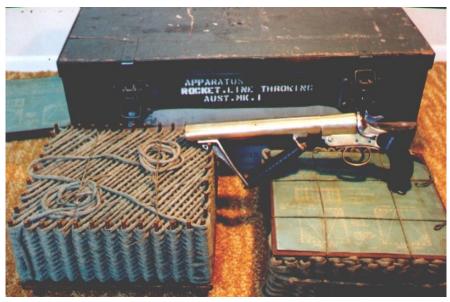
www.sihg.org.uk



Saving Lives at Sea Schermuly's Pistol Rocket Apparatus for launching a line from ship to shore

Schermuly Line, flaked ready for use, see page 4.



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If a **SIHG Membership Renewal Form**

is enclosed, please complete it promptly and send it, with a cheque payable to 'Surrey Archaeological Society'

to Surrey Archaeological Society (SIHG), Castle Arch, Guildford GU1 3SX. You may also choose to pay by Standing Order. If you already pay by Standing Order you need not take any action, (and you will not see a renewal form).

SIHG Industrial Archaeology Lectures
at Guildford
The 44th season starts on 8 October 2019
Church House Guildford, 20 Alan Turing Road,
Guildford GU2 7YF
alternate Tuesdays, 19:30-21:30
Programme and registration form enclosed.

********************* **AGM 2019**

Surrey Industrial History Group **Annual General Meeting** and Conservation Award Ceremony Saturday 27 July 14:00

Bluebird Room (enter by Campbell Gate) **Brooklands Museum**

See centre pages for details

(An up-to-date agenda will be available on the day.)

We are very sad to report the passing of two active members of the Surrey Industrial History Group

David Evans edited the SIHG Newsletter for a remarkable 108 issues, latterly helped by his wife Barbara as his eyesight deteriorated. (I took over as the September 2007 issue, number 159, was about to go to press. JS)

Kim Owen was active until very recently, still attending SIHG lectures in Guildford. He had a special interest in the history of gunpowder, as he lived by the Chilworth Mills. His wife Elizabeth continues a lively interest in industrial history.

SIHG Newsletter No 222 May 2019

Enquires to Programme Co-ordinator Bob Bryson: 01483 577809, meetings@sihg.org.uk.

The 44th season of SIHG **Industrial Archaeology Lectures at Guildford** Church House Guildford, 20 Alan Turing Road, Guildford GU2 7YF

alternate Tuesdays, 19:30-21:30 (map: www.sihg.org.uk) Single lectures at £5, payable on the night, are open to all.

Full programme and application form enclosed.

8 October 2019

Sopwith through the Great War

Chris Farara, The Hawker Association

22 October 2019

Military Archaeology of the National Trust Surrey Estates

Tom Dommett, National Trust Regional Archaeologist

4 November 2019 Monday

Hearth & Home: Vernacular Building Materials of South East England

Dr Geoffrey Mead, University of Sussex

19 November 2019

One Thames or Two? The Archaeology of London's River

Jon Cotton, Surrey Archaeological Society

3 December 2019

RAE Farnborough - 100 Years of Aviation Research, Development & Innovation

Dr Graham Rood, Curator Farnborough Air Sciences Trust (FAST)

17 December 2019

Members' Talks Evening - (free)

Short talks by members plus refreshments and a chance to meet others

The programme continues in 2020

SIHG Lectures in Leatherhead Autumn 2019 Thursday Mornings 10:00-12:00 Room G6 The Institute, 67 High Street Leatherhead KT22 8AH

Non-member full fee £50 SIHG member £45.

Single lectures at £5, payable on the day, are open to all, but please check with Bob Bryson before attending.

3 Oct National Aircraft Factory No 2 David Hassard

10 Oct Guildford 1st WW / David Rose

17 Oct Capital Ships of the German Navy 1935 - 1945 / Malcolm Tagg

24 Oct Noel Pemberton-Billing / Colin van Geffen

31 Oct HALF TERM - Possible Visit

7 Nov The History of Watermills / Bryan Lawton

14 Nov Artificial Intelligence (AI)

& its impact on Society / Richard Rumble

21 Nov Gustave Eiffel - The Man, the Statue, the Tower / Douglas Irvine

28 Nov Ada Lovelace and Charles Babbage, computer pioneers / Roger Price

5 Dec Development, Growth and Decline of Bus Services / Richard Mellor 12 Dec Great Canal Engineers / Geoff Roles

17 Dec Members' Short Talks

Venues, Times & Contacts

Most venues open 30 minute before the published time. Please confirm details before travelling!

- Amberley Museum: New Barn Road, Amberley, nr Arundel, West Sussex BN18 9LT; info 01798 831370, office@amberleymuseum.co.uk.
- Ancient Technology Centre: 10:00-16:00; £6; Damerham Road, Cranborne, Dorset BH21 5RP; (behind school); 01725 517618, www.ancienttechnologycentre.co.uk,
- Anne of Cleves House: Tue-Sat 10:00-17:00, Sun-Mon 10:00-17:00; £6.30/£6; 52 Southover High Street, Lewes, Sussex BN7 1JA; 01273 474610.
- Basingstoke Canal Society: 20:00; Parish Pavilion, Recreation Ground, Station Road, Chobham, GU24 8AJ; www.basingstoke-canal.org.uk/, contact - Malcolm Brickwood, corona1066@yahoo.com, 07437 200021.
- BIAG, Berkshire Industrial Archaeology Group: 19:30; £2-50; St Mary's Church Hall, Castle Street, Reading, RG1 7RD; www.biag.org.uk.
- **Brixton Windmill**: Windmill Gardens, West end of Blenheim Gardens, Off Brixton Hill, London SW2 5EU.
- Brooklands: open Summer 10:00-17:00, Winter 10:00-16:00; £11/£9.90; Brooklands Rd, Weybridge, Surrey KT13 0QN; www.brooklandsmuseum.com; 01932 857381.
- **Brunel Museum**: Railway Avenue, Rotherhithe, London SE16 4LF; www.brunel-museum.org.uk; 020 7231 3840.
- Chatham Historic Dockyard: 10:00-18:00, online £22/£19-50 (season ticket); Chatham, Kent ME4 4TZ; www.thedockyard.co.uk; 01634 823800.
- Coultershaw Beam Pump: waterwheel, C18 pump & C21 turbine; E side of A285, 1½ miles S of Petworth at the river bridge GU28 0JE; www.coultershaw.co.uk.
- CNHSS, Croydon Natural History & Scientific Society: 19:45; free? UR Church Hall, Addiscombe Grove, E Croydon CR0 5LP; http://cnhss.co.uk; 0208 668 1431.
- Crossness Engines: 10:30-16:00, £8; The Old Works, Crossness STW, Belvedere Road, Abbey Wood, SE2 9AQ; www.crossness.org.uk; 020 8311 3711.
- Croydon Airport Visitor Centre: Open, guided tours first Sun of month, 11:00-16:00, free; Airport House, Purley Way, Croydon CR0 0XZ.
- Didcot Railway Centre: 10:30-17:00; £10-00/£9-50; Didcot Parkway railway station, Didcot, Oxfordshire OX11 7NJ; www.didcotrailwaycentre.org.uk; 01235-817200.
- Docklands History Group: 18:00, £2; Museum of London Docklands, West India Quay, Hertsmere Rd, Canary Wharf, London E14 4AL; 01689 851982; www.docklandshistorygroup.org.uk.
- Gatwick Aviation Museum: Open Fri, Sat and Sun; 09:30-17:00; £7-50; Vallance-Byways, Lowfield Heath Road, Charlwood RH6 0BT; Exhibits are photo-friendly; www.gatwick-aviation-museum.co.uk/; 01293 862417.
- Godalming Museum: Open Tue—Sat; 10:00-17:00; 109A High Street Godalming, Surrey GU7 1AQ; 01483 426 510.
- GLIAS, Greater London Industrial History Society: 18:00; Alan Baxter Associates, 75 Cowcross Street (through the archway, in the basement at the rear of the building), Farringdon, EC1; www.glias.org.uk., info Tim Sidaway, secretary@glias.org.uk.
- Greenwich Industrial History: 19:30, £1; Old Bakehouse, rear of Age Exchange Centre, opp Blackheath Stn, Bennett Park, 11 Blackheath Village, SE3 9LA; no parking.; http://greenwichindustrialhistory.blogspot.com.
- Haslemere Educational Museum: Open Tues to Sat10:00-17:00; admission by donation; 78 High Street, Haslemere, Surrey GU27 2LA; www.haslemeremuseum.co.uk; 01428 642112.
- HIAS, Hampshire Industrial Archaeology Society: 19:45, free; Underhill Centre, St John's Road, Hedge End, Hants SO30 4AF; www.hias.org.uk; 01962 855200.
- Honeywood Museum: open Wed-Fri 11:00-17:00, Sat-Sun, BH Mon 10:00-17:00, free; Honeywood Walk, Carshalton SM6 3NX; 020 8770 4297.
- Honeywood Museum Friends: 19:30, £4-50; www.friendsofhoneywood.co.uk; 020 8642 4778.
- House Mill: tour£4; 11:00-16:00; no booking; Three Mill Lane, Bromley-by-Bow E3 3DU; www.housemill.org.uk; info 020 8980 4626, info@housemill.org.uk.

- IWA, Inland Waterways Association: £10/£8; www.waterways.org.uk; 0203 612 9624.
- Kempton Steam Museum: 10:30-16:00, £7/£6; Snakey Lane, off elevated A316, Hanworth, Middx; entrance TW13 7ND; www.kemptonsteam.org; 01932 765328.
- **Kirkaldy Testing Museum**: first Sunday of month; 11:00-17:00; guided tours; 99 Southwark Street, London SE1 0JF; www.testingmuseum.org.uk
- London Bus Museum: see Brooklands.
- London Canal Museum: 10:00-16:30; Talks 19:30, £4/£3; 12/13 New Wharf Road, London N1 9RT; www.canalmuseum.org.uk; 0207 713 0836.
- London Museum of Water and Steam: Wed-Sun; 10:00-16:00; Green Dragon Lane, Brentford, Middx TW8 0EN; www.waterandsteam.org.uk; 020 8568 4757.
- London Sewing Machine Museum: 14:00-17:00; 308 Balham High Road, London SW17 7AA; 020 8682 7916. www.craftysewer.com/acatalog/ London_Sewing_Machine_Museum.html
- Mapledurham, Watermill: pre-booked guided tour + cream tea £10; Tue, Wed, Thu; Mapledurham, Reading RG4 7TR; www.mapledurhamwatermill.co.uk; over 18s only; 07843 742833.
- Markfield Beam Engine and Museum: 11:00-17:00, cost? Markfield Road, South Tottenham, London N15 4RB; www.mbeam.org; info @mbeam.org; 01707 873 628.
- Michelham Priory Watermill: most afternoons, £9.80/£8.80; Upper Dicker, Hailsham, East Sussex BN27 3OS; 01323 844224.
- Museum of London: 150 London Wall, London EC2Y 5HN; www.museumoflondon.org.uk.
- Museum of London Docklands: Mon-Sun: 10:00-18:00; no.1 Warehouse, West India Quay, London E14 4AL; www.museumoflondon.org.uk/docklands, info.docklands@museumoflondon.org.uk, 020 7001 9844
- Newcomen Society London: 17:45, free; Dana Studio, 165 Queen's Gate, Kensington, London SW7 5HD; http://newcomen.com.
- Postal Museum: 10:00-17:00; online £16 with ride on the Mail Rail; please book; 15-20 Phoenix Place, London WC1X 0DA; www.postalmuseum.org, 0300 0300 700.
- Portsmouth Historic Dockyard: 10:00-17:30, site ticket, annual £26/£24.25; HM Naval Base, Portsmouth PO1 3LJ; www.historicdockyard.co.uk; 02392 728060.
- Reigate Caves: Barons' Cave £2/£1.50,Tunnel Road: £3/£2; 10:00-16:00; (Barons Cave is not suitable for those with significant mobility difficulties).
- Royal Gunpowder Mills: 10:00-17:00; Beaulieu Drive, Waltham Abbey, Essex, EN9 1JY; £10.50/£9; www.royalgunpowdermills.com/.
- Rural Life Centre: open Summer Wed-Sun 10:00-17:00 + Bank Holiday Mondays, £8-50/£7-50; Old Kiln Museum, Reeds Road, Tilford, Farnham, Surrey GU10 2DL; www.rural-life.org.uk; 01252 795571.
- STEAM Museum of the Great Western Railway: 10:00-17:00, £8/£6-50; Firefly Avenue, Swindon SN2 2EY; www.steam-museum.org.uk; 01793 466 646.
- Twyford Waterworks: 11:00-16:00, £7/£6; Hazeley Road, Twyford, Hampshire SO21 1QA; info 07516 458900, enquiries@twyfordwaterworks.co.uk
- WACT, Wey & Arun Canal Trust: The Granary, Flitchfold Farm, Loxwood, Billingshurst West Sussex, RH14 0RH; 01403 752403, office@weyandarun.co.uk.
- Watercress Line, Mid Hants Railway: all day travel £14, free on non-running days; Station Rd, Alresford, Hants SO24 9JG; (or Station Rd, Alton, Hants GU34 2PZ); www.watercressline.co.uk; 01962 733810.
- Wealden Iron Research Group (WIRG): www.wealdeniron.org.uk/.
- Wey & Arun Canal Trust: The Granary, Flitchfold Farm, Loxwood, Billingshurst West Sussex, RH14 0RH; office@weyandarun.co.uk; 01403 752403 (Mon - Fri 09:30 - 13:30)
- Whitchurch Silk Mill: Tue-Sun, bank hols; tours on some days 14:00; 28 Winchester St, Whitchurch, Hants RG28 7AL; www.whitchurchsilkmill.org.uk, 01256 892065.

William Schermuly and Life Saving

by Peter Tarplee

This is really the story of the tenacity of one man, William Schermuly, who was born in 1857 and whose family had emigrated from Holland 200 years earlier. As a boy William was a cadet on HMS Warspite which was an ex-warship (HMS Waterloo) moored on the Thames at Deptford. Here boys were trained for either the Merchant Navy or the Royal Navy but the attraction for many of the cadets to undertake what was a very harsh regime seems to have been that they were issued with a full set of sailor's uniform.

HMS Warspite was operated by the Marine Society who were to recognise Schermuly's later achievements for the Society by making him a 'Life Governer'. He left the Warspite in 1871, aged 14, and joined the wooden sailing ship *Mauritions* which leaked so much that the pumps had to be manned

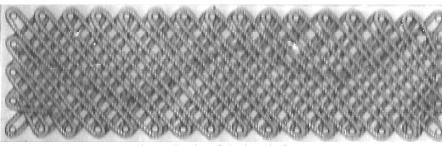
at all times. This was his initiation to life afloat on a square rigged sailing ship and to very quickly realise that life at sea was not only hard but extremely dangerous. During the next nine years he was to sail the seven seas in a wide variety of ships and although he found the life hard he found the call of the sea irresistible. He was a tough character, even as a young lad he had dived off London Bridge and swum to Greenwich dodging both the river traffic and the river police.

From his experiences as a sailor he became obsessed with a simple truth:

Lost ships can be replaced, but lost men are gone for ever.

And he determined to dedicate the rest of his life to the saving of life at sea.

Around the coast of Britain alone over 1,000 lives a year were lost due to shipwrecks. This was often due to the difficulties or



Schermuly Line, flaked ready for use.

impossibility of getting a line between ship and shore. Schermuly thought that instead of trying to get a line from the shore to the ship why not attempt to get a line from the ship to the ashore? After all it makes a much bigger target to aim at. He decided that the best way would be to fire a line-carrying rocket from the ship to the shore. He was to spend the rest of his life endeavouring to achieve this and ensuring that ships are adequately equipped.

He left the sea in 1880 with no money but with a determination to make his life-saving dream a success and after a

time his ideas to be able to throw a line from a ship to the land began to take shape. He now had ten years with no money, no draughtsman and no pyrotechnologist to develop his dream system and by 1897 he had produced a prototype ship's line-throwing apparatus.

He used a large waterproofed cardboard tube and stick to which was attached a thin cord which was fastened in turn to a stouter cord. The rocket was fired from a tube on the line box in which the line had been flaked* in a way which had been perfected by Schermuly

This system was more effective than anything else available at the time. It could be aimed from a moving ship's deck, it was self-balancing, being suspended from a short length of rope. Its range was 300 yards from a tossing ship. He had produced an idiot-proof rocket system that a sailor could use in the worst possible conditions from a

wildly pitching boat to fire a line accurately to the shore.

Schermuly was awarded the Gold Medal at the Diamond Jubilee Exhibition in 1897- the highest award. He then spent many frustrating years trying to persuade ship owners of the advantages of install this equipment on their ships and the Government of the advantages of bringing in legislation requiring similar equipment being mandatory.

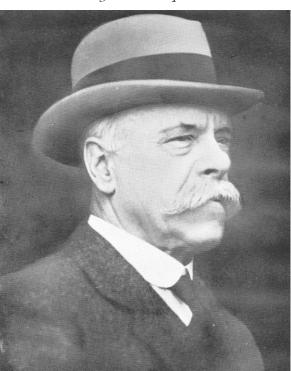
But in spite of this innovative invention gaining a prestigious award and not being expensive the public showed no interest. More importantly, neither did the world of shipping. As a general rule, people whose lives were not at risk showed no interest in saving other people's lives. In

the eyes of the general public, and of the ship owners, seamen's lives were cheap....very cheap.

Whenever there was a shipwreck Schermuly would write to the press offering to demonstrate his apparatus

which, had it been on board, might have saved the lives of passengers and crew. Interest remained low, therefore so did sales and so did William Schermuly's income. However he tried he was unable to raise any support from the government regarding legislation. As he concluded again and again, seamen's lives were cheap.

Often, particularly in bad weather, ships were wrecked with other vessels standing by but with no means of getting a line between them. Schermuly did have strong support from the National Seamen's Union and the



William Schermuly 1857-1929

Firemen's Union but he could get no interest from the government or ship owners. Eventually, by 1910, some owners did begin to show interest whilst the government were 'considering the matter'. In 1912 the first significant order was received, from the Royal Mail Steam Packet Company who decided to install the kit on all their fleet. Gradually more shipping lines joined in, first the Union Castle Line followed by the P&O line and others.

Now we have the First World War with more shipping, particularly coastal shipping, but the Admiralty still took no interest in Schermuly's equipment until three months into the war when the hospital ship Rohilla was wrecked with a loss of 80 lives. The ship had struck a mine off the Yorkshire coast and began to sink rapidly. The captain ran the ship ashore and it grounded 200-300 yards from the land but they were unable to get a line to the vessel. The Whitby lifeboat took off medical staff aboard and some of those aboard got ashore on makeshift rafts but the ship began to break up. From Friday to Monday the Shore Rocket Brigade tried to get a line to the ship in the teeth of a gale but they could not succeed. At the subsequent inquest the captain said that if they had had line-throwing apparatus on board communications with the shore would have been easy and he recommended that all ships should carry such equipment.

After this many newspapers took up the cause but the government still did nothing. Eventually they did order line-throwing gear for troop ships and hospital ships, but it was not considered necessary to fit it on any other naval craft.

After the war a few more shipping lines installed linethrowers on their vessels but a large number held back as it was not compulsory. Committees had recommended that it should be mandatory but the government was 'too busy'. Many ship owners delayed action until the government could specify the type of line thrower to be used.

There were still some problems with the designs so far. Cardboard was not very suitable for permanent use at sea, there was a time delay between lighting the rocket and it leaving the firing trough and the whole operation was affected by wind. By1920 Schermuly had solved these problems by using a gun which gave instantaneous firing of a projectile, which was not affected by wind, by employing a small metal rocket fired from a pistol.

The prime mover was a large bore longpistol barrelled (1) which fired a short blank cartridge (2).The rocket (3) consisted of a weldless steel case filled with a propellant mixture (4) sealed in by a waterproof disc (5). Fixed to the rocket case is a direction bridle (6) to

Schermuly's Pistol Rocket Apparatus

the end of which a short length of flexible steel wire (7) is attached which is connected to the end of the wire being thrown.

This was the Schermuly Pistol Rocket Apparatus and was the equipment for which his company achieved fame. Still sales were slow in coming even though the Schermuly product passed all the tests whilst kit from rival companies often failed to do so. However, in 1926 Schermuly built their own factory in North Cheam where they were able to manufacture all the parts themselves. There was already some relevant expertise in the area as the new works was near to Brock's firework factory.

In 1928 the carrying of line-throwers was enforced by the Merchant Shipping (Line Throwing Appliance) Act' By this law every British ship exceeding 500 tons gross register when going to sea from any port in the UK shall be provided with a line-throwing apparatus approved by the Board of Trade. This act came into force on 1st January 1929, 19 days later William Schermuly died. He was buried in the churchyard of St. Lawrence Church in Morden.

Shortly before he died Schermuly had formally presented 200 fully paid-up shares in the company to the Marine Society of which he had been elected a life-governor. So he had managed to achieve most of his ambitions but his struggle had left him very much in debt. Another of his wise statements after a frustrating time getting interest in, and approval of, his life-saving equipment was:-

'Produce an article which makes the taking of life easier and the world will clamour for it. Offer a better article for the saving of life and the world shows little interest.'

The new managing director of the company was William's third son, Captain Conrad David Schermuly, under whose guidance, after the 1929 act, the company obtained more orders. But still ships under 500 tons, like tankers and coasters, were excluded even though these were just the ships which would have benefited most from having line-throwing gear on board. Nevertheless by 1936 the Cheam factory was too small and a year later they moved to a remote site at Newdigate off Mill Lane behind 'The Surrey Oaks' public house.

By 1938 after much pressure from Schermuly they managed to get the 1928 act changed to cover all vessels over 80 tons or over 50 feet in length. At the same time all vessels had to carry apparatus capable of throwing a line 200 yards (instead of 120 yards before) and the line shall be 1/2 inch instead of 5/16 inch diameter. Also it now stipulated that the lateral deflection of the fired line must not exceed 10% of the length of its flight. These new regulations virtually ruled out Schermuly's competitors, and for a

while theirs was the only system approved by the Board of Trade.

A year later World War II started and more orders were received from the Admiralty and the War Office. The company also developed many new products and so the works needed to expand. During the war the site went from 14

acres to 55 acres and at its peak they employed 1,400 staff. The works consisted of small huts each some distance from the next to avoid any major accidents and so from the air it resembled a chicken farm. At Holmwood station gunpowder vans were regularly to be seen in the sidings for use by Schermulys.

As well as the pistol rocket apparatus the company developed many other items during the war including parachute distress signals, grapnel rockets for scaling cliffs, pistol rockets to enable fire service or ARP personnel to get lines over buildings, lifeboat parachute distress signals which could be fired from a lifeboat and be seen for 50 miles and many other similar products.

After the war there were various changes in the firework and allied industries and the Newdigate factory closed and the production moved to High Point near Salisbury. The site at Newdigate is now a housing estate. $\ ^\square$

* Flake a rope: The flaked rope releases instantly when the operator pulls the free end of the loop. If the rope is going to be released through a pulley or a jam cleat, then the rope must not be laid out while twists still remain in it. Before making the flake, start at the cleat, and working your way to free the end, shake out any twists. See animation: www.animatedknots.com/fig8flake/index.php.

Reference:

Thompson, C. R. (1946) Ship to Shore – The Biography of William Schermuly and the History of the Schermuly Pistol Rocket Apparatus. Bletchworth, Surrey. Schermuly Pistol Rocket Apparatus Ltd.

Science & Technology Anniversaries left over from last year - 2018

These anniversaries should have been published last year, but, preoccupied by moving house, I did not get round to compiling this list. The 2019 version will follow before the year is out!

Anniversaries left over from last year - 1768 - 250 Years Ago

Captain James Cook set sail from England on board the HMS Endeavour bound for the Pacific. His three year voyage of discovery sought evidence of Terra Australis Incognita or "unknown land". Two years later he discovered Australia.



Baptiste Joseph Fourier was born. He developed the Fourier Transform which allows complex periodic processes to be broken down into a series of simpler wave motions. It has wide application in many realms of physics and engineering.

Discrete FT (DFT)
$$X(k) = \sum_{n=0}^{N-1} x(n)e^{-j\omega_k n}$$

$$k = 0, 1, \dots, N-1$$

Anniversaries left over from last year - 1818 - 200 Years Ago

Ignaz Semmelweis was born in Hungary. His work in Vienna saved the lives of countless mothers. In one clinic, run by midwives, no deaths occurred. Doctors in the other clinic often conducted autopsies and carried cadaver contamination to the birthing room, causing puerperal fever and death. When the surgeons followed instructions to wash their hands, deaths dropped dramatically. He worked tirelessly to convince doctors that washing their hands was not a waste of time.

F Stromeyer & KSL Hermann discovered the metal cadmium, metal, atomic number 48.

John Ross launched an expedition to discover the North-West Passage.

James Whitaker Wright and a Local Mystery

by Pam Taylor

Recently, at a Surrey Industrial History Group meeting we were regaled with the history of the London Underground, including that of the Bakerloo Line, whose trains I had often caught while at university in London. Involved in its development was James Whitaker Wright, a man of many parts. Numerous of these were found to be decidedly criminal, and he famously swallowed cyanide to escape the lengthy prison sentence to which he had just been condemned. My attention was then caught a few days later by an email from a Surrey Gardens Trust friend, in which she mentioned Wright in connection with a mysterious "underground ballroom" in Witley. I decided to I nvestigate further.

Wright was born in 1846, his father being a Methodist Minister, meaning that the family moved around with his rotation of duties.

James first became a printer, subsequently making a fortune promoting silver mines both in the Americas and in England. His swindling career started with promoting his stocks as "consuls", recruiting respected peers of the realm as directors of his companies. Buoyed by his success he bought Lea Park and South Park Farm, gaining Lordship of the Manor and control of the Devil's Punchbowl and Hindhead Common. He set about building a mansion which included 32 bedrooms, an observatory, a velodrome and a theatre. The grounds were heavily landscaped, causing worries that the extensive earth removal was changing the land features. Central to these features were three lakes,



James Whitaker Wright 1846-1904

the largest of which had a statue of Neptune waving aloft his trident. What the lake concealed was, and still apparently is, an underground smoking room, sometimes used as a ballroom.

The room was constructed of small sheets of glass, up to 3 inches thick to withstand the water pressure, set in riveted ironwork, formed into a domed shape like an igloo. The room was entered by a spiral staircase set in a classically shaped building on the side of the lake, which led through a tunnel to the central room. Once built, the lake was filled, giving many anxious moments to its owner and perhaps more so to its designer. The only clue to its presence was the occasional puff of smoke from its occupying smokers, which exited from the room via a hole in Neptune's mouth. No record exists of who designed it, but the walls of its approach

tunnel were lined with cladding similar to those in use in the Bakerloo tunnels. The room was lit by electric light, and apparently gave off an eeric glow at night, adding an ethereal atmosphere to his fabulous mansion. Guests described seeing goldfish swimming past, although the vision must have been distorted by 3 inches of glass, unless it was of extremely high quality.

In the past, and continuing to the present, Surrey has seen many wealthy people settle here, some bringing somewhat shady business or political pasts with them. Like several of these, Whitaker Wright did not enjoy his country idyll for long. Barely three years after its completion his business



The ballroom under the lake at Witley Park, viewed from the shore

empire collapsed, after frantic attempts to shore it up by shifting capital around. The trouble was mostly due to the difficulties of building the Bakerloo line, which needed money that others were unwilling to provide. He fled from justice but was brought back to stand trial in 1904, causing panic in London's Stock Exchange. After his dramatic suicide at the end of his trial a search revealed that he also carried spare capsules and a loaded revolver. In spite of this, a large, well-attended, funeral was held at Wtley and he is reportedly buried there.

But what of the estate? It was purchased by Lord Pirrie, renamed Witley Park, and extended to form a deer park. Land surplus to requirements was divided into lots for sale; funds raised locally enabled the purchase of Hindhead

Common, which was transferred to the National Trust. So, Whitaker Wright left a legacy for which we can all be grateful, and he also left a unique monument in his lake which endures to this day, a tribute to some superb engineering.

The lakes and grounds show up well on Ordnance Survey maps and it is worth looking at these; some information is available online, and there is a book on Wright's life, aptly named, "Ultimate Folly".

If anyone has more information on the local angle of the story, please get in touch.

Reference:

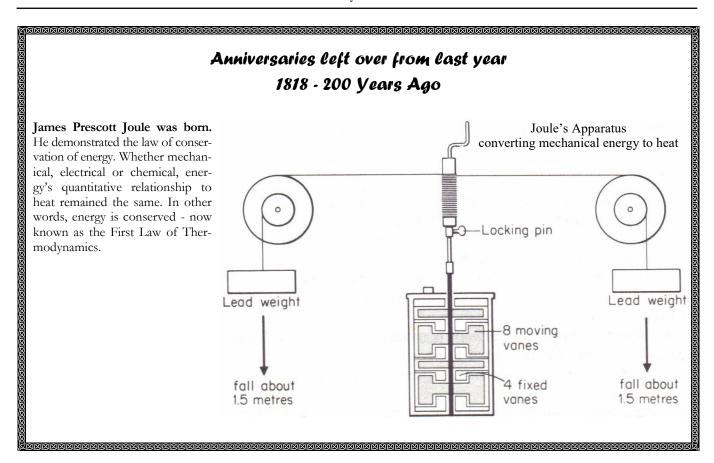
Macrory, Henry (2018) Ultimate Folly: The Rises and Falls of Whitaker Wright. London, Biteback Publishing



The ballroom under the lake at Witley Park; night -time fisheye view



The ballroom under the lake at Witley Park; day-time view



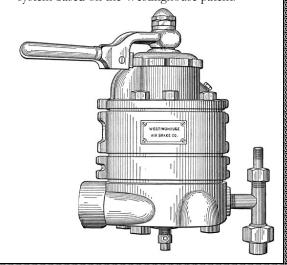
Anniversaries left over from last year 1868 - 150 Years Ago

Charles Darwin wrote

"Variations of Animals and Plants Under Domestication".

Discovery of helium. Jules Janssen witnessed a total eclipse of the sun in Guntur, India and recorded the colours in the spectrum of solar prominences, including a bright yellow line. Independently, English astronomer Joseph Lockyer observed the same spectral line. They realised that it was the signature of a new chemical element, unknown on Earth. They named it helium, which turned out to occur in very small quantities on Earth, originating underground through the decay of radioactive elements such as uranium. (It took until 1895 before another scientist managed to isolate helium, to the joy of balloon-enthusiasts everywhere.)

George Westinghouse's brake was developed. Modern trains rely upon a fail-safe air brake system based on the Westinghouse patent.



Surrey Industrial History Group

Presentation of Conservation Award Annual General Meeting 2019

Joining Instructions

you are attending our AGM to avoid paying admission NOT enter via the new public entrance, next to Mercedes Benz World.) Mention that Enter the site via the Campbell Gate and park in the Campbell car park. (Do

on the A245, From Woking

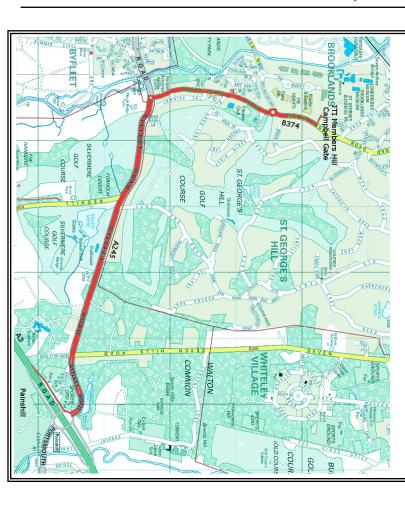
Brooklands Road (B374) turn left into

> From the A3 leave by the Painshill junction, taking the A245 towards Byfleet.

At the first roundabout turn right into Brooklands Road (B374)

Brooklands Museum / Mercedes-Benz World and go straight over. Then, at the next roundabout, ignore the brown signs to After 300m, take the entrance on the left signed

JTI Members Hill', (SatNav KT13 0QU).



Surrey Industrial History Group

Part of the Surrey Archaeological Society

at 14:00 on Saturday 27 July - Brooklands Museum Presentation of Conservation Award Annual General Meeting 2019 &

on the project and the opportunity to tour the Bellman hanger. out relocating and restoring the Aircraft Factory. We then hope to have a short talk Our AGM will be held at 14:00 in the Bluebird Room and following this at about 14:30 we will present the 2019 plaque to the Museum for the work they have carried

See previous page for navigation to the Campbell Gate of Brooklands

presentation and also stop for a cup of tea or coffee.

Sometime during the proceedings we will pause to take photographs of the award

SURREY ARCHAEOLOGICAL SOCIETY

SURREY INDUSTRIAL HISTORY GROUP (SIHG)

Minutes of the Annual General Meeting

held at Shere Village Hall on Saturday 28 July 2018

Corrections to the AGM Minutes of 15 July 2017: No corrections required. Apologies for Absence: Gordon Knowles, Norma Cox, Pam Taylor. (Secretary), Jan Spencer (Newsletter Editor), Margaret Levett, John Bourne, Susan Bourne. Present: Bob Bryson (Chairman), Gerry Moss, Glenys Crocker, Hugh Anscombe

Chairman's Report: The chairman reported that membership was still falling -In Memoriam: The meeting stood in honour of Alan Crocker and Roy Johnson who had passed away since the last meeting

He thanked Margaret Levett for her excellent work as organiser of Speakers for the essential that we find someone for the Spring course of 2019. 95 at present compared to 126 five years ago Leatherhead course. Speakers for the Autumn course have been booked, but it is

Treasurer's Report: There was £147 in sales of publications and £34 in printing costs publications therefore contributed £113 over the year.

The value of the group increased by £453 and is very healthy at £39,913 as at Interest on our assets contributed £867 and members subscriptions £974.

to the stocks of books, plaques, goodwill or etc. 31 March 2018. This is invested in financial assets and no additional value is attributed

Re-election of Officers and Committee: The following elections and re-elections took Chairman Robert Bryson Secretary Hugh Anscombe Committee Pam Taylor Newsletter Editor Jan Spencer Vice-Chairman Pam Taylor

Monday 8 October 2018 at St Catherines Village Hall (Club Room). Further information on Next Meeting of the Committee: The next committee meeting will be at 19:30 on unfilled. He also announced that Glenys Crocker had accepted the role of Honorary Member presented the award to Handa Bray, Andrew Baker and Chris Howard Surrey Hills Society for the work done on the new galleries of Shere Museum. Jan Spencer Any Other Business: The chairman proposed that the role of SIHG president remain Note: Margaret Levett and Gerry Moss were re-elected in 2017. how to find St Catherines Village Hall will be sent to Committee Members nearer the time. After the meeting the SIHG conservation award was made jointly to Shere Museum and the

Surrey Industrial History Group (SIHG)

A Group of the Surrey Archaeological Society (Registered Charity No. 272098)

Annual General Meeting 14:00 on 27 July 2019 at Brooklands Museum, Surrey

Agenda

- 1. Apologies for Absence
- 2. Minutes of the Annual General Meeting of 28 July 2018
- 3. Chairman's Report for the year ending 31 March 2019
- 4. Treasurer's Report for the year ending 31 March 2019
- 5. Committee Nominations for Elections

Chairman Robert Bryson
Vice-Chairman Pam Taylor
Secretary Hugh Anscombe
Treasurer vacant

Newsletter Editor

Jan Spencer

John Bourne retires in rotation after three years' service. He offers

himself for re-election and is nominated by the Committee.

Other nominations for Officers or Committee Members are invited, and should be sent to the Secretary not later than 25 June 2019, and must bear the names of the proposer and seconder and the signature of the nominee indicating willingness to serve.

Any other business

Any resolution proposed under this heading should be notified to the Secretary not later than 2 July 2019.

Hugh Anscombe Honorary Secretary

Surrey Industrial History Group Chairman's Report for the year ending 31 March 2019

This is my fourteenth annual report as Chairman of the Surrey Industrial History Group. The year started with the South East Region Industrial Archaeology Conference. This year the event was hosted by the Berkshire Industrial Archaeology Group and held at the Windsor Boys' School on 21 April 2018.

Our AGM was held on 28 July at Shere Village Hall and Museum, when our Newsletter editor Jan Spencer presented the 2018 Conservation Award jointly to Christine Howard of the Surrey Hills Society and Handa Bray representing Shere Museum. The award was for their work leading the Tales and Trails of the Tillingbourne project. The project resulted in the production of a series of walk leaflets highlighting industrial and other features along the Tillingbourne valley. Character puppets each with a real life story were also part of the project and now form part of the material displayed in a new gallery at the Museum.

The 43rd series of Industrial Archaeology Lectures held in Guildford commenced on 1 October with a lecture on Brunel, Scott Russell and the Great Eastern given by Prof Andrew Lambert from King's College London and concluded on 5th March with a talk on Iron Men - C19th Engineer Henry Maudslay and his Circle given by David Waller, Author and Journalist. The lecture on 19 February was a special addition to the programme to commemorate the life and work of Alan Crocker, our late President. Phil Crockett from the British Association of Paper Historians gave a talk on paper making referencing the contribution that Alan's research had made to the field.

The Thursday morning weekly lectures at the Institute in Leatherhead were organised by Malcolm Tagg who arranged the speakers. John Bourne, assisted by Michael Herbert, chaired the meetings. The talks, held over both the autumn and spring terms, commenced on 4 October with a talk by Richard Mellor on the role of the merchant navy in the Falklands conflict. The last lecture in the series was on 21 March when Philip Macdougal spoke to the Leatherhead group about Naval Dockyards.

Paid up membership of the group at the last count was 88, made up of 73 ordinary members, 5 Associate, 6 Institutional and 4 honorary; a further seven down on last year. Since this check however a number of members who had not paid may have renewed their subscriptions.

Our Newsletter and website www.sihg.org.uk continue to be the best source for up to date information on group activity and I would like to thank all the members of SIHG, especially my fellow committee members, who have supported the work of the group throughout the year.

Bob Bryson

Regular Events

until 31Dec STEAM Museum: Special Exhibition - Time on Trial.

until 23 Dec STEAM Museum Special Exhibition – World's Fastest.

fortnightly STEAM Museum: Meet the Railway Workers; Sat - 4, 18 May; 1, 15, 29 June; 13, 27 July.

daily Brunel Boat Trips: 10:40, meet at Embankment station (not pier) for a tour of Brunel sites on the Thames, train through the oldest tube tunnel in the world and descent into the underground chamber. No booking.

weekly Brunel River Walks: Sun & Mon 10:40 + Wed 18:15, meet at Bermondsey tube station for a guided river walk

from Cherry Gardens to the Brunel Museum, then below into the Grand Entrance Hall, secret underground

chamber; late opening after Wednesday's walk. No booking required.

weekly London Museum of Water & Steam: Open Wed-Sun, 10:00-16:00;

Various dates London Museum of Water & Steam: Trains running -

19, 26, 31 May; 2, 16, 22, 23, 29, 30 June; 6, 7, 21, 24, 27, 28, 31 July.

Various dates London Museum of Water & Steam: Pumping Engines in Steam -

4, 5, 6, 18, 25, 29 May; 1, 15 June; 20 July.

weekly Wey & Arun Canal Trust: Sat & Sun and Bank Holiday Mon

boat trips depart from Canal Centre behind Onslow Arms in Loxwood RH14 0RD.

28 May onwards Museum of London Docklands: Secret Rivers exhibition; 10:00-18:00.

Venues, Times & Contacts are on page 3.

Anniversaries left over from last year 1918 - 100 Years Ago

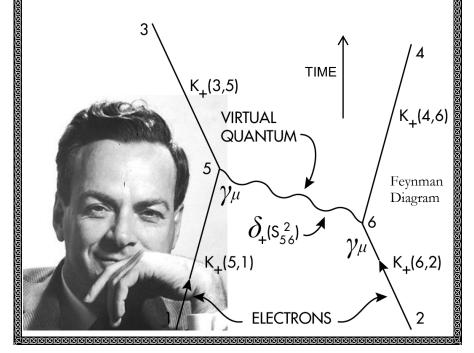
Daylight saving time was introduced in US.

Arthur Eddington wrote "Gravitation and the Principle of Relativity".

Mount Wilson telescope was first used.

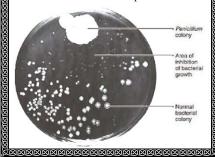
Three-colour traffic lights were installed in New York.

Richard Feynman was born. He was one of the most nonconformist of theoretical physicists; he gained public notoriety late in life as a member of the Presidential Commission investigating explosion of the space shuttle *Challenger*. He had a very original approach to quantum mechanics and the formulation of quantum field theory (His work earned a share of the 1965 Nobel Prize in physics).



Anniversaries left over from last year 1928 - 90 Years Ago

Sir Alexander Fleming noticed a bacteria-killing mould *Penicillium* notatum growing in his laboratory. The antibiotic penicillin is believed to have saved up to 200 million lives since it went into production.



Anniversaries left over from last year 1943 - 75 Years Ago

Wing Commander Guy Gibson led 617 Squadron of the Royal Air Force on the audacious Dambusters raid. Its mission was to breach dams in Germany's industrial heartland using engineer Sir Barnes Wallis's famous bouncing bombs. Barnes Neville Wallis lived in Effingham, Surrey, where he is buried in the churhyard of St Lawrence.

Diary May 2019

2 Thu London Canal Museum: Guided Tunnel Boat Trip from the museum through Islington Tunnel. Departure times 11:30 12:30 14:15 15:15 and 16:15. The 11:30, 12:30 14:15 and 15:15 boats return to the museum. The 16:15 boat passes through a lock and drops off passengers at Graham Street, Islington; book via our web page.

- 2 Thu London Canal Museum: The Basingstoke Canal Heroes and Villains by Roger Cansdale.
- 4 Sat 6 Mon Royal Gunpowder Mills: A Booming Bank Holiday; 10:00-17:00; family ticket £22.
- 4 Sat 6 Mon Didcot Railway Centre: Double-headed Diesels - with D9551 and D9516.
- 4 Sat London Sewing Machine Museum: Open Day.
- 5 Sun Amberley Museum: Classic Motorcycles; 10:00-16:30; £13.60/£11.50.
- 5 Sun 6 Mon Twyford Waterworks: Spring Rally; £6/£5; 11:00-16:00; Monday is the Friends of King Alfred Buses Running Day for free journeys to and from the Waterworks; info www.kingalfredbuses.org.uk.
- 5 sun Crossness Engines: Family Open Day Prince Consort NOT in steam; 10:30-16:00; £6; also on 2 June; 6 July.
- 5 Sun Croydon Airport Visitor Centre: Guided tours of the world's oldest Air Traffic Control Tower; also on 2 June; 7 July.
- 5 Sun Kirkaldy Testing Museum: Open Day. 11:00-17:00.
- 5 Sun Crossness Engines Public Steaming Day. 10:30-16:00; no booking required.
- 5 Sun House Mill: Guided Tour.
- 5 Sun IWA: Guided Waterside Walk River Tyburn, and along Regent's Canal to Little Venice, start at 14:30 outside Baker St tube station (Baker St north/Lords exit); no prior booking required.
- 6 Sun Historic Haslemere Guided Town Walk: Discover more about Haslemere High Street and the history of the town, led by Tim Winter; meet outside Haslemere Museum at 14:30; free, donations welcome; no need to book.
- 8 Wed Newcomen Society, London: William Fairbairn the Experimental Engineer by Richard Byrom.
- 9 Thu London Canal Museum: Guided Tunnel Boat Trips from museum through Islington Tunnel; also on 16, 23, 30 May; 6, 13, 20 June; 4, 11, 18, 25 July.

Venues, Times & Contacts are on page 3.

Recording Factory Closures

A good opportunity to record the history & to rescue traditional papers & machinery! If you hear of a factory which is about to close, please report it to us; contacts on page 13.

Diary May 2019

- 11 Sat -12 Sun Upminster Windmill Visitor Centre: Open. St Mary's Lane (on A124), RM14 2QL; 13:00-16:00; www.upminsterwindmill.org.
- 11 Sat Reigate Caves: Open Day.
- 11 Sat Amberley Museum: Mini Day all types from the earliest to latest.
- 11 Sat Godalming Town Walk: Look at the industrial history of the town and the influence it had on the buildings; start at 14:30 at the Pepperpot; the gentle walk lasts about an hour and a half; just turn up; free.
- 11 Sat Merton Heritage Discovery Day: talks and stalls from heritage groups from the London Borough of Merton and Surrey plus do block printing and stained glass colouring; 12:30-16:30; Morden Library, Merton Civic Centre, London Road, Morden.

11 Sat	National Mills Weekend: Our Mill -
&	Its History in Pictures - A nationwide
12 Sun	celebration of Britain's mills in pictorial
	form - www.spab.org.uk/mills/national-
	mills-weekend

- 11 Sat Whitchurch Silk Mill: Open 10:30-17:00, Tours; 14:00; (open Tue-Sat + bank hols).
- 11 Sat | 12 Sun Brixton Windmill: Short Tours available on the day; free.
- 11 Sat - 12 Sun House Mill Bromley-by-Bow: Open for National Mills Weekend.
- 12 Sun Merton Abbey Mills Waterwheel: Open for National Mills Weekend; Merton Abbey SW19 2RD; close to the roundabout at the entrance to Sainsbury's superstore, off A24.
- 11 Sat | 12 Sun Shalford Watermill: Open for National Mills Weekend.
- 11 Sat 12 Sun London Museum of Water & Steam: Open for National Mills Weekend; Watermill in action.
- 11 Sat

 12 Sun Reigate Heath Windmill: Open for National Mills Weekend; RH2 8QR, off A25, E of Reigate, take turning left across heath and after three-quarters of a mile, turn right into golf club.
- 12 Sun Ifield Watermill: Open for National Mills Weekend; RH11 0PL, from A23 Crawley bypass, turn W to Gossops Green and take the 2nd on R, R again and then first L and turn L at T-junction, the mill is ¼ mile on L, off Hyde Drive.
- 12 Sun Coultershaw Beam Pump:
 Open for National Mills Weekend.
- Burton Mill: Open for National Mills Weekend;
 10:00-16:00; milling flour and generating hydro power
 + history of the mill & restoration of the machinery;
 Burton Park Road, Petworth, West Sussex, GU28 0JR;
 info Barry 01798 667244.
- 12 Sun Cobham Watermill: Open for National Mills Weekend; KT11 3AL, on A245, 200 yards S of Cobham High Street.

Diary May 2019

- 11 Sat Dennis Society: Guildford Chassis Plant Open Day; 10:00-17:00; Dennis Way, Slyfield Industrial Estate, Guildford GU1 1AF; free; info claire.barrett@alexander-dennis.com.
- 11 Sat Dartford's Annual Steam and Classic Vehicle Fair: Trevithick's Industrial Dartford Celebration; Free; Dartford Central Park; 10:00-17:00; www.trevithicksindustrialdartford.co.uk
- 12 Sun Historic Commercial Vehicle Society: Crystal Palace to Brighton annual run lorries, vans, buses; start from 07:00 to 09.30; see spectator note about the route. Check train if going to see vehicles at Brighton; www.hcvs.co.uk.
- 13 Mon Hampshire IAS: The Portsmouth Direct Railway (Portsmouth to Petersfield) by Peter Keat.
- 13 Mon -17 May SPAB: Repair of Old Buildings Course, London; www.spab.org.uk.
- 14 Tue Greenwich Industrial History Society: Underground Kent by Mike Clinch.
- 14 Tue Hendon and District Archaeological Society: 50 Years of Recording London's Industrial Heritage by David Perrett; 20:.00; Drawing Room, Avenue House, 17 East End Rd, Finchley N3 3QE. Visitors £2; www.hadas.org.uk.
- 15 Wed GLIAS: AGM + Trinity Buoy Wharf and the Proposed Historic Ships Collection for London by Richard Albanese; 18:15; The Gallery, rear entrance, Alan Baxter Ltd, 75 Cowcross Street EC1M 6EL.
- 18 Sat Black Country Living Museum: Iron: & Steel An Industrial Might, Study Day, Heritage Workshops & Talks; 09:00-16:00; must book online or 0121 520 8054; £18 including car parking and lunch and refreshments throughout the day.
- 18 Sat Whitchurch Silk Mill: Demos; 10:00 13:00
- 18 Sat 19 Sun Amberley Museum: Home Front Weekend; display of military vehicles used in the Second World War.
- 18 Sat 19 Sun Kempton Steam Museum: Stationary Engine and Model Boat weekend; Triple in steam and railway running both days.
- 19 Sat Docklands History Group: Conference The Medieval Port of London; 09:45- 17:30; in
 the Weston Theatre of the Museum of London,
 London Wall EC2Y 5HN; £35; book online,
 www.docklandshistorygroup.org.uk.
- 19 Sun Crossness Engines: Family Open Day Prince Consort in steam; 10:30-16:00; £8.00; also on 23 June; 21 July.
- 19 Sun House Mill: Guided Tour.
- 19 Sun IWA: Guided Towpath Walk along the Regent's Canal: King's Cross Granary Square Camden, start: at 14:30 outside King's Cross tube station (taxi rank); no prior booking required.
- 19 Sun Footprints of London: Shipbuilding to Banking The Isle of Dogs Story, walk led by Andrew Parnell, aided by archive photos; info and booking: http://tinyurl.com/ShipbuildingtoBanking.

Venues, Times & Contacts are on page 3.

Diary May 2019

- 20 Mon London Omnibus Traction Society: London's First Generation Trams and British Trolleybuses by Eddie Dawes and John Parkin. 18:00 for 19:30; Conway Hall, Red Lion Square, London WC1R 4RL; free; www.lots.org.uk
- 22 Wed Vale Of White Horse IAG: Kingerlee:
 The Family and the Building Firm in Oxford by
 Liz Woolley; 19:30 at Denchworth Village Hall
 Barn Close, Denchworth, OX12 0EZ;
 info martin.buckland1@ntlworld.com; £3 please.
- 22 Wed Berkshire IAG: Reading Walk start 10:30 at Queen Victoria Statue opposite St Lawrence Church, led by Peter Trout.
- 25 Sat 27 Mon Cuckoo Spring Fayre: 15 steam engines at Laughton Showground, Lewes Road, Laughton, East Sussex BN8 6BN; info D Anstiss laughton-showground@gmail.com, 01323 811264; www.heritagefield.co.uk/whatsoncuckoo.html.
- 25 Sat 27 Sun Amberley Museum: Heritage Craft Weekend - celebrate traditional and woodcrafts with craft makers and demonstrations.
- 25 Sat 26 Sun Chatham Historic Dockyard: Railway Weekend; sorry, no rides.
- 26 Sun Bursledon Brickworks: Steampunk

 @ The Brickworks; 11:00-16:00; supported by
 Gosport Steampunk Society; the museum will
 be all steamed up + activities, craft stalls and Hants
 Narrow Gauge Railway running; £7/£6.
- 26 Sun Markfield Beam Engine: Steaming Day.
- 26 Sun House Mill: Guided Tour.
- 26 Sun IWA: Guided Towpath Walk along the Regent's Canal Little Venice to Camden, start at 14:30 outside Warwick Avenue tube station; no prior booking required.
- 29 Wed London's Super Sewers: from Bazelgette to Tideway by Mike Sawyer; info on www.rbhistory.org.uk
- 31 Fri London History Day: London's museums, galleries and cultural spaces open their doors to reveal special behind the scenes tours, rarely seen exhibits and one-off events, celebrating the capital's unique identity; https://historicengland.org.uk/get-involved/visit/london-history-day/

Venues, Times & Contacts are on page 3.

Anniversaries left over from last year 1958 - 60 Years Ago



Sputnik was launched - the world's first artificial satellite The size of a beach ball, this Soviet sphere completed 1440 orbits of Earth, inciting the Space Race that determined the course of Soviet Union and US relations for the next 20 years.

Diary June 2019

1 Sat - 2 Sun St Albans Steam & Country Show: 32 engines at Oaklands Campus (Smallford) on the A1057 AL4 0KR; www.hertssteam.co.uk; info Mark Waite, mark.waite@hotmail.co.uk, 07896 555097.

- 1 Sat Coombe Conduite Houses: Conducted Tour, meet at 14:00; led by Dr David Kennedy; + continue in pub afterwards; (no facilities on site); Coombe Lane W (turn off A3 at Coombe flyover towards Kingston), (KT2 7HE); almost opposite Coombe Junior School; on road parking in adjacent roads; book with Carol Coyne 01932-226374, bryony.dbrg@gmail.com by 18 May; donations to the Kingston Upon Thames Society welcome.
- 1 Sat London Sewing Machine Museum Open Day.
- 2 Sun Twyford Waterworks: Industrial Railways Running Day; sorry no rides.
- 2 Sun Didcot Railway Centre: Transport Rally.
- 2 Sun Historic Haslemere Guided Town Walk: Discover more about Sicklemill, Shottermill and Wey Hill areas of the town led by Tim Winter; meet at Wey Hill Fairground car park at 14:30; the walk includes a steep footbridge; free, donations welcome; no need to book.
- 2 Sun Kirkaldy Testing Museum Open Day.
- 2 Sun House Mill: Guided Tour.
- 2 Sun IWA: Guided Towpath Walk along the Regent's Canal Mile End to Limehouse, start at 14:30 outside Mile End tube station; £10/£8; no prior booking required; info 0203 612 9624, www.waterways.org.uk.
- 3 Mon 6 Thu Country House Comfort & Convenience Tour: The Weald of Kent and Sussex; Heritage of Industry Ltd, The Gables, 20 Main Road, East Hagbourne, Oxon OX11 9LN; book: info@heritageofindustry.co.uk.
- 3 Mon Hampshire IAS: The Panama Canal by Jon Sims.
- 3 Mon Postal Museum: Walk The Rails walking tours through the hidden underground tunnels of Mail Rail; 18:00-20:00.
- 4 Tue Crossness Engines: Guided Tour; 11:00-14:00; engine NOT in steam; £13.57; must be pre-booked; also on, Tue 6, 16, 30 July.
- 5 Wed Docklands History Group: Rotherhithe and Bermondsey by Pete Smith.
- 6 Thu London Canal Museum: The Suez Canal by Dr Roger Squires.
- 7 Fri -9 June Epping Ongar Railway Steam Gala; www.eorailway.co.uk
- 7 Fri 9 Sun Didcot Railway Centre: The Hall & Saint.
- 8 Sat Brixton Windmill: Short Tours available on the day; book long tours a month in advance; free; also on July 9 Sun, 13 Sat, 14 Sun.
- 8 Sat Reigate Caves: Open Day.
- 8 Sat Godalming Town Walk: The High Street and the Coaching Inns; start at 14:30 at the Pepperpot; free; the gentle walk lasts c. 1½ hours; just turn up.

Diary June 2019

- 8 Sat Eastern England Region Industrial Archaeology Conference: at Thetford; Salvation Army Hall, Magdalen Street, Thetford, Norfolk IP24 2BN 09:30-16:00; Lectures on Thetford Pulpware, Burrells & visits to Industrial sites, including Burrells; organised by Norfolk Industrial Archaeology Society, www.norfolkia.org.uk; info Carol Haines 01603 867825.
- 9 Sun House Mill: Guided Tour.
- 11 Tue IWA: Guided Towpath Walk along the Regent's Canal Little Venice to Camden, start: at 14:30 outside Warwick Avenue tube station; £10/£8; no prior booking required; 0203 612 9624, www.waterways.org.uk.
- 15 Sat 16 Sun Chatham Historic Dockyard: Railway Weekend; sorry no rides.
- 15 Sat Didcot Railway Centre: Didcot to Oxford Great Western Railway 175th Anniversary Celebrations.
- 15 Sat -16 Sun Kempton Steam Museum: Steaming Weekend – Triple in steam both days and rides on the narrow-gauge railway.
- 16 Sun House Mill: Guided Tour.
- 16 Sun IWA: Guided Towpath Walk along the Regent's Canal: Islington to Mile End, start: at 14:30 outside Mile End tube station; £10/£8; no prior booking required; 0203 612 9624; www.waterways.org.uk.
- 17 Mon Clapham Society: Brewing along the Wandle Valley by Alison Cousins. Omnibus, 1 Clapham Common North Side SW4 0QW. 19:00 for 20:00; www.claphamsociety.com.
- 22 Sat -23 Sun London Transport Museum & TfL: The District 150 Steam Train Run. will mark 150 years of the District line as a special heritage event that will see a steam train travelling through tunnels into central London on the Underground for the last time. Tickets will be available later in the year via museum website: www.ltmuseum.co.uk/whats-on/events-calendar/heritage-vehicles-outings.
- 22 Sat 23 Sun Amberley Museum: Emergency Services Weekend: watch the fire engines go.
- 23 Sun Markfield Beam Engine: Steaming Day.
- 23 Sun London Bus Museum, Brooklands: On the Buses Summer Event.
- 23 Sun House Mill: Guided Tour.
- 24 Mon Croydon NHSS: The Great Fire of London devastation and recovery by Andrew Warde.
- 27 Thu London Metropolitan Archives: Joseph Bazalgette's Birthday Party. Free event at London Metropolitan Archives, 40 Northampton Road, London EC1R 0HB; 14:00-15:00; www.cityoflondon.gov.uk/things-to-do/london-metropolitan-archives/Pages/default.aspx.
- 29 Sat 30 Sun South Beds Country Show: 25 steam engines; New Manor Farm, Toddington Road, Harlington, Bedfordshire LU5 6LA; info Paul Worbey, paul@bseps.org.uk, 01462 851711.
- 30 Sun House Mill: Guided Tour.

Diary July 2019

- 1 Sat Hampshire IAS: The Development of Fastenings from their beginnings to becoming an everyday technology by Anthony Poulton-Smith.
- 4 Thu London Canal Museum: World War Two Women Canal Boaters talk by David Padfield.
- 6 Sat Wealden Iron Research Group: Summer Meeting and AGM; 10:00-14:00 at Brede Village Hall, Cackle Street, Brede, Rye TN31 6DX; details of afternoon visit and AGM to follow, see www.wealdeniron.org.uk.
- 6 Sat GLIAS: Dartford In The Footsteps of Trevithick, walk led by Martin Watts & Linda Graham; start at 14:30; reserve a place on the walk by emailing for further information walks@glias.org.uk.
- 6 Sat London Sewing Machine: Museum Open Day.
- 6 Sat IWA: Guided Towpath Walk along the Regent's Canal Little Venice to Camden, start: at 10:45 outside Warwick Avenue tube station.
- 7 Sun Twyford Waterworks: Open Day.
- 7 Sun Croydon NHSS: Museum Open Day –
 Regulars at the Museum will show you round;
 13:30 to 16:30; for directions please call
 our Curator, Chris Taylor, on 020 8668 9570.
 We are near Woodmansterne Station.
- 7 Sun IWA: Guided Waterside Walk Secrets of the northern Queen Elizabeth Olympic Park start at 14:30 outside Stratford station (by "Newham London" sign).
- 7 Sun Kirkaldy Testing Museum: Open Day; 11:00-17:00.
- 7 Sun House Mill: Guided Tours.
- 13 Sat Reigate Caves: Open Day.
- 13 Sat 14 Sun Amberley Museum: Gala Weekend celebrate and ride our narrow gauge railway and join us in celebrating our industrial trains.
- 13 Sat Godalming Town Walk; see 11 May.
- 13 Sat 14 Sun London Transport Museum Depot: Open Weekend; LTM Depot, 2 Museum Way, 118-120 Gunnersbury Lane, London W3 9BQ; www.ltmuseum.co.uk/whats-on/museum-depot/ open-weekends.
- 14 Sun House Mill: Guided Tours.
- 21 Sun Amberley Museum: Classic Car Show join us as we showcase classic cars from the 1950s 1990s around the 36 acre site.
- 21 Sun Bursledon Brickworks: Trains @ The Brickworks; 11:00-16:00; Hampshire Narrow Gauge Railway Trust show off all the work they have been doing and their collection of rolling stock; train rides, model railway layouts and works steamed up and working; £7/£6.
- 21 Sun House Mill: Guided Tour.
- 21 Sun IWA: Guided Waterside Walk Limehouse, Thames & Docklands start at 14:30 outside Westferry DLR station (by the Cycle Hire Point).
- 25 Thu Friends of Honeywood Museum: Lavender Mitcham & Beyond; by Alison Cousins; £5; free tea & coffee from 19:00; book on 020 8642 4778.

Venues, Times & Contacts are on page 3.

Diary July 2019

- 26 Fri 28 Mon Netley Marsh Steam & Craft Show: 40 steam engines; Netley Marsh, Southampton SO40 7GY; www.nmscs.org.uk; info Neil Hirst, enquiries@nmscs.org.uk.
- 27 Sat Surrey Industrial History Group
 Annual General Meeting 2019 &
 Presentation of Conservation Award
 at 14:00, Bluebird Room
 Brooklands Museum, see centre pages.
- 27 Sat

 28 Sun London Canal Museum: Ice Heritage

 Weekend a cake-baking competition for Carlo
 Gatti's birthday, a cream tea, Gatti's Victorian

 Music Hall, ice-cream making demonstrations,
 gallery talks, and visits underground into the ice
 wells. Some of these things are on one day only.
- 28 Sun 28 August Royal Gunpowder Mills: Professor Nitrate's Test Zone.
- 28 Sun Markfield Beam Engine: Steaming Day.
- 28 Sun House Mill: Guided Tour.

Looking Ahead

Diary August 2019

9 Fri - 14 Wed AIA: Annual Conference at Bridgwater & Taunton College; two events on Friday, three lectures on Saturday plus awards, members' talks and Conference Dinner: AGM plus Rolt Lecture on Sunday morning then outings on Sunday afternoon, Monday, Tuesday and Wednesday; full details, downloads and online booking https://industrial-archaeology.org/conferences/ annual-conference/

Venues, Times & Contacts are on page 3.

Anniversaries left over from last year 1968 - 50 Years Ago

The Victoria Line in London opened its first section, with the first train leaving Walthamstow Central for Highbury & Islington at 06:30. Over the following four years, the line was extended south before being completed at Pimlico.

The first manned orbit of the moon by Apollo 8's ground-breaking orbit of the moon. The 6 day-long mission produced the iconic "Earthrise", which forever changed the perspective of humankind on their home planet.

Anniversaries left over from last year 1993 - 25 Years Ago

The first journey of a high-speed train from France to England via the **Channel Tunnel** – this engineering miracle finally opened to the public amid a blaze of publicity the following year.

Anniversaries left over from last year 2008 - 10 Years Ago

Large Hadron Collider. The LHC is the largest machine in the world, located under the France-Switzerland border and used to test theories and questions of physics. The colossal machine accelerates beams of protons towards each other, with the eventual collision of fundamental particles allowing for the investigation of even smaller particles that make up the proton itself.

Anniversaries left over from last year 2013 - 5 Years Ago

The Higgs boson, also known as the 'God Particle' was found using the Large Hadron Collider (LHC). The discovery of the Higgs boson confirms a long-held theory in physics of a particle that grants mass to matter through the interactions of a so-called 'Higgs field'.

Climate change - A Carbon Dioxide reading higher than any reading for millions of years was recorded by the Hawaiian atmospheric monitoring station Mauna Loa. This level, was 400ppm (parts per million). As carbon dioxide levels increase, more heat is trapped by the atmosphere, leading to global warming. April 2017 marked the first recording of 410ppm, and that number will only rise in the future.

The deadline for **submitting copy** for the next Newsletter is 12 July 2019

Submissions are accepted in typescript, on a disc, or by email to news@sihg.org.uk.

Anything related to IA will be considered. Priority will be given to Surrey-based or topical articles.

Contributions will be published as soon as space is available.

Readers are advised that the views of contributors are not necessarily the views of SIHG.

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