesch, an engineering instrument supplier in New York City, but it was also marketed by K&E. This is a scarce slide rule dating to the 1920s.



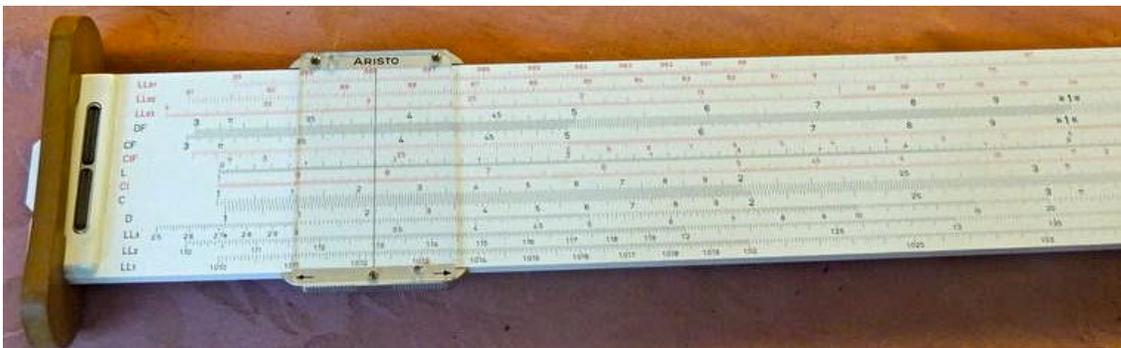
Early K & E 4075 10" Polyphase Duplex Slide Rule. \$613

A rare model with 2 slides, scarce chisel cursor, and 1891 Cox patent, this is one of the first duplex slide rules with the scales on the reverse are related to the front scales. One slide allows the A [B C] D / A [B C I] D scale set. The second slide allows the A [B C] D / A [S L T] D scale set.



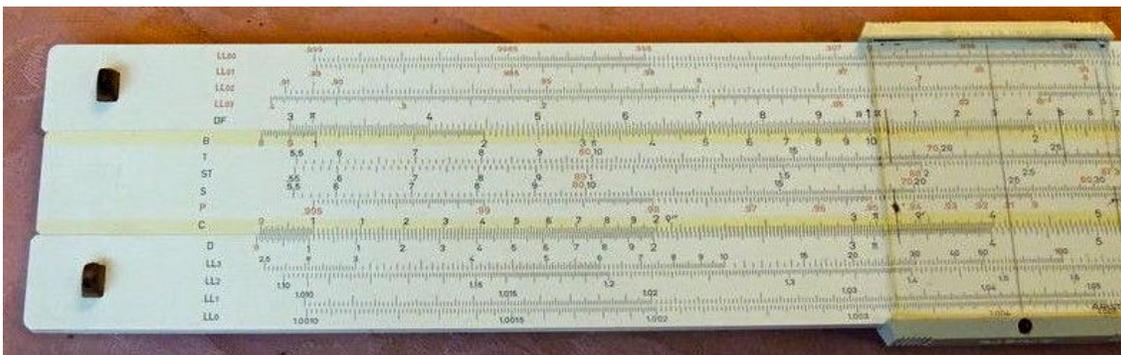
German Faber-Castell 343 System Baur slide rule with original case. \$228

This is a favorite slide rule of Peter Holland's. Peter wrote about this rare slide rule in the Spring, 2011 issue of the Journal of The Oughtred Society. It has a special scale on the beveled edge (not visible in the image above) that is linear and has three sets of labels running from 0 to 25, 25 to 50 and 50 to 75. This is the Baur scale. It is used in reference to the "A" scale to get logarithms to the base $100^{1/25} = 1.2022$. This allows the Faber-Castell 343 to calculate *any power and any root up to 6 places*. More details can be found in Peter's JOS paper: http://www.oughtred.org/jos/FaberModel343_PeterHolland.pdf



ARISTO 1070 Multilog Slide Rule, 62 cm long, duplex with Log Log scales. \$292

This is a log log duplex slide rule with 50-cm scales. Note the special end supports that keep the slide rule elevated on a desk or table so that the slide and cursor can be operated without picking up the slide rule.



ARISTO 0972 Hyperlog Slide Rule. \$270

This is, perhaps, Aristo's most powerful slide rule, with 6 hyperbolic and 8 log log scales.



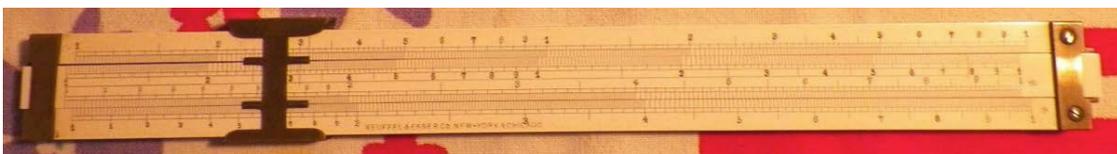
Rare Boonshaft and Fuchs Frequency Response Slide Rule. Est. sales price \$800

With bonus slides in two cases, this is a rare unique design of the traditional slide rule. Richard Smith Hughes wrote about this slide rule in a JOS PLUS article in the Fall 2011 issue of the JOS, pages 17-26.



Gerber Scientific Instrument Graph Analogue Slide Rule Model GA-103. \$175

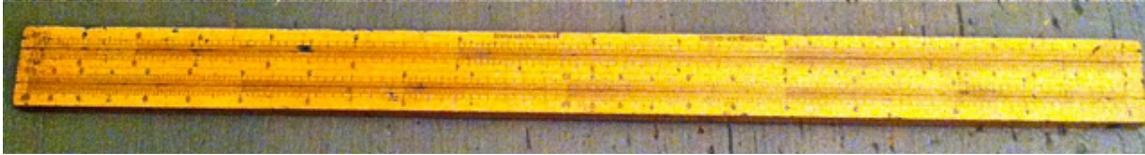
This is another rare and unique design that is used directly on graphs and curve plots to interpolate results. Its transparent body allows the viewing of graphs and curves beneath the slide rule. It has linear, logarithmic, reciprocal, trigonometric, probability and other scales.



K&E Model 1744 Slide Rule. \$332

This has the 1891 Wm. Cox Pat. and scarce brass indicator, with a basic scale set of:
A [B C] D / A [BI CI] D

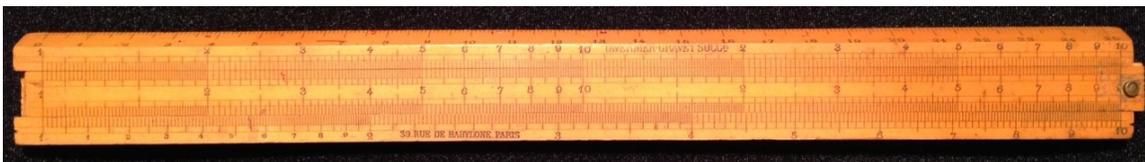
THREE TAVERNIER GRAVET SLIDE RULES



Tavernier-Gravet Soho Regle a Calcul en Buis 19eme Slide Rule. \$171

Translation: Tavernier-Gravet Soho slide rule in wood, 19th century (from eBay France). The Soho set of calculating scales: A [B B] D date to before Mannheim invented the 'Mannheim' scale set: A [B C] D. Unlike the Mannheim scale set, the Soho scale set does not require a cursor. In fact, the cursor was invented (or reinvented?) by Mannheim so that the top scales of slide rules could be related to the bottom scales, thus easily allowing the determination of squares and square roots with the new Mannheim scale set. After Mannheim invented the cursor in the 1850s, the firm Tavernier-Gravet and its successors continued to market slide rules with Soho scale sets until after the turn of the twentieth century.

It is interesting that another T-G Soho slide rule sold recently on eBay France (see below) for about **\$16**, it being in much better condition than the example shown above. Credit for notice of this purchase is given to a lucky Oughtred Society member, whose name will remain anonymous, for now. That just goes to show that with patience and perseverance, great buys are still possible. However, note that the T-G Soho slide rule shown below has a beveled edge with a measuring scale, while the example shown above is 'sans' bevel, and thus is probably older, and maybe scarcer, and thus deserving of a higher price.



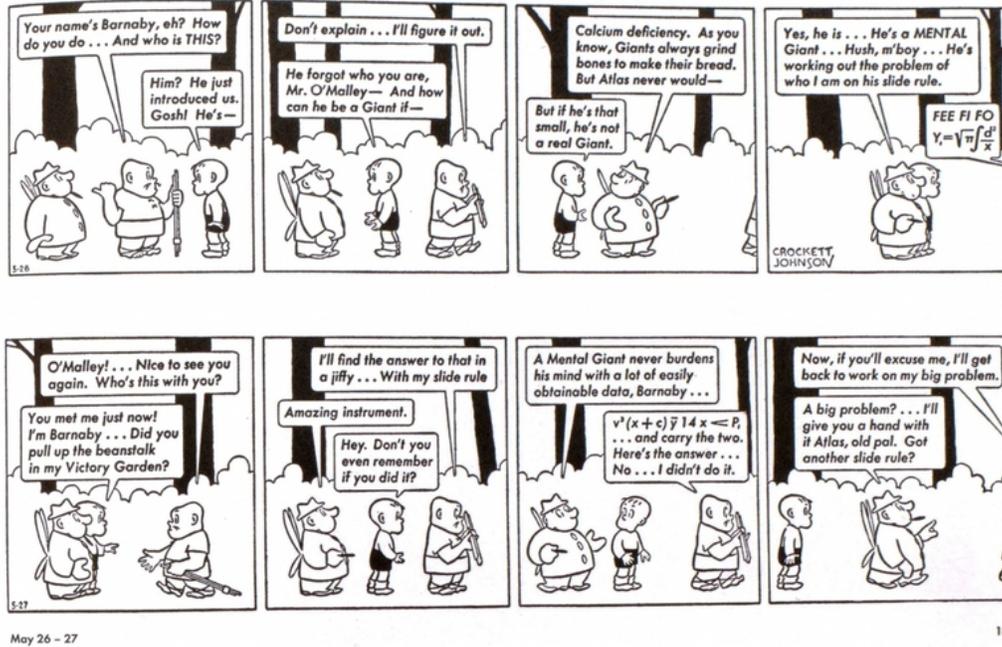
Below, see an example of a T-G Mannheim slide rule, sold recently on the UK eBay for **\$156**. Note that it has a celluloid scale surface.



Also note that there was one more T-G Soho slide rule with a beveled edge that sold on eBay UK for **\$97**, and another T-G Mannheim slide rule with celluloid scale surfaces (but missing its cursor) that sold on US eBay for **\$24**. Two more Mannheims with metal half-frame glass cursors (one in boxwood with a 1909 date code), sold on eBay France for **\$61**. Another, missing the glass, sold by a Belgian seller for **\$22**.

Also of note is a Loga Rechenwalze (cylindrical slide rule), a 10-m model with wood support frame, that sold in the past two months. It sold on eBay France for **\$606**.

On The Serious/Humor Side



Nicola Marras sent this Barnaby cartoon for this issue of the OS Newsletter. He wrote that he does not know of any Italian cartoons that feature a slide rule, but that “we (in Italy) just had a translation of the American Barnaby & Mr. O'Malley cartoon, where a character, Mr. Atlas, always had a slide rule in his hand.” Below is the cartoon in its original English language. Nicola found his cartoon on the Mathematical Association of America (MAA) web site:

<http://www.maa.org/book/export/html/362079>

It was published by the MAA with the permission of the Executor of the Estate of Ruth Krauss, the wife of Crockett Johnson, creator of the Barnaby Cartoons.

According to the MAA, Barnaby’s fairy godfather, Mr. O’Malley, introduced him to Mr. Atlas the Mental Giant, who often carried a slide rule for important calculations. In the cartoon above (first row), Barnaby, the young man, is introduced to Mr. Atlas (who is carrying a slide rule) by Mr. O’Malley. Mr. Atlas forgets Mr. O’Malley’s name, and quickly goes off to figure the name out on his slide rule. At the far right of the first strip, Mr. Atlas’s speech bubble can be seen to be working out O’Malley’s name with the calculations being done on his slide rule.

One can see that Mr. Atlas is saying: $FEE FI FO: Y_1 = \sqrt[n]{d^2/x}$. In the second strip, Mr. Atlas greets O’Malley, whose name he had just resolved on his slide rule. Then, Mr. Atlas, who has already forgotten Barnaby’s name, goes off to calculate it on his slide rule. Once that is accomplished, Mr. Atlas departs to ‘work on his big problems,’ and Mr. O’Malley offers to help if Mr. Atlas can provide another slide rule! 😊

None of this makes sense, because the slide rule needs numbers to make calculations, not mathematical expressions. For some unknown reason, Crockett Johnson ignored the fact that a slide rule is used for calculating with numbers. But for those schooled in mathematics, it all makes for some nice humor!

Reported by Ed Chamberlain and Nicola Morras

. Send Newsletter Contributions to: edwin_chamberlain@valley.net