

SKID STICK



NEWSLETTER OF THE UK SLIDE RULE CIRCLE

ISSUE 56
JUNE 2017

UKSRC Membership

This runs for a calendar year from January to December.

Subscriptions: UK £12 pa. Europe £15, USA and the rest of the world £17. Rest of World: PDF = £15

Payments by cheque for Subs and **Gazettes** to be made payable to **Gerald P Stancey #2a/c**

(Note new a/c name) should be sent to Dave Nichols at:
36 Sheep Street
Winslow
Buckingham
MK18 3HN
England

uksrc.membership@btinternet.com

PayPal payments should be made payable to the account of rod@lovet.com

with an advice to Dave making clear exactly by whom and for what payment was made.

Gazette prices

UK: £15 + £2 p&p Total £17

Europe: £15 + £4 p&p Total £19

Rest of World: £15 + £7 p&p Total £22

Editor:

Peter Hopp
1 Dorewards Ave
Bocking
Braintree
Essex. CM7 5LT

Tel: 01376 326132

Email:

peterhopp678@btinternet.com

www.uksrc.org.uk

ISSN 1466 3570

I trust that everyone who received an e-mail reminder has by now renewed their membership for 2017? If you have not, then please take this as a final not-so-gentle reminder to do so a.s.a.p.! We will miss you if you have not!

We have been celebrating various mathematical anniversaries in the last few years, none as important as Napier's Quadricentenary in 2014 of the birth of logarithms; well we have another similar celebration this year, the 400th anniversary of his death and also the publication of his "*Rabdology ...*" which has some really fascinating stuff in it. I can do no better than recommend Dr. Klaus Kühn's quite incredible "*Collectanea de Logarithmis*" where there are available a series of downloads from papers presented at the 400th celebration in Edinburgh available from: <https://www.collectanea.eu/napier400memorial/>

This year's Gazette is recognising the 400th anniversary of Napier's demise in a small way and should anyone wish to produce a relevant article for publication we would welcome it. As always, I do hope that no-one thinks they need to be asked to produce any item for our publications; we welcome articles from anyone on any subject, in any format – we will cheerfully turn your input into a suitable format for Gazette or Skid Stick so please do write something!

Our Spring UKSRC meeting showed what a marvellous job our honorary officers do to keep the UKSRC gently ticking along! Dave Nicholls keeps a tight rein on our members and subscriptions, Gerald Stancey, our Honorary Treasurer, keeps track of our finances, Rod does all sorts of things apart from our web site and Editor in Chief of Gazette, and Peter Fox is an ever reliable stuffer of envelopes with Skid Stick and anything else we decide to post. This last has to be one of the most tedious tasks, but is an essential one. Without them all, and it gives me particular pleasure that we have managed to continue in this entirely informal way, the Slide Rule Circle would not keep going. We are always looking for others to stand up and help out, and over the years there have been many, but new blood is always more than welcome, please do volunteer. "Thank You" to all of you who do keep things going, it is much appreciated!



OH THAT PLACE...? WE SHUT THAT DOWN AGES AGO!

Various items in the news recently have had me shaking my head in wonder at the state of play in the great wide world, and so the cartoon here struck a real chord. It also made me feel sad that we could actually laugh at the demise of common sense. I am probably too much of a grumpy old man to be taken seriously, so please take this as the meanderings of a very old and cranky editor!|

It is great to welcome another new member; Darrel was someone else who might have heard of us through the purchase of slide rules from the Colin Barnes Collection. A very warm welcome indeed!

New Members

Darrel Rosander
5242 Starr Road
Campbell, NY 14821
United States
email: DarrelRosander@cs.com

Directory Changes

Address Correction: None

Change of e-mail address

David Sweetman

david@quadd.info

Mike Minihane

mike.minihane33@gmail.com

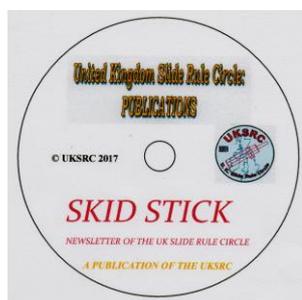
Matters Arising

The inestimable Rod starts the ball rolling with a pretty accurate comment on the *Intelligence Quotient Slide Rule* from the last SS. He says: “Bloody hell! All it has to do is subtract two dates to get your age (I find it easier to remember my age rather than doing that!) and then divide your age by mental age (where does it get that I wonder) and multiply by 100. Perhaps one of the scales is to input your hat size and size of feet to get an approximation of mental age? Talk about an over-kill!” Too true, perhaps there is more than meets the eye?

I had a gentle correction from our old friend and Honorary Member Heinz Joss wrt the OS Awards. He said: “Just a little remark: Herbert Bruderer is Swiss, and not German. German readers perhaps will not mind, but Swiss readers will.” OK and apologies to anyone who I have managed to offend, not intentional!

Cyril Catt from the antipodes kindly discovered via the magic of Google that our picture of the *WAAF with the slide rule* comes from the Computer History Museum in Mountain View, California. They are regular host to OS meetings in the USA, (see: <https://tinyurl.com/huysmto>) and originally from Getty Images and Keystone Features and part of a fascinating series of images of the WAAF in wartime. Definitely worth a further look.

Book Worm



Following on from our announcement in the last Skid Stick of the availability of all back issues of Gazette on DVD, we are also now delighted to announce the availability of all back issues (except the last year) of Skid Stick for £55 including p&p anywhere

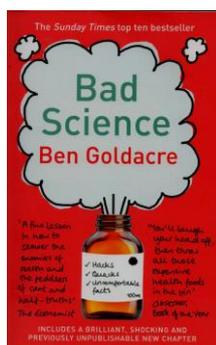
in the world. An unbeatable offer for countless hours of

great reading! Contact Rod or Dave or me and we will get it to you. You can order directly from the UKSRC web site.



eBay regularly offers electronic collections of rare books for sale. I “treated myself” to “The Slide Rule and Mensuration Collection” from **rare-book-collections**, (note their eBay name and “logo” (left) if you are searching for them). This consists of 66 (yes, 66!) PDF copies of a vast collection of the rare, the unusual, and perhaps even the common but for £4.99 post-paid for the DVD this is unbeatable value! I will not even start to list what is on here, but suffice it to say I have already ‘lost’ several hours just browsing the offerings. Heaven alone knows when I will ever read them all. There are others, please check them out! They are superb value.

“*Hello Russia, Goodbye England*” by Derek Robinson, Quercus 2012. A novel of a Vulcan squadron in 1962, at the height of the cold war. As with all Robinson’s RAF books it is well written and observed. There are a couple of mentions of a slide rule. Page 168: “At midnight Jack Hallet and Nick Dando were playing chess. Quinlan was reading a book on the Korean War. Tom Tucker was playing with his sliderule [sic]. Silk had just finished writing a long letter to Zoe. He reread it, and looked up. Tucker had found an answer on his sliderule. Or perhaps it was a question, because he was using his forefinger to write an invisible calculation on the armrest of his chair. He didn’t like the result and he rubbed it out, although there was nothing visible to erase.” One can relate to that!



recommended.

“*Bad Science*” by Ben Goldacre. Published by Harper Perennial 2009. The ultimate Grumpy Grandpa’s book, as the puff says “... dispenses fast and powerful relief from scaremongering journalists, pill-pushing nutritionists, flaky statistics and evil pharmaceutical corporations” – several of my favourite ‘rants’. A great number of interesting subjects are covered in a most enjoyable way. Well written as well as highly entertaining, the author works for the NHS! Very highly

e-Worm

“*When the Computer Wore a Skirt*”: Langley’s Human Computers, 1935-1970. The story behind the three American black females, celebrated in the recent film “*Hidden Figures*”, Katherine Johnson, Mary Jackson and Dorothy Vaughan who worked out calculations to launch NASA space mission in the 1960’s. The web site https://cgis.ndc.nasa.gov/historic/Human_Computers had this great quote: “Computers “read” photographic films of the manometer readings, and recorded the data on worksheets. Working one on one for an engineer, or collectively in a computing section, computers then ran different types of calculations to analyse the data, and plotted the results on graph paper. All this work was done by hand, using slide

rules, curves, magnifying glasses and basic calculating machines, like the Marchant or the more popular Friedan, [sic] which could multiply AND calculate square roots.” An interesting view of the USA at that time.



I did find an image involving slide rules from this web site; it is from the “facilities” part of the site, and shows three women one of whom has three

slide rules in front of her, all 20” rules!

There has been yet another Dietzgen advert skulking about on eBay (fascinating Rod Lovett fact: more than 85% of eBay slide rule items do not sell) and this one from 1956 has certainly been up and down my watch list many times. It follows the format of others we have previously admired (SS 45 & 50) and enables us to put a date on the Micromatic adjustment they offered and which



seems to have been unique to that company. I know of no other.

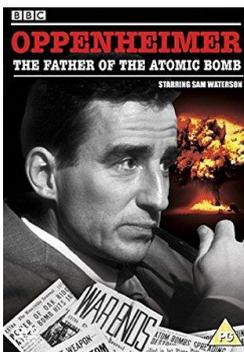
Science Museum Stories: “Mathematics and Aviation, The Handley Page ‘Gugnunc’ (after a popular Daily Mirror cartoon catchphrase of the time) aircraft”.



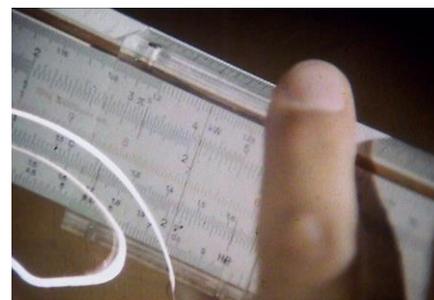
Mathematicians, engineers and designers at the Admiralty Air Department in the First World War, including Letitia Chitty (third from left, middle row) helped transform aviation in peacetime. Recalling Admiralty Air Department work in the First World War, she was quoted: “There were no programmes, no

calculating machines ... we relied upon our slide rules and arithmetic in the margins ...

Lives were at stake and we couldn't afford to let anything go through wrong.”



Oppenheimer – The Complete BBC Series 3 DVD set. With many thanks to a very sharp-eyed Nathan Zeldes, we have a picture of a slide rule (bottom right) which appears very briefly in the opening sequences. Nathan comments that the plastic cursor appears to be a bit of an



anachronism. A quick look at Peter Holland's latest Faber Castell book (for that is what I think the slide rule is) confirms that this cursor with a half-cylindrical magnifier was given a 1950's DRGM. I could well be wrong, perhaps our F-C experts can confirm this or otherwise?

Aristo Wrist Stop Watch

It appears that Aristo is an old and well known maker of stop watches and other chronometers, including many wrist models, for many different sporting uses, and the name is purely coincidental. Aristo the watch-maker's history began in 1907, when watchmaker Julius Epple founded 'Julius Epple K.G.' (officially registered in 1936). in Pforzheim, Germany. Later the name changed to 'Aristo Uhren- und Uhrgehäuse Fabrik' and again later to 'Aristo Watch GmbH'. A wrist examples is shown from



this maker and below are others. I have no idea what this example is used for. Four 15-minute/second quadrants are not an intuitive topic! It may relate to the US NFL, that needs confirmation, and I do not understand how it would be used in that situation.

At first Aristo used movements from Glashütte and Urofa, but in 1934 they took over the movement factory of Maurer & Reiling and started to produce their own movements (signed JE for Julius Epple).



There are other Aristo sub-brands, for example Apollo (registered in 1927) and Aristo-Park, both registered by Aristo Import

Co. Inc., New York USA, for the American market. On the previous page are two wrist worn yachting timers. See <http://www.regatta-yacht timers.com/stopwatches/> for even more examples in normal stopwatch format.

Cuff links –Contd.



Following on from the item back in SS54, I was delighted to hear from Detlef about some other rather attractive cuff links with a mathematical favour – calculator cuff links, sadly non working but very realistic. These and other similarly “cool” cuff links are available from <http://www.sologemelos.com/en/p/calculator-cufflinks>, indeed other attractive and some very unusual designs are also available from elsewhere on the same site, see: <http://tinyurl.com/zryxjfn>. Thanks Detlef!

The Jolly Gauger

With many thanks to Tom Martin, the following delightful little ditty comes from “PLAIN PAPERS relating to the EXCISE BRANCH of the INLAND REVENUE DEPARTMENT 1621 – 1878” by John Owens, Supervisor of Inland Revenue, 1879. If all the rest of the 564 pages are half as jolly as this it should be a real blast! It also makes a lovely change to be able to produce a relevant item that is so different.

<p>I am a jolly Gauger, And keep a four foot rule, With Colling’s books in pocket, New come from Dixon’s school. And a Gauging we will go, we’ll go, we’ll go. And a gauging we will go.</p> <p>With Colling’s Book in Pocket, And Everard’s Rule and Cane, A sliding rule for Customers, And a Conscience void of Stain. And a Gauging ...</p> <p>When in the Night I ramble, With Lanthorn in my Hand, And if in Bed my Landlady, She’ll rise at my Command. And a Gauging ...</p> <p>I hank my Horse still at the Door, And to the Cellar run, Where I do gauge all empty casks, As well as those are full. And a Gauging ...</p> <p>There’s Number One holds thirty-six, And so doth number Two, There’s Number Four holds forty, The Fourth’s not gauged true. And a Gauging ...</p>	<p>There’s Number Five filled with Small, As sure as anything; Odsblue, you it is all strong, You must not cheat the King. And a Gauging ...</p> <p>But in the Item of our Sport, I wish we had been Wiser, Just as I at the Window looked I spy’d the Supervisor. And a Gauging ...</p> <p>In came the Supervisor, So pleasantly he looks; How do you, good Officer, Pray let me see your Books. And a Gauging ...</p> <p>But when he looked into them, He fell into a Rage, What do you mean you drunken Dog? Here’s neither Stock nor Gauge. And a Gauging ...</p> <p>For the future I’ll admonish you And take it on my Word, If ere you do the like again I’ll report you to the Board. And no more a Gauging you’ll go, you’ll go, And no more a Gauging you’ll go</p>
---	--

Self-Igniting Slide Rules

Our thanks to Ray Hems who sent us this fascinating piece from the ISRG, he says, “Not sure if you read the ISRG stuff on Yahoo, but a current topic is whether the celluloid of slide rules will self ignite.

The latest comment is “Nitrate motion picture film was used until 1951, and was made from nitrocelluloid, the same material that is used to face wooden and bamboo slide rules. I have worked with nitrate film for 18 years and was responsible for a store with 42 tons of the stuff and have a good idea as to its flammability. There are two types of film archivists who work with nitrate film: Those who believe that nitrate can self ignite, and those who do not. I belong to the latter category. If an external source of heat is applied to nitrate it WILL catch fire. Nitrate film in good condition needs a temperature of at least 70 Celsius to ignite. The facings of slide rules are thin slivers of celluloid exposed to the atmosphere, and as such do not decompose in the same manner as tight rolls of nitrate film. Badly decomposed nitrate film has been provoked to ignite in laboratory conditions at temperatures as low as 42 Celsius.

I have “experimented” with scraps of nitrate film, both strips and entire rolls. Scraps of nitrate in an ashtray would not ignite, even when a cigarette was stubbed out on them. A cigarette left burning on the top of a roll left a burn mark, but did not ignite the roll. Focussing the sun’s rays with a magnifying glass similarly failed to ignite the film. Puffing on a lighted cigarette whilst holding a scrap to the glow on the end of the cigarette did light it. The surest way to ignite nitrate is to hold a cigarette lighter to a strip of it.

I have no worries as to my (presently) small collection of celluloid faced Faber Castell rules spontaneously catching fire, and do not lose any sleep over the fact that the rules are in the room next to my bedroom. Be careful with using a celluloid faced slide rule around a naked flame, such as an open fire or candle, but [note that] a newspaper could also be ignited by such.

Don’t worry and enjoy your collection!”

Just thought it might be a fun topic for Skidstick sometime – how worried is anyone that their collection will blow the house up!

Gosh thanks Ray! Actually it is good to know that it is a much more stable substance than some of the “old wives” would have us believe!

As a gentle hint to our readers, it is strange and delightfully abstruse topics such as this that make Skid Stick so much of a pleasure to edit and produce and they come from you, the readers. So please if ever you spot something unusual that amuses or amazes you, as a slide rule collector it is likely that it will amuse the rest of us as well. So please, send it in for the delight and delectation of all.

A Miracle of Modern Technology



I have long admired the lovely Victorian pocket barometer/altimeters which come either in silver or gilded brass, in pocket watch format complete with winder (left) and here with a pocket watch built in, and a simple loop. They are a really delightful piece of technology. However, never having found one in a suitably “distressed” state for me to repair and bring up to standard, I decided to treat myself to a modern equivalent.



I duly found and purchased a “Pocket Waterproof Fishing Barometer/ Altimeter/Thermometer/ Watch” (left) for the princely sum of £9 post paid, and complete with a carabina [sic] to hang it on your belt. When it arrived I marvelled at the incredible list of its *Features*:

Smart tracking barometric pressure for 6 fishing places. Smart reminding suitable fishing time. 24 hours barometric pressure trend chart. Adopt super-accuracy barometric sensor from Swiss. 3 days air pressure & temperature record. Incorporates altimeter, barometer, temperature, weather forecast, countdown timer, time & data functions, etc. IPX 4 waterproof. LCD backlit. Wow!

Specifications:

Barometer:

Range from 300hpa to 1100hpa. Hpa and Inhg unit switch available Resolution of 0.1hpa

Thermometer:

Range from -10°C to +60°C. °C and °F unit switch available. Resolution of 0.1 degree. Data records: 6 sets of data for fishing places including pressure, time, depth
Countdown timer: Range from 0 to 59:59:59

Weather forecast: 4 weather status indication (sunny, partly cloudy, cloudy, rainy). The weather forecast for next 12 to 24 hours. Time: 12/24 hour format switch available. Date display: month, day. 3 days historical data record: Record 3 days max (min) pressure, max (min) temperature.

Battery life: about 12 months. Material: Plastic
Colour: Blue. Item size: 5.5 * 1.5cm/2.2 * 0.6in (D * W). Item weight: 29g/1oz.

As I said, it is a miracle of modern technology, but virtually impossible to use! The two-button controls require an incredible ability to concentrate and the patience of a saint! Consequently I have only, at best, ever managed to half set it up. Shame really, it is quite incredible what it can do when properly and completely

set up! And, not surprising, it eats batteries!

Testimony from an American User

I have always been somewhat cynical about “unsolicited testimonials”. However, the following (with the above heading) issued by Fowler, presumably in 1925 or shortly after, is a fascinating view of what could be interpreted as being better with a Fowler’s calculator when compared with other similar contemporary devices. I have tried to copy the same capitalisation and bolding as in the original document:

Mr. Gano Dunn

**The Eminent Engineer and President of
THE J.G. WHITE ENGINEERING CORPORATION
43, Exchange Place, New York. U.S.A.**

In a letter dated July 29th 1925 states

The Fowler Calculators arrived several days ago, and I desire to acknowledge their receipt. **I find your Calculator the best I have ever seen.** Having always had an antipathy to the stick form of Slide Rule, I started 30 years ago to use a French circular type. Later I substituted an improvement sold by a British firm. This had a white instead of a silver dial and was easier to read. In recent years I tried another of British make, a German one and several instruments with multiple circles made in the United States. All have been subject to error from either coarse graduation, short scales, excessive parallax, or eccentric or loose pivot. **Your instrument is at least 10 times as accurate as the best circular instrument I have heretofore tried.** It seems to be entirely free from eccentricity, and its parallax errors are much smaller than any other. In addition its scales are much longer. **I congratulate you on having combined discriminating design of the scales with such a high degree of mechanical precision in manufacturing.** For these reasons I shall be glad to comply with your request to pass on the circulars to other engineers, and **I enclose a further remittance for six more Fowler Calculators, Type RX.”**

This does provide an interesting insight into what Fowlers may have considered the high-points of their designs if they produced this, or else, if genuine, then equally what their customers might have thought! My cynicism being what it is, I googled “J.G. White... etc.” and found a most interesting Google book published by the company sometime in the 1920’s: “*Achievements of the J.G. White Engineering Corporation and Associates in American and Foreign Fields*”. <http://tinyurl.com/zr7pca4>. In the 35 pages are quite incredible lists of many major power systems of all types in all parts of the world they had completed. Also confirmation that their president since 1913 was indeed Gano Dunn. His entry in Wikipedia shows a long, varied and interesting life (1870 – 1953) with a great emphasis on engineering. It also shows a plaque honouring the man and his incredible achievements, see next page. (https://en.wikipedia.org/wiki/Gano_Dunn)

In the face of this evidence, I have had to revise my thoughts on this unsolicited testimonial. It must indeed have been genuine. It also shows that with Dunn's interesting comparison with contemporary pocket-watch devices we can make an educated guess that he had previously tried: an original French Boucher of about 1895 with its silver scales, then a British Stanley Boucher with paper scales. It is more difficult to guess which would be the later British and which German devices he was talking about. The American has to be K&E Sperry. A fascinating and unusual comparison of pocket-watch slide rule features, and an interesting document.

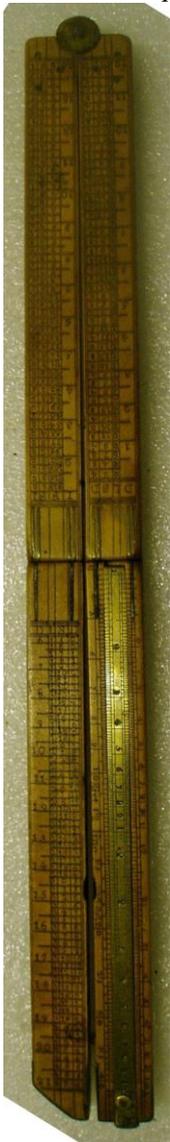


The American has to be K&E Sperry. A fascinating and unusual comparison of pocket-watch slide rule features, and an interesting document.

A Most Unusual Combination

This quite delightful 2-foot, 4-fold slide rule featured on eBay a couple of years back. At first sight it looks to be a very ordinary Coggeshall rule (albeit in a less usual 2'-4-fold format) with its Girt Line and Per Load Tables over three legs. Turning the rule over gives a normal 2-foot rule graduated in 1/8" for the full 24" length as one would expect.

The clue that this is not an ordinary rule can be seen at the bottom left hand corner of the adjacent picture. It is the angled end of a folded/jointed barrel measure!



The graduations for the barrel measure are on the inside edge of the rule. The picture above shows Diagonal Lines for Wine and Beer which run the full 24" length of the open rule.

Sadly there is no maker's name anywhere to be seen and there are no gauge marks to give an indication of date. Closer inspection also shows that what on the face of it looks like three

'Per Load' tables are actually far more interesting and diverse. Adjacent to the leg with the slide is a 'Per Load' table, running from 6d to 21d. The 12d markings are 2.10.0 showing that it is for 50lb loads: 50 lbs at 12d (1/-) is 50/- = £2.10.0. The second table marked D.L.S.D is a 'Hundred-weight Table', from 1d to 12d, confirmed as being a cwt table as one hundredweight (112 lbs) at 1d is 112 pence = 9s. 4d. The third table, marked I.F.F.I and marked from 1 to 14 is much more unusual and difficult to decipher, particularly as the entries are decreasing with increasing Inches in the left-hand column. It is not self-evident at all. It turns out to be a 'Rope Table'. The first column gives the circumference in inches and fractions of an inch, the next three give the length in fathoms, feet and inches of rope that weighs one hundredweight (cwt); the normal way of buying rope, and hence the decreasing figures. We were able to confirm this by comparison with another similarly marked naval officer's rule from the late 1700's, where 2" circumference rope needs 121 fathoms and 8 feet of rope to the cwt, and 10" circumference needs only 4 fathoms and 6 feet of rope. A fascinating and eclectic mix of measures accommodated on one rule from much later than 1770, possibly about 1850 I would estimate. One can only assume it would be used by a shipborne Gauger with a penchant for carrying timber in various load sizes, well roped down with different strengths of cordage! Seriously, one wonders who would have wanted that mixture of capabilities.

Multiplication

We were pleased to receive another astute piece of slide rule observation from Gerald Stancey, they are always a pleasure. He writes: "I was brought up to believe that the correct way of multiplying was to use the C/D scales and, if possible, the reciprocal (CI) scale. (*Hon Ed: Agreed!*)"

While perusing a Faber catalogue/instruction manual, undated but probably late 1930's, it came as a surprise to read that multiplication should in general be done on the A/B scales; the C/D scales being used when greater accuracy is needed. The use of the reciprocal scale for multiplying and dividing is not mentioned. A short survey of manuals and instruction leaflets shows that pre-WW2 the use of the C/D scales was the preferred method when multiplying/dividing. The use of the reciprocal scale does not seem to appear until after WW2. (*Hon Ed: Agreed again. At school if it became obvious we had used A/B we would certainly be ticked off by the teacher.*)

It has long puzzled the author that good quality rules were being produced pre-WW2 that did not have a reciprocal scale and on some of them Pi only appeared on the A/B scales. Perhaps the "Faber" advice to use the A/B scales was the norm but it does seem strange that it took so long for the advantages of the reciprocal scale to be realised." *Hon Ed: I'm not a great one on slide rule norms, I was brought up using it one way and that way stuck for ever more, what do the readers think?*

Times Past

I'm not sure where I found this image, and it's not directly to do with slide rules, but is of a Survey party in the USA sometime in the late 19th century, taken on a normal working day. What I found absolutely fascinating is how well dressed they are, even the "Boy"



– proudly carrying the long banded staff – is wearing a waistcoat, and second from left sports a quite incredible tie! The axe-man, complete with gold watch chain, is sitting on a bunch of wooden stakes, and the transit man has very well-polished shoes! One has to assume this was purely due to pride in the work they did as a group. As someone who wore a suit for most of my 40 years in

work – and hated it – I can well associate with something that was obviously "expected" – and quite rightly so. However, as a generally unrequited scruff of the "Compo" (last of the Summer Wine) variety, I was delighted to abandon such finery when I retired. Times past indeed!

Two Patented French Calculators



The Tesseract web site (www.etestteract.com/) often provides unusual mathematical equipment, and there are few as strange as this pair of devices!



"CALCULATEUR DIDELIN," French, c. last quarter 19th century, "Brevete France S.G.D.G.

et Etranger." The 19½" x 8½" x 2½" (50 x 22 x 6 cm) softwood case, with hinged lid and sides, contains a system of five lithographed tin rollers, plus a hinged overlay plate with a total of 150 (!) windows opened and closed by 30 independent shutter slides. The rotating tubes (for units, tens, hundreds, thousands, and ten-thousands) are printed with interest due for 30 different percentage rates (from 0.25% up to 9%). It is an intriguing and quite rare specialised calculator; we find no example in the published catalogues of the collection in the Science Museum in London, and but one in the Musee des Arts et Metiers, that one given to the Museum by Monsieur Didelin himself in 1892. I just loved the idea of a 'diddling calculator'! Then we have the Tachylemme:

THE "TACHYLEMME," French, c. 1880, signed "C.L. Chambon, Inventeur; Lith. Baster & Vieillemand, 97, B't. Port-Royal, Paris; Approuvé par la Societe d'encouragement pour l'industrie Nationale." This patented calculator has a fine 4" x 6½" (10 x 16.5 cm) polished wood body with ebonized wood base, bevelled glass top, and plated metal frame. The lithographed panel displays, through windows, the printed numbers on four cylindrical rollers for 1's, 10's, 100's, and 1000's.



There are windows for percentage rates (of interest, etc.) of 1% to 6% by halves. External knobs allow setting any four digit number; one then sums the four displayed values for the result. Baster and Vieillemand are well known as fin-de-siècle Parisian lithographers of colour postcards, publicity cards, etc. Chambon himself invented the "Tachylemme" in 1876. An uncommon device – one is recorded as having entered the IBM collection.

Defensive Mathematics

Good old Tesseract also came up with a quite incredible contraption which one could think was being presented as a joke: WROUGHT IRON DIVIDERS/DAGGER, European 17th /18th century. Measuring 13½" (34 cm) overall, this rather primitive pair of dividers is well constructed, with a five-leaf hinge with pommel knob, twin tapering arms, and double hilt. It has a good "heft" for use as a dagger. Condition is good, apparently all original, noting some pitting to the surface. The application of the hilt to dividers, making them into a significant close range weapon, is well documented. For example, one finds a

There is no obvious way of removing or replacing the glass. The whole calculator is a chunky 290 gms and is 4.65" diameter – a not insubstantial device. This particular example I acquired was in great condition – except for some rust spots on the steel back – not so pretty but perfectly liveable with. However, that was what prompted me to take the back off and see whether the rust had also grown inside, and indeed it had, onto the bottom ends of the axles. It was simply cleaned off with a glass-fibre pen brush, a few drops of oil added where necessary, and then it set me wondering – how were they put together? There is no obvious way of holding in the crowns and their attendant axles. However, after clearing the grime around the edge, there are two tiny holes (see red arrows) which look to take tiny pegs that hold in the axles. I would have guessed that they are grub screws, but there is no obvious slot or other ways of extracting them! So Hidden Details indeed!

What's In a Name?

While noodling around on German eBay, I found two mouth-watering Breitling wrist-watch slide rules, see pictures below.



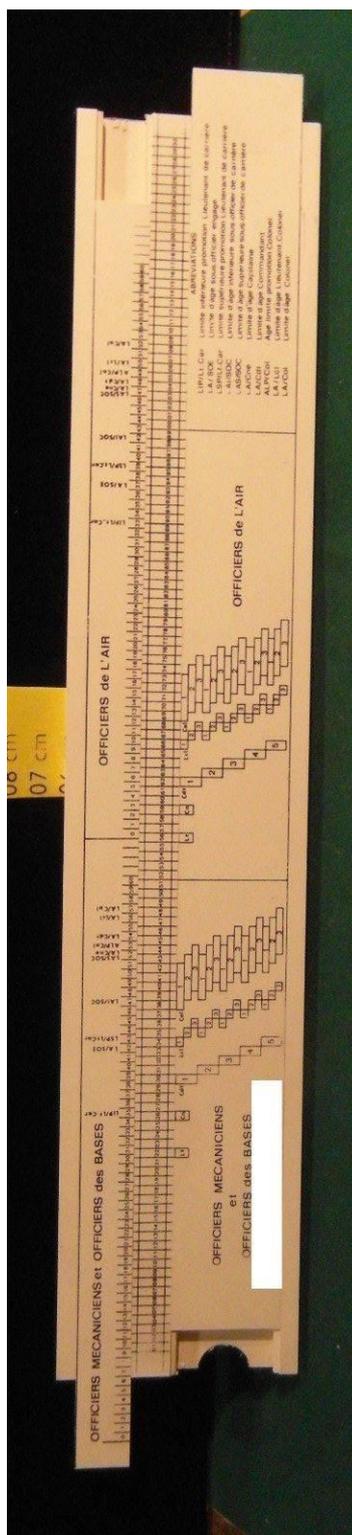
Both are referred to as 'Ref 1808 Chronomat Spiegelei Rechenschieber von 1975', the one on the left (white face) had a price tag of €2,790 and the one on the right (black face) €5,000; so they were miles beyond my budget. However, two other points of interest. First, the crowns are (most unusually) on the left of the watch face, and secondly, both were called "Spiegelei" which translates as Fried Egg – Why?

Rare and Unusual Slide Rule

One would have thought that this was not a subject which is inherently suitable for slide rule calculation. However, the "Rare règle à calculer "le déroulement de carrière des Officiers de l'Armée de l'Air"" – "Rare slide rule "the progress of career of the Officers of the Air Force"" exists. It would appear to have been appropriate for "Officiers, Mécaniciens et Officiers des Bases" – Officers, Mechanics and Base Officers".

With only high-school ability in French, and despite the best efforts of Google translate, it is not obvious how this poly-slide rule with its three slides is used to calculate how, when or if a French air-force officer becomes due for advancement. The name of the original owner has been blanked out, so I wonder

whether these are a part of all French Air Force Officer's standard kit handed out from the Quartermaster's Stores.

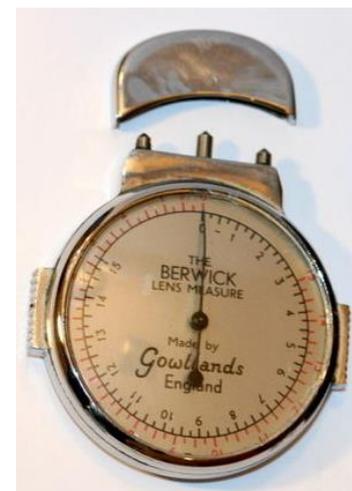


That immediately begs the question how many hours per day does one spend calculating one's prospects for promotion, and how do you mathematically improve your chances? Should anyone care to try for a better understanding, I can let you have electronic images including expanded pictures of each half.

Lens Measure or Lens Clock

Also known as a Geneva Lens Measure, these are a specialised form of Spherometer and are like a dial indicator. They are used to measure the focal length of lenses in Dioptres. One quite often sees them for sale and they are another attractive piece of specialised measuring/calculating equipment. The recent acquisition of an example prompted some research into their use and history, and I found the inevitable pleasant surprises!

According to the internet, the inventor of the (Geneva) lens measure was Jack Brayton, who was associated with the Geneva Optical Company of Geneva, N.Y., U.S.A. The lens measure was patented in the



United States, Great Britain, Germany, and France in the year 1891, and indeed a lens measure from F.A. Hardy and Co of Chicago (below) shows references to all these patents. However, an earlier reference shows a French lens measure dating from 'after 1882', perhaps implying that such an instrument was available before 1891, and adds that

around 1900 the instrument had appeared in ophthalmic instrument catalogues. Brayton's US patent 447,276 of Feb 24, 1891 shows an extremely simple mechanism for



“showing the radius of curvature” utilising the three pins, the central one moving. It is also assigned to the Geneva Company of Chicago. I assume this is the one which is also patented elsewhere. There is also US Patent 703,725 of July 1902 to Franklin Hardinge which shows a device instantly recognisable as a Lens

Measure with a much more sophisticated mechanism, and he also assigned this patent to the Geneva Optical Company of Chicago. This patent is the last one shown on the Hardy Lens Measure. I am not aware of the relationship between the two Geneva companies, Chicago and New York

Elsewhere on the internet is another lens measure this time from the Geneva Optical Company quoting the same 1891 patent, but showing a very different mechanism. Exactly how this mechanism works is not known at this time. There is obviously a lot more to these delightful



devices than meets the eye, and plenty more to research! Watch out for an exposé in a future edition of the Gazette.

devices than meets the eye, and plenty more to research! Watch out for an exposé in a future edition of the Gazette.

Stanley's Computing Scale

This is a fascinating contraption which was first sold in 1878 by William Stanley – and subsequently supplied by his company as well as many others – and whose use is not immediately obvious. The ‘scale’ is usually supplied in a wooden box with the main scale and the eight subsidiary scales in fitted slots. The “cursor” with its wire centre line is quite large and unusual, but essential for its operation. Note that all scales and the cursor were fitted with ivory handles to make manipulation easier, a typical touch of Stanley ‘class’ detail!



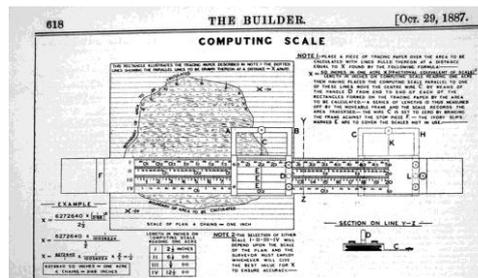
Stanley's version is unusual in having the interchangeable subsidiary scales. Versions of computing scale calibrated in single fixed numbers of chains to the inch had been available previously. The

computing scale comprises a wooden stock with a slot for



the subsidiary scales graduated in acres and the sliding frame in metal with a central vertical wire. These scales were used to calculate areas in acres of pieces of ground drawn to different scales. In use the plan containing the piece of

land was overlaid with a transparent sheet of paper with horizontal lines ruled at intervals to correspond with the scale of the plan and the computing scale was laid on top of this. “The Builder” of October 29, 1887 included illustrated instructions from which this has been summarised (below).



At the start of a measurement the vertical wire in the sliding frame would be set to zero on the left side of the scale. Normally the person measuring would start with the lowest ruled line. The wire in the frame would be lined up to the left

edge of the area to be measured and then moved towards the right. The scale was then lifted to the next line above (without moving the frame) and the wire set against the left hand edge. The frame was then moved right as before and repeated until the entire area of ground had been measured. The area in acres was then read off the graduated scale on the stock. This is not dissimilar to the method of measuring the MEP off an Indicator Diagram, and indeed should appropriate subsidiary scales be suitably calibrated the Computing Scale could be utilised for that purpose as well. Another fascinating sliding rule – nearly a slide rule!

More Celebration Circular Slide Rules

The last Skid Stick had small circular slide rules



forming part of a money clip. By a strange coincidence the same slide rules have since featured as key-rings with a backing of a suitably celebratory or

memorial nature. How truly ‘old’ these are, is not known. It is quite possible they were made the day-before-yesterday!

First we have a key ring celebrating the US Navy's ASW Team with silhouettes of S-3A Viking and P3-C Orion aircraft (above). Then (next page) we have a very similar key chain, this time celebrating the Lockheed F-104 Starfighter. At least this one has some green verdigris to give a semblance of age, but whether these devices truly are old is a mystery!

These last ones were originally manufactured by The Pacific Products Company of 1016 – 1020 Palm Avenue, Los Angeles, California at an unknown date. Does anyone know when these might originally have been manufactured? The Starfighter first flew in 1956 and the last in service was 2004 in Italy –



a long time over which these could have been made!

Ordering Patents

Ordering Patents from the UK Intellectual Property Office was never a problem, providing you knew patent number, year and inventor. A quick phone call and your credit card number resulted in a copy virtually by return. This facility no longer appears to be available. Now you have to email first querying availability which will get a reply. You follow this by an on-line credit card payment which gives you a payment reference number. This can then be faxed [!!] to them or else a form printed out and posted! All much less convenient and here are the relevant details:

e-mail address: Sales@ipo.gov.uk
web for payment etc.: <http://www.ipo.gov.uk/fs2.pdf>

Good luck, let us know how you get on.

People and Slide Rules (Contd.)

This ever-green topic continues to provide suitable pictures. The first lovely picture comes courtesy of Peter Holland who spotted it for sale on eBay.



This first delightful picture was taken in the Kungsholmen Gymnasium, Stockholm's famous music

school sometime in the 1970's (from a very indistinct date stamp on the back). It has everything: the two girls comparing notes and the envious over-the-shoulder glance from what looks to be a chap in the next row. Great picture, many thanks!



Next, in a very different place of education, we have a great picture from the USAF Test Pilots School in about 1951 which I particularly liked for the non-PC reason that it showed the future test pilot hard at work with his tutor as well as pipe, match-book and slide rule! How long would he have lasted today? Excellent!

Within this genre we have always accepted concocted pictures, and here we have great pleasure in meeting James,



the young collector of the month who belongs to Karl and Franziska Kleine. James was purchased at Euston – and should have been so named in homage to his second cousin Paddington, but was actually re-christened James on Karl's return to Germany from the Bletchley IM. He is obviously a

serious collector in his own right and is shown with recent acquisitions including some items from the Colin Barnes Collection. Thanks Karl!

Proof Reading!



I can't make up my mind whether this is poor proof reading or simple ignorance. Whichever, I doubt that it would have affected the actual medal winner, but probably everyone over the age of 50 would be cringing at the awful

bloomer! Courtesy of the "Proof-Reading" thread on the

Dull-men's Club web site:

<http://www.dullmensclub.com/?s=proof+reading>

A pair of Almost Unreadable Watches!

Watches feature quite often in these pages as I believe that the humble watch – now rapidly disappearing from use, being replaced by the ‘smart’ phone – is one of the few remaining areas where good, simple design can really enhance the final product.



The first watch that features here, under the heading of *A Minimal Moment*, is virtually unreadable! Certainly to be able to come up with a time requires study of the dial, rather than a quick look at a standard

analogue face which usually gives instant fulfilment, i.e. you know the time immediately!

See what you think of the advertising puff that accompanied it: “German company DuFa’s distinctive brand of Bauhaus-inspired minimalism is the epitome of cool! The just-launched Regulator 9017 watch refashions time, presenting hours, minutes and seconds individually – together the dials tell you everything you need to know. Small quirks, such as a face that gently curves, add more appealing idiosyncrasy. £495, deutsche-uhrenfabrik.de”.

After much careful study, I believe the time shown is 10-past eight – in the evening, and it is so ‘cool’ as to be stone cold, but that is probably down to a very old-fashioned editor!



And then I found yet another watch whose strange placement of hands and dials left me more than a touch non-plussed.

Spotted on Pinterest and made by Nienaber watches in Bünde, Germany, see http://www.nienaber-uhren.de/index.php?de_index.

If anything, this is even less intuitive to tell the time let alone telling the time quickly. I assume the ‘6’ at each end of the lower scales is for 6 a.m. and 6 p.m. in whichever orientation suits your life style better, and then minutes similarly distributed with the ‘60’ centrally placed above the ‘12’. The time shown, I think, is 3.35 p.m. Have a look at their web site for their awful advertising puff and even more unusual ‘retro’ watches.

Napier's Bones

A really delightful set of Napier's Bones appeared on eBay under a starting price of £0.99 and disappeared virtually the same day, supposedly unsold, but probably turned into an instant Buy-It-Now at a suitably inflated price. It would have been really fascinating to see what price they would have reached ‘normally’!



They are a ‘full suite’ including cube and square bones, all ten number bones (including 2 x 7 bones on display) and are contained in an unusual wooden box with a sliding lid. They looked to be in absolutely mint condition, whilst the box had some dings commensurate with age, and had performed its protective function admirably. They would have been a lovely addition to any collection of calculating equipment.

Slide rule themed philately – an update

It was really great to receive the following update to what had been a fascinating article in *Gazette* some while back. We appreciate items which are probably too short for a full Gaz update but make an excellent piece here.

Since sharing a gallery of stamps and first day covers depicting slide rules in the *Gazette* (Issue 16, 2015), I was pleased to learn of another example. It was issued by the tiny Pacific island republic of Nauru in 2008 to commemorate the 90th anniversary of the RAF.

It uses one of the iconic photos of the later knighted Frank Whittle in his WWII RAF uniform shown using a slide rule (previously shared in SS, Issue 50, ‘People and Slide Rules’ by Peter Hopp). I believe to date, that it is the example that features a real slide rule in greatest detail (in contrast to the stylised rules on the Romanian 1957 pair). A 1994 Micronesia stamp also used a design based on the photo but not as tight a crop.

The Nauru issue included a sheet of eight featuring a splendid painting of the Gloster E.28/39. The Wikipedia entry notes that it first flew in May 1941 and “was the first British jet-engined aircraft to fly”.

The Nauru 19/05/2008 First Day Cover was a ‘Commemorative Crown Cover’ which included an embedded £5 Bailiwick of Jersey crown. The stamp design featured in a larger format on the envelope and the coin showed a portrait of Whittle and his jet engine.

The original photo, which the *Wikipedia* entry for Whittle identifies as ‘CH 11867’, can be inspected on the Imperial War Museum’s website in high resolution, and also shows its well-worn box. It is credited to the RAF ‘official photographer Miller (F/O)’.

(<http://tinyurl.com/znaklha>)

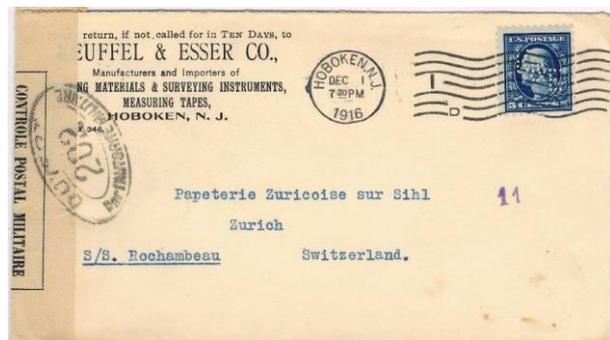


I’m indebted to Ruud van Dam for kindly letting me know of this stamp. He collects philately items related to computers, where slide rules form a subset. He also shared examples from his collection of which I was unaware of where slide rules featured in other categories of philately. These include meter stamps and postal stationery. Three items from his collection are shared with his generous permission.



The Dietzgen is dated Sep. ’61 from PA and the postmark advertises its new Microglide rules. The Charles Bruning is dated Jul. ’51 from LA.

The Keuffel & Esser letter (labelled ‘Controle Postal Militaire’) dated Dec. 1916 from NJ, USA to a Zurich address, is notable because it uses a perfin stamp



where ‘K&E’ is perforated on the US stamp and for the censor label. *Wikipedia* has an entry for ‘perfin’ (SPIFS in the UK) which it defines as “a stamp that has had initials or a name perforated across it to discourage theft”.

Footnote on Whittle’s slide rule: A query on the Yahoo ISRG forum asking where Whittle’s SR may be

located provided a useful link by Daniel Say to Tina Cordon’s website. She notes that one is deposited in the Churchill Archives Centre, Cambridge, UK. One of the staff was most helpful by email and they confirm that they have a rule submitted by Whittle in 1975. The catalogue entry title is:

“WHTL H.1 1934 Whittle’s Slide Rule with Original Case” and that it includes a signed note by Whittle that he used it from 1934 to 1974 through his student years at Cambridge and on the development of the jet engine. He notes it is a Faber model.

So it seems likely that this is the rule he is seen using in photos taken in WWII. Thank you to Peter Holland who has inspected the photo online closely and notes that it is likely one of the Faber 3xx series.

It is not currently on display but a place can be reserved in the Reading Room for it to be inspected with prior notification using their online application form.

(<http://tinyurl.com/j4h2ukr>)

Editor’s Note: Our grateful thanks to David Walker for this update. I was delighted to see that the picture of Whittle included the ever-present cigarette, and that the PC brigade had not air-brushed it out! I also keep learning – I had not come across ‘perfin’ stamps before.

First Byte of The Apple

‘Ho Ho’, so read the headline on a picture in the Daily Telegraph of 15 March 2017.



This was advertising an example of Apple’s first computer which is being sold because its owner is unable to do much with it – the machine has just 4kB of memory, not sufficient to even send an email. The Apple 1 was released in 1976 but only 200 were made. This working model is expected to fetch more than £250,000 at auction in Cologne, Germany, on May 20th – watch this space!

In SS53 we featured an Apple 1 printed board alone which sold for \$365,000 so I have a feeling this will go for much more.

It is Rocket Science

Gerald Stancey sent us a further interesting observation. He spotted that: “According to the Nestler Museum (see: <http://sliderulemuseum.com/Nestler.htm>) both Wernher von Braun and Sergei Korolov (his Russian

counterpart) used the Nestler Electro 37 slide rule. Is this coincidence or is there something unique about the Nestler slide rule?

Let me say at once that the quality of Nestler slide rules stands equal with any other so it is with the scales that I am concerned. The main scales on the face of the rule are A/B, CI, C/D, all of which are provided with extension scales. It is therefore well equipped for normal arithmetical work. The face also carries two specialist electrical scales. I am not a rocket scientist so I cannot give a definitive view on their utility but dare to venture that they were not of much concern to Wernher and Sergei. The lower edge of the rule carries a cube scale and a two cycle log-log scale. This arrangement obviously gives a poorer log-log resolution than that of a rule that has two single cycle log-log scales.

The back of the slide carries S, S/T, T scales which are read by the normal arrangement of index lines and slots in the stock. However the sine scale can only be read using the right hand slot; the left hand slot, unlike Faber rules, does not carry an index mark. This means that some vectors can only be solved either by reversing the slide or making a note of the value of the sine.

Other quality slide rules of the 1930's did not have, what to the author appear to be, these deficiencies, so why were they favoured? Perhaps the answer is that both men got the same model of slide rule when they first became interested in technology. They became familiar with it and acquired an affection for it, and had no reason to up-grade. In other words it is purely coincidence that both of them used the same slide rule. If so can we deduce that rocket science is mainly basic arithmetic?"

Editor's Note: The two slide rules are in the Smithsonian, see below. Korolev's (upper) is labelled the 'Magician's Wand'; von Braun's (lower) is called 'An engineer's tool', much more prosaic! It is also interesting to note that the von Braun slide rule has the slide inserted upside down – is this as he used it, or as the museum displayed it? There was a picture of Korolev using his slide rule back in SS33 (Feb 2014).



The Earliest Slide Rule (Contd.)

The item in SS54 (page 4) brought about some further interesting information from Ed Chamberlain, who responded to the original Blog with a further comment, see:

<https://specialcollections.blog.lib.cam.ac.uk/?p=11890#comment-27279>. He states in part of his response: "However, this is not the earliest slide rule (or slide rule scale design) known. The British Museum has in its

collection a very important circular slide rule with a spiral scale executed on brass disk by Johannes Hulett in 1635. The disk is engraved near its centre with: 'Johannes Hulett Circulariter sed Vitato Circuitu' and dated 1635. It has a 10 turn spiral calculating scale with a scale length of about 3.8 meters. Johannes Hulett was a 1633 graduate of New Inn Hall (now St. Peter's College at Oxford University). Hulett lived in Oxford where he was an instrument maker and a teacher of mathematics for private students. It is known that both Oughtred and his former student turned competitor, Richard Delamain(e), designed circular slide rules by 1630. Since Hulett resided in Oxford and Oughtred in Cambridge and Delamaine in London, this is a difficult issue to sort out. Perhaps there are more letters deep in the files in Cambridge and Oxford that will help sort this out."

We had hoped to have an article on Hulett's slide rule for the Gazette way back in 2010 and it may yet be coming, however here is something that anyone else with an interest in research could get their teeth into! Over to you, dear reader.

UKSRC Spring Meeting Sunday April 23rd 2017

Our Spring 2017 local meeting took place at Dave and Jenny Nichols home in Winslow, and was attended by a record 15 members: Trevor Catlow, Stephen Edwards, Peter Fox, Peter Hopp, John Hunt Snr., Rod Lovett, Tom Martin, Jerry McCarthy, Peter Sealy, Graham Smith, Gerald Stancey, Mick Taylor, Colin Tombeur, Andrew West, plus of course Dave and Jenny. From my point it was a delight to see so many members and to be "back in circulation"!

There was the usual mouth-watering array of slide rules on display and the seamless conversation carried on as before. It was pleasing to see that the ivory Hannyngton which featured in SS 55 (page 6) had found a good home in the UK. There was a lovely lot of early and later Fuller calculators, some new all-wood devices from our usual source as well as many others of all shapes and sizes. Peter F. had brought the delightful Payne-Gallwey calculator I had missed last time around. What a strange device with paper scales and a hall-marked silver ring by Stanley – great!

Business in the afternoon after a superb lunch with lots of entertaining chat on the usual huge variety of topics was accomplished in an hour and covered: Membership – 85 paying members plus 12 complimentary, thanks Dave! Finances – a healthy sum in excess of £4000 – thanks Gerald; and then plans for IM 2018 led by Rod. The foundations for this are well laid, details are still being resolved but it all sounds like the makings of a great meeting. See later. It was agreed that the Autumn UKSRC meeting would once again be at TNMOC and Graham Smith was asked to organise it. See later. A gift of 5 slide rules from the Colin Barnes Collection / rump of the Blundell Archive was given to all attending members, our thanks to Jane Barnes for these. There was then a lengthy discussion as to the fate of the remainder of the Barnes collection which identified some possible ways forward for his ephemera but not really for the remaining 750 slide rules which remain a problem to be solved.

Our thanks to Dave and Jenny for hosting us and feeding us so royally; and my own very heartfelt thanks to our superb volunteer team who as an entirely Honorary Ruling Junta see the UKSRC business through in a thoroughly effective way. This wrapped up the business, and we were able to start on our homeward journeys following another great and enjoyable meeting.

Muse 56

“One day you are the pigeon, the next you are the statue”. I love truisms and especially ones which have some more obvious element of truth in them! But that is true of all truisms – else why would they be a truism?

“There are none so blind as them who won’t see” – another good old fashioned truism, and one that seemed particularly appropriate when Rod and I were in full flood “sorting” the late Colin Barnes’ collection. And then it was not so obvious – the thing that started all this philosophical thinking was what was “good” and what was “not good” – I can think of no other way of describing what was bought and what was not bought. There was little obvious rhyme or reason in the buyers’ selections! And then one realises: it was being bought by human collectors, not always the most logical souls to the outside world, but absolutely logical to themselves. Hence the Stanley Fuller remained unsold – everyone in the UKSRC has one so why buy a second, etc etc! I think that dealing with “collectors” is definitely not the most logical operation in the world.

Albert Einstein was supposedly once asked what was the most powerful force in the universe. His answer: ‘compound interest’. Is this a non-sequitur? Or is it actually just a different sort of clever? Assuming it is, I love non-sequiturs such as this. Definitely not what I would have expected, and yet actually how very true. Because the scientific method is based on logical deduction, measured observations, experimentation, reproducibility of experiments, and peer consensus, an accepted scientific fact is usually unassailable by logical means. However, it is all too easy to view an argument as logical and sound when you agree with the conclusion. Similarly, the counter, to view arguments as flawed when you disagree with the conclusion is also too easy. Fortunately, the standard non-sequitur we have to contend with is of the sort that goes: ‘I know a man who was an engineer and all he talked about was work. Engineers are boring people’. These are easily countered or ignored. There must



be many other much cleverer examples; can readers let us know of their favourites please?

This great picture is of Emilio Gino Segrè, 1905 - 1989, an Italian Physicist who discovered the elements technetium and astatine, and the antiproton, a sub-atomic antiparticle, for which he was awarded the Nobel Prize in Physics in 1959. He is another Manhattan Project member photographed with his slide rule, which must be one of the largest collections of similar users. This comes from a 2002 National Academy of Sciences Biography of the great man.

SIF and Stanley Auctions

Both the SIF and the Stanley Auctions were forced to cancel meetings for various reasons. However, the **SIF** is back on **22nd October 2017** at its usual venue, **the Double Tree Hilton at 2 Bridge Place, Victoria London, SW1V 1QA** between 10am and 3.00pm. Admission: £5. Early entry (9.00am) £20. Definitely worth the visit if you like antique instruments. See: <http://www.scientificfair.co.uk/>

The **David Stanley Auctions** are also back in action hopefully with a full catalogue of good stuff for the next **International Auction** on Saturday 30th September - 9.00 a.m. prompt; Viewing Friday 29th September - 12noon - 7.00 p.m. & Sat 30th 7.30 a.m. However, there is also a **General Auction** on Friday 11 Aug - 10.00 a.m. prompt, Viewing Thurs 10th Aug - 12 noon - 7.00 p.m. & Fri 11th 7.30 a.m. All their auctions take place at **The Hermitage Leisure Centre, Silver St., Whitwick, Leicestershire LE67 5EU**. See <http://www.davidstanley.com/index.php>

Unusual Fuller Varnishes

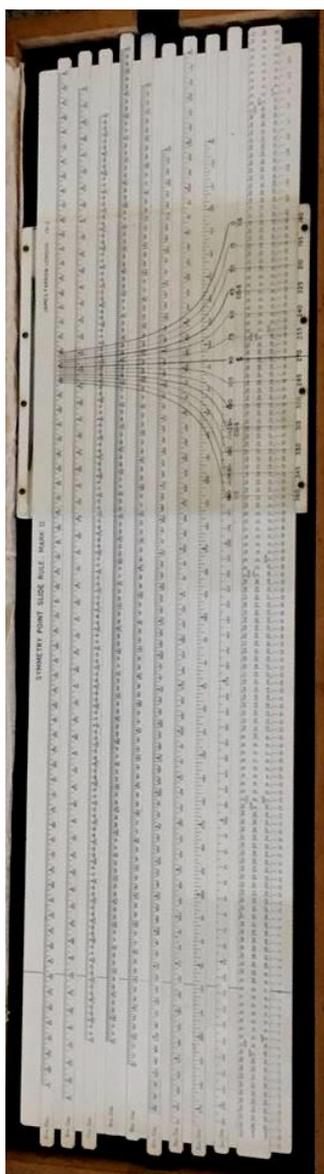
The UKSRC Spring meeting included a number of super early Fullers, also some Bakelite Fullers which appear to have an unusual problem with the varnish on the scales. These would appear to have started around 1950 and continued through to about 1960 – ascertained from looking at examples within that date range.



The problem shows up as a roughness when you run your hands over the scales and a closer look shows a certain amount of crazing of the covering varnish as shown on the left-hand picture above, the other is a non-crazed version with flawless, smooth varnish. The effect does not seem to affect the way the scales move relative to each other, but is never-the-less very obvious once you go looking for it!

Can members who own Bakelite Fuller calculators please have a look to see whether their calculators suffer from this effect and then please let us know the serial number /date of their device so we can confirm a date range.

A Spectacular Slide Rule



Good old eBay had this quite incredible 74.5cm x 20cm (29.25" x 7.9") James Farrow Symmetry Point slide rule dated 1942 for sale; it will be interesting to see what it finally realises! I can think of no other device with 10 slides and one of the most incredible cursors I have seen, both in terms of size and markings. Sadly it is missing the instructions.

A Google search tells us that: 'Point Symmetry is when every part has a matching part: the same distance from the central point, but in the opposite direction'. How this might relate to a slide rule with nine 'Cos' slides and a tenth 'Month' slide is not clear, perhaps our readers might know.

James Farrow at 99 Clifton Crescent, London SE 15, are also known for Pilot Balloon slide rules, though these were sold by a later (1950's) company James Farrow and Sons. These were written about by Colin and others, see

Procs IM 5, August 1999 and others, all available via Rod's Literature search.

Unusual Nestler Cursor

This most unusual cursor was seen on a Nestler Rietz Nr, 23R slide rule for sale on eBay. It looks rather

like a Hemmi horse-shoe cursor, and does not feature on any examples in the Guus Craenen "Nestler ..." books.



It is entirely possible that it is not a Nestler original fit. I don't recognise the Ampersand in a Circle logo on one edge. Also, the slide rule carries an unusual seller's name in the well: Th. Zlocha, Wien IV; and was sold by a seller in Hungary which might all be significant. Can anyone help please?



Yet another Lord's



Another Lord's Type 1 calculator from W. Waddington, this one with a serial number of 125 has been offered for sale. This device had yet another notably different back, for comparison see also SS54 and 55, page 5 and 3 respectively. This is

something which convinces me that they were largely hand made while carrying the same scale set. I can again think of no other slide rule that was quite so different in detail while carrying the same name. It must have made 'manufacture' quite entertaining! What do the readers think?

UKSRC Autumn Meeting At TNMOC Sunday October 8th 2017

Our Autumn 2017 local meeting is planned to take place at TNMOC; **Address:** Block H, (10.30am - 5pm), Bletchley Park, Bletchley, Milton Keynes MK3 6EB, on Sunday 8th October 2017. ALL are most welcome. Please do make the effort to join us for something you will most definitely enjoy - being in the company of like-minded individuals at a quite exceptionally interesting venue! Please let me know of your planned attendance so we can plan accordingly. **Theme:** Cursors! Yes, there are many and varied - bring the weirdest you can find as well as the most common, we don't always look at the detail. Plus, of course, anything else of interest. PMH.

IM 2018 United Kingdom Fri & Sat 21-22 September 2018

Plans for IM 2018 are being formulated as we speak. The venue has been chosen as Stratford upon Avon, and details are being resolved. Volunteers are in place and it will be great that we will host another UK based IM in 2018. More news will follow in plenty of time but the date is set so put it in your diaries. Contact: Rod Lovett by email rod@lovet.com

IM 2017 Bonn: Germany 22-23 September 2017

With the Theme "Calculating In Everyday Life" details for the forthcoming IM can be found on their IM web site www.im2017.org or by contacting conference chairman, Prof. Karl Kleine, preferably by email: kleine@im2017.org.

The IM web site is very good and includes an interesting 'History' of all the the IMs to date. Please note that the organisers are still looking for papers or other contributions.