The outside components consisting of the clock drum and its two supporting cast iron brackets had to be tackled with the aid of a very clever piece of kit. This was a moveable platform that could be manoeuvred into position as it had caterpillar tracks. Once located below the clock a scissor mechanism allowed the platform to be raised to the required height to commence the dismantling operation. The clever bit was that this machine had some sophisticated electronics to automatically adjust the platform through hydraulics to keep it level, no matter how uneven the ground the machine was standing on. The initial examination was performed by Ron and Alan and then Norvin Simpson replaced Ron on the platform to disassemble the clock. Two of the four bolts securing the clock drum to the brackets had to be cut through as they had severely deteriorated. The clock was then removed from the brackets and loaded onto Norvins pickup ready for transport. Initial appraisal require some work to restore having sufshows this part of the clock will fered from the weather. The two brackets were then removed and also loaded on the pickup. Alan finally made good the redundant holes in the exterior wall. The various clock components were moved in convoy to safe storage provided by John Underhay.

During the removal various branch members came along to witness these efforts. A discussion with Mick Welch revealed that he remembered the clock being erected on Avril House during the early 1980's, which was long before the present owner of the building brought it. This means that the unknown period of the history of this clock has been significantly shortened to about 4 years, the length of time between the clocks removed from Clerkenwell and its subsequent erection at Fiveways.

Ron is still collecting donations towards the fund that will support this project. It can be in any form that suits you. If cash or cheque, please put it in an envelope with your name and address so that a receipt for that specific amount can be issued to you. It can be handed to Ron at a meeting or if it's a cheque make it out to South London Branch BHI and send it to Ron Rose, 71 Warren Road, Orpington, BR66JF. The reason for this is so that the paperwork can be taken care of. If you want to pay directly into the branch account please email Ron at <u>ronalderose@btinternet.com</u> for details so that appropriate records can be kept. Thank you.

Grenville Johns

Membership

If you have not renewed you membership please complete the membership form and return to me.



South London Branch British Horological Institute

Newsletter No. 514 Janyary2022 Branch No 25. Founded 1978

Meetings are held on the 2nd Thursday of each month

At The White Hart Barn (Godstone Village Hall)

Godstone Surrey RH9 8DU at 7.30 p.m. for 8 p.m.

INSIDE THIS ISSUE "The key is in not spending time, but in investing it". Stephen R. Covey.

NEXT MEETING OLDETIMERS VINTAGE WATCHES Next Month's Meeting 13th January 2022 Crispin Maciejewski.

Oldetimers vintage wrist watches

LAST MONTH'S MEETING Our next meeting will be our very own Crispin Maciejewski. He has sold watches worldwide to both national and private collections and even supplied the film industry.

A CLERKENWELL RESURECTION I hope you will welcome him on our new meeting date the second Thursday of the month, **Thursday the 13th of January**, weather and current Covid restrictions permitting.

IMPORTANT NEWS

WORKSHOP

NEWS

Crispin's interest in watches began whilst studying jewellery and silversmithing. He will share His passion for **pre-1950s** wristwatches his fascination for their intricate engineering and design and tell us more on how he started his horological career with a four-year apprenticeship in horology. This led to the launch of Oldetimers. A company he set up with the desire to keep wonderful timepieces alive and ticking into the future.

FREE ADVERTISING www.slbbhi.co.uk His talk will explore the workmanship that goes into these watches, from the mechanical movement to the fine detailing of the cases, I hope his infectious enthusiasm will help to keep these wonderful pieces ticking well into the future.

LAST MONTH'S MEETING The George Daniels Memorial Lecture

DR. ROGER SMITH OBE, FBHI.

THE DEVELOPMENT OF THE MECHANICAL WATCH

The South London Branch were particularly honoured when Dr. Roger Smith accepted an invitation to speak at our George Daniels Memorial lecture evening about his thoughts on "The Development of the Mechanical Watch". In his twenties, Roger from Bolton, was servicing vintage and modern watches by day and making his first watches by night. By 1998 Roger had completed his second watch and was invited by George Daniels, his mentor, to the Isle of Man collaborating on the "Daniels Millennium series which incorporated the Daniels designed coaxial escapement. Roger worked with George for three years until he established his own workshop on the Isle of Man to develop his ideas for the future of hand made timekeeping.

Early in his career Roger noted the interval between servicing watches he was working on, was from three to five years. He considered their mechanical development to have stood still for centuries unlike the motor car, which had made great strides in safety and efficiency over the last fifty years. The quartz revolution did introduce accuracy but also waste, through battery replacement and they possessed a lack of art, science, and soul.

For over a century accurate timekeepers had a beat rate of 18,000 vibrations per hour, but the lubrication required to the pallets of the escapement would break down resulting in increased wear and shorter service intervals. By raising the rate to 28,800 or even 36,000 beats per hour, manufacturers sought to even out discrepancies and increases accuracy, but lubricants had not kept pace with these developments, resulting in shorter service intervals. (The more teeth the greater the frictional wear). Roger considered an essential read on this subject was George Daniels definitive work entitled "The Practical Watch Escapement", which influences many horologists today. In the late 1990's Omega adopted the George Daniels coaxial escapement and found with a lower power requirement and lubrication; the service intervals rose to ten years. Roger described to us the principle of the coaxial escapement which delivers impulse to the balance for a greater percentage of the oscillation without the sliding friction and it delivers the impulse more efficiently, he illustrated this with a simple experiment you can carry out pushing a door open.

The principal to which Roger works is that a watch should have a minimum number of components, is produced to a high degree of accuracy, and works over a long period without attention. Throughout the development of each watch design Roger has the underlying criteria to keep friction to a minimum. To this end he has constantly been improving the Daniels co axial escapement. In early escape wheels, variations on the upper and lower wheels contributed to difficulties in setting up the escapement. By 2010 both sets of wheels were incorporated into one ensuring concentric angular orientation of the wheel. These changes, tweaks to the geometry and construction of the lever and roller enabled him to lower the main spring strength therefore reducing friction and consequently wear. The 6mm escape wheel was reduced to 4.5 mm and the result was dramatic allowing a 23% lighter spring to be used. Service intervals are now ten to fifteen years and Roger is predicting twenty years.

This lecture by Roger was particularly thought provoking by the way we were invited to reason with his thinking as he progressed over the years with the many ideas and improvements, he developed over twenty years.

Duncan invited questions from the members, after which Robert Wren thanked Roger for his excellent lecture and presented him with a bottle of our famous lubricant.

Michael McDonnell, Duncan Greig.

A Clerkenwell Resurection

This is a picture of the clock in situ on the Thwaites and Reed building at 15 Bowling Green Lane in Clerkenwell. The branch has begun the process of returning it to its former glory so this report is of the first stage of this interesting project.



On a cold morning of Sunday 28th November a small team of branch members turned up at Avril House at Fiveways in Croydon to complete stage 1 of the overall plan to save this public clock. Led by Ron Rose FBHI, the advance party of Alan Westgate and Ron busied themselves by removing the pendulum bob, pendulum rod, weight, movement and bracket from inside the building.

They appeared with these items and loaded them into Alans car. Initial inspection suggests they are in good condition. Continued two supporting cast iron brackets had to be tackled with the aid of a very clever piece of kit. This was a moveable platform that could be manoeuvred into position as it had caterpillar tracks. Once located below the clock a scissor mechanism allowed the platform to be raised to the required height to commence the dismantling operation. The clever bit was

IMPORTANT NEWS CHANGE TO MEETING DATES

Last month it was proposed that we change our meetings from 1st Thursday to 2nd Tuesday. As from now we will meet on the second Thursday of each commencing on the <u>13th of January 2022.</u>

WORKSHOP NEWS AND VACANCIES

The workshop has reopened, there has been some changes to personnel as one would expect after such a long time. This results in some spaces to be filled for the evening classes. Anyone interested in joining us and using the excellent facilities in our workshop please contact me on 01959577312 or 07917226598 The only restriction at the moment is that we require people attending to be double jabbed!

James Marten

Apologies

Last month we had some technical difficulties with the ZOOM presentation and some members were unable to log on. We have resolved the problems and hopefully the next meeting will go without a hitch.

> FREE ADVERTISING FOR BRANCH MEMBERS. Contact Bill 01543506195 or <u>electricwilliam@gmail.com</u>

> > www.slbbhi.co.uk

The following photos show Ron with the movement, the platform in use during disassembly of the exterior components, and the clocks components in safe storage.







5