



Please note the  
NEW VENUE  
for the Guildford meetings -  
**Church House Guildford,**  
**20 Alan Turing Road,**  
**Guildford GU2 7YF**  
(on the Science Park)



The Motor Car in the Inter-war  
Years: Bond Minicar, see page 8.



The very informative SIHG  
half-term visit to Guildford  
on 26 October 2017,  
led by Hugh Anscombe, had  
the bonus of the unexpected  
sighting of *CHIMERA II*.

(Photo John Bourne)

This steam launch,  
now owned by Peter Lee;  
was built in 2005  
by John Winn.  
(See [www.steamboat.org.uk/  
user.php?id=61989](http://www.steamboat.org.uk/user.php?id=61989))



**SERIAC 2018**  
**SOUTH EAST REGIONAL**  
**INDUSTRIAL ARCHAEOLOGY CONFERENCE**  
**SATURDAY 21 APRIL 2018**

The Windsor Boys' School 1 Maidenhead Road Windsor SL4 5EH  
**Conference details and booking form enclosed**  
**A day of Industrial Archaeology experiences**  
**in the company of fellow Industrial Archaeologists!**

Organized this  
year by BIAG

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## SIHG Newsletter No 217 February 2018

Enquires to Programme Co-ordinator Bob Bryson: 01483 577809, [meetings@sihg.org.uk](mailto:meetings@sihg.org.uk).

### The 42nd season of SIHG Industrial Archaeology Lectures at Guildford

alternate Tuesdays, 19:30-21:30

Church House Guildford, 20 Alan Turing Road, Guildford GU2 7YF (map: [www.sihg.org.uk](http://www.sihg.org.uk)).

Single lectures at £5, payable on the night, are open to all.

9 January	<b>The Development of the Motor Car in the Interwar Years</b> , Trevor Williams. Farnham U3A
30 January	<b>The Planning and Construction of High Speed 1</b> , Doug Irvine, Civil Engineer
6 February	<b>Eric Alliot RFC, RAF and From Icarus to Airbus</b> , Michael Alliot, son of an Aviation Pioneer
20 February	<b>Heroes &amp; Villains of the Basingstoke Canal</b> , R Cansdale, Basingstoke Canal Society
6 March	<b>Shieldhall - Thanks to the Heritage Lottery Fund</b> , Graham Mackenzie, Chief Engineer of SS Shieldhall

### Thursday Morning Lectures at Leatherhead, weekly 10:00-12:00

Room G6 The Institute, 67 High Street Leatherhead KT22 8AH

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

Please contact Bob Bryson: 01483 577809, [meetings@sihg.org.uk](mailto:meetings@sihg.org.uk), if you wish to attend a particular talk.

11 January	<b>Collapsing Buildings and how to save them</b> , Chris Shaw
18 January	<b>The Titanic</b> , Bob Bryson, SIHG
25 January	<b>The Future is Square - P.O. Street Furniture</b> , Julian Stray, P.O. Museum
1 February	<b>Southern Railway and Transport</b> , Reg Davies
8 February	<b>Crossrail</b> , Patrick Griffin, Crossrail
15 February	Half Term
22 February	<b>LEO The Lyons Computer</b> . Neville Lyons
1 March	<b>The Merchant Navy at War Pt III including The Falklands</b> , Richard Mellor
8 March	<b>Bridges</b> , Geoff Roles
15 March	<b>Alexander Raby and the Downside Mill</b> , Richard Savage, SyAS
22 March	<b>Members' short talks</b>

## Exhibitions & News

**Brooklands Aircraft Factory** is now open. Inside the Bellman Hangar an 'Aircraft Factory' environment has been created, harking back to the Hangar's original use as a manufacturing building. Exhibitions explore the history of aircraft manufacture - from the pioneering early aircraft of wood and fabric, to the supersonic airliner and the technologies of the future. The Factory Floor is designed to evoke an authentic factory atmosphere and is packed full of activities, enabling visitors to try out aircraft-building skills for themselves, drawing on the Brooklands spirit of experimentation and creating a unique learning experience. The centrepiece of the exhibition is the Loch Ness Wellington, with additional areas focussing on the factory floor in early and later years, life for the factory employees away from work, and displays on the development of Wings, Fuselages and Propulsion.

Brooklands throughout the day: see, hear and feel Concorde blast along the runway, soar into the sky and accelerate to Mach 2 - twice the speed of sound. Re-live the excitement of the Supersonic Age in our fascinating **35-minute Concorde 'Flight'** evoking emotional memories.

Until 9 September 2018 Museum of London Docklands

### Fighting for Empire: From Slavery to Military Service in the West India Regiments.

Until April 2018 London Canal Museum **London's Lost Canals** An exhibition from the museum's own team on the canals that have largely disappeared from view in our capital city. Discover the site of an early torpedo works, the base for the world's largest fishing fleet, and the canal whose route is now used by thousands of commuters every day.

### Brunel Museum - Brunel's Last Project

Biggest Ship in the World, First Modern Ocean Liner, the Ship that Changed Everything In the lower gallery an exhibition about Brunel's greatest ship. A few hundred yards down the river on the Isle of Dogs, the launch ways of SS Great Eastern are accessible by Thames Clipper via Masthouse Terrace Pier or by our London Walk six times a week. The launch ways are always open...

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Group President: Prof AG Crocker FSA

## Venues, Times & Contacts

Most venues open 30 minute before the published time.

- Amberley Museum & Heritage Centre:** 10:00-17:00; £11/£10; Amberley Railway Station BN18 9L; [www.amberleymuseum.co.uk](http://www.amberleymuseum.co.uk); 01798 831370.
- Ancient Technology Centre:** 10:00-16:00; £6; Damerham Road, Cranborne, Dorset BH21 5RP; (behind school); 01725 517618, [www.ancienttechnologycentre.co.uk](http://www.ancienttechnologycentre.co.uk).
- Anne of Cleves House:** Tue-Sat 10:00-16:00, Sun-Mon 10:00-17:00; £6:10/£5:80; 52 Southover High Street, Lewes, Sussex BN7 1JA; 01273 474610.
- Berkshire Industrial Archaeology Group (BIAG):** 19:30; £2-50; St Mary's Church Hall, Castle Street, Reading, RG1 7RD; [www.biag.org.uk](http://www.biag.org.uk).
- Brooklands:** open Summer 10:00-17:00, Winter 10:00-16:00; £11/£9.90; Brooklands Rd, Weybridge, Surrey KT13 0QN; [www.brooklandsmuseum.com](http://www.brooklandsmuseum.com); 01932 857381.
- Brunel Museum:** Railway Avenue, Rotherhithe, London SE16 4LF; £6/£4; 020 7231 3840.
- Bursledon Brickworks:** steam days £7/£6, open days £4/£3; Coal Park Lane, Swanwick, Southampton SO31 7GW; [www.bursledonbrickworks.org.uk](http://www.bursledonbrickworks.org.uk); 01489 576248.
- Chatham Historic Dockyard:** 10:00-18:00, £22/£19-50; Chatham, Kent ME4 4TZ; [www.thedockyard.co.uk](http://www.thedockyard.co.uk); 01634 823800.
- Crossness Engines:** 10:30-16:00, £8; The Old Works, Crossness STW, Belvedere Road, Abbey Wood, London SE2 9AQ; [www.crossness.org.uk](http://www.crossness.org.uk); 020 8311 3711.
- Croydon Airport Society Visitor Centre :** open 1st Sunday of the month, 11:00-16:00, free; Airport House, Purley Way, Croydon CR0 0XZ.
- Croydon Natural History & Scientific Society (CNHSS):** 19:45; free? UR Church Hall, Addiscombe Grove, E Croydon CR0 5LP; <http://cnhss.co.uk>; 0208 668 1431.
- Cuffley Industrial Heritage Society:** 19:30, £4; Northaw Village Hall, 5 Northaw Road West, Northaw EN6 4NW; [www.cihs.org.uk](http://www.cihs.org.uk).
- Didcot Railway Centre:** 10:30-17:00; £10-00/£9-50; Didcot Parkway railway station, Didcot, Oxfordshire OX11 7NJ; [www.didcotrailwaycentre.org.uk](http://www.didcotrailwaycentre.org.uk); 01235-817200.
- Docklands History Group:** 18:00, £2; Museum of London Docklands, No 1 Warehouse, West India Quay, Hertsmere Rd, Canary Wharf, London E14 4AL; [www.docklandshistorygroup.org.uk](http://www.docklandshistorygroup.org.uk); 01689 851982.
- Dorking Museum & Heritage Centre:** Thurs, Fri, Sat 10:00-16:00; £2/£1; 62 West Street, Dorking, Surrey RH4 1BS; [www.dorkingmuseum.org.uk](http://www.dorkingmuseum.org.uk); 01306 876 591.
- Gatwick Aviation Museum:** Open Friday, Saturday and Sundays; 09:30-15:30; £7-50; Vallance-Byways, Lowfield Heath Road, Charlwood RH6 0BT; <http://www.gatwick-aviation-museum.co.uk/>; 01293 862417.
- Greater London Industrial History Society (GLIAS):** 18:00; The Gallery, Alan Baxter Associates, 75 Cowcross Street (through the archway and in the basement at the rear of the building), Farringdon, EC1; info Tim Sidaway, secretary@glias.org.uk; [www.glias.org.uk](http://www.glias.org.uk).
- Greenwich Industrial History Society:** 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>.
- Hampshire Industrial Archaeology Society (HIAS):** 19:45, free; Underhill Centre, St. John's Road, Hedge End, Hants SO30 4AF; [www.hias.org.uk](http://www.hias.org.uk); 01962 855200.
- Honeywood Museum Friends:** 19:30, £5.0; [www.friendsofhoneywood.co.uk](http://www.friendsofhoneywood.co.uk).
- Honeywood Museum:** Wed-Fri 11:00-17:00, Sat-Sun, BH Mon 10:00-17:00, Honeywood Walk, Carshalton SM6 3NX.
- Inland Waterways Association (IWA):** £10/£8; no prior booking required; [www.waterways.org.uk](http://www.waterways.org.uk); 0203 612 9624.
- Kempton Steam Museum:** 10:30-16:00, £7/£6; Snakey Lane, off elevated section of A316, Hanworth, Middx; entrance TW13 7ND; [www.kemptonsteam.org](http://www.kemptonsteam.org); 01932 765328.
- Kirkaldy Testing Museum:** First Sunday of Every Month 11:00-17:00; £5/£4; 99 Southwark Street, London SE1 0JF; [www.testingmuseum.org.uk/](http://www.testingmuseum.org.uk/).
- Lambeth Local History Forum:** [www.lambethlocalhistoryforum.org.uk/](http://www.lambethlocalhistoryforum.org.uk/).
- Leatherhead & District Local History Society (LDLHS):** meetings 20:00; £2; The Institute, 67 High Street, Leatherhead KT22 8AH; [www.leatherheadlocalhistory.org.uk](http://www.leatherheadlocalhistory.org.uk). Leatherhead Museum: Hampton Cottage, 64 Church Street, Leatherhead, Surrey, KT22 8DP; 01372 386348.
- London Bus Museum:** see Brooklands.
- London Canal Museum:** Open 10:00-16:30; Talks 19:30, £4/£3; 12/13 New Wharf Road, London N1 9RT; [www.canalmuseum.org.uk](http://www.canalmuseum.org.uk); 0207 713 0836.
- London Museum of Water and Steam:** Green Dragon Lane, Brentford, Middx TW8 0EN; [www.waterandsteam.org.uk](http://www.waterandsteam.org.uk); 020 8568 4757.
- Loughton & District Historical Society:** Methodist Church, Loughton High Road; 20:00 2nd Thursday of the month, £2.50; [www.loughtonhistoricalsociety.org.uk](http://www.loughtonhistoricalsociety.org.uk).
- Lowfield Heath Windmill:** (14:00-17:00?), free/donation; Russ Hill, Charlwood RH6 0EL (TQ 235 408). [www.lowfieldheathwindmill.co.uk/](http://www.lowfieldheathwindmill.co.uk/), 01403 272664.
- Mapledurham, Watermill & House :** £9-50/£8-00; 14:00-17:30; Sats, Suns & Bank Hols; Mapledurham, Reading RG4 7TR; [www.mapledurham.co.uk/the-water-mill](http://www.mapledurham.co.uk/the-water-mill), 0118 972 3350 or [www.mapledurhamwatermill.co.uk](http://www.mapledurhamwatermill.co.uk), 07710717149.
- Museum of London Docklands:** Mon-Sun: 10:00-18:00; no.1 Warehouse, West India Quay, London E14 4AL; [www.museumoflondon.org.uk/docklands](http://www.museumoflondon.org.uk/docklands), [info.docklands@museumoflondon.org.uk](mailto:info.docklands@museumoflondon.org.uk), 020 7001 9844.
- Newcomen Society Birmingham:** Thinktank, (Birmingham Science Museum), Millennium Point, Aston University, Curzon Street, Birmingham, W Midlands B4 7XG
- Newcomen Society London:** 17:45, free; <http://newcomen.com>; new venue - The Dana Studio, The Dana Centre, 165 Queens Gate, London SW7 5HD.
- Newcomen Society Portsmouth:** 18:30; free; Portland Building, University of Portsmouth, Saint James's Street, Portsmouth PO1; <http://newcomen.com>.
- Portsmouth Historic Dockyard :** 10:00-17:30, site ticket, annual £28/£26; HM Naval Base, Portsmouth PO1 3LJ; [www.historicdockyard.co.uk](http://www.historicdockyard.co.uk); 02392 728060.
- Railway and Canal Historical Society :** 18:30, free? The Rugby Tavern, Rugby Street, London WC1N 3ES; [www.rchs.org.uk](http://www.rchs.org.uk).
- Royal Gunpowder Mills Waltham Abbey:** 10:00-17:00; school holidays; £10.50/£9; Beaulieu Drive, Waltham Abbey, Essex EN9 1JY, 01992 707 350.
- Rural Life Centre:** open Summer Wed-Sun 10:00-17:00 + Bank Holiday Mondays, Winter Wed/Sun 10:00-16:00; £8-50/£7-50; Old Kiln Museum, Reeds Road, Tilford, Farnham, Surrey GU10 2DL; [www.rural-life.org.uk](http://www.rural-life.org.uk); 01252 795571.
- STEAM - Museum of the Great Western Railway:** 10:00-16:00, £8/£6-50; Kemble Drive, Swindon SN2 2TA; [www.steam-museum.org.uk](http://www.steam-museum.org.uk); 01793 466 646.
- Subterranea Britannica:** [www.subbrit.org.uk](http://www.subbrit.org.uk).
- Sussex Industrial Archaeological Society (SIAS) :** [www.sussexias.co.uk](http://www.sussexias.co.uk).
- Watford & District Industrial History Society :** 20:00, 3rd Thursday, September to March; North Hall, Queens' School, Aldenham Road, Bushey WD23 2TY; 01923 779580, [www.wadihs.org.uk/](http://www.wadihs.org.uk/).
- Wandle Industrial Museum:** £0.50; Wednesdays 13:00-16:00, Sundays 14:00-17:00; The Vestry Hall Annexe, London Road, Mitcham , CR4 3UD; no parking; 020 8648 0127, [www.wandle.org/](http://www.wandle.org/).
- 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](http://www.watercressline.co.uk); 01962 733810.
- Weald & Downland Living Museum,** £13/£12; Summer 10:30-18:00, Winter 10:30-16:00, Singleton, Chichester, West Sussex PO18 0EU; [www.wealddown.co.uk](http://www.wealddown.co.uk); 01243 811348.
- Wey & Arun Canal Trust:** The Granary, Fritchfold Farm, Loxwood, Billingshurst W Sussex, RH14 0RH; [office@weyandarun.co.uk](mailto:office@weyandarun.co.uk); 01403 752403.

## Roy Johnson (1930 - 2017)

*The funeral of long-standing SIHG member Roy Johnson took place on 21 November at Woking Crematorium, attended by family, friends and colleagues, including SIHG members.*

He was enthusiastic about so many industrial topics - motorbikes, clocks, valves, battles etc. He was also prepared to talk or write on them amusingly and knowledgeably. Moreover, he was interested in my talks and articles in the SIHG Newsletter and was ready, always in a friendly and constructive way, to point out errors!

He kindly invited me into his workshop where he managed to get my ancient stirrup pump working again.

JS

Talks by Roy, which he wrote up for the SIHG Newsletter, include:

Gun Barrels	nr 211 August 2016	Flash In The Pan	nr 203 January 2015
Dash up the Channel	nr 197 January 2014	A Pilgrim Valve in 1961	nr 192 March 2013
Military Ciphers	nr 182 July 2011	The Story of Two Clocks	nr 173 January 2010
Motorcycle Plus 60	nr 162 March 2008	Classic Motorcycles	nr 155 January 2007.

Below, we reprint one of Roy's articles.

### 'Dash up the Channel'

*by Roy Johnson*

In February 1942 the German High Command had three of their capital ships in the Atlantic part of Brest undergoing repairs for battle damage and re-arming in preparation for future active service.

The possibility of these three ships joining up with the battleship *Turpitz*, located in the Norwegian port of Trondheim, posed a major threat to future allied convoy movements in the Atlantic and the North Sea.

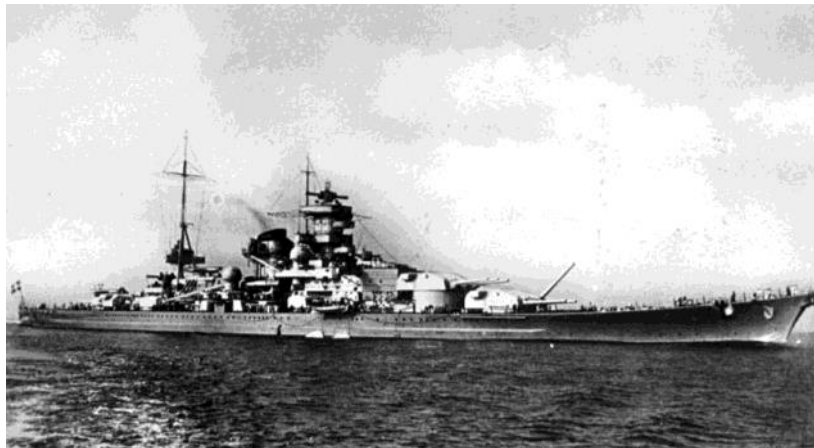
The Royal Navy made contingency plans to cover, in particular, the possibility of the ships at Brest going up the Channel through the Straights of Dover, whilst all the time the RAF mounted hundreds of raids sustaining heavy losses against the now heavily fortified French port.

Fully aware that intelligence about preparations for any movement of the vessels would be passed to the British by the French Underground, the Kriegsmarine (German Navy) mounted various ruses to confuse the true intention; a major factor in these was the destination and time of eventual departure.

British understanding was clear; if and when the three battle cruisers attempted to move up the Channel to the safety of home ports they would do so by passing through the pinch point of the Dover Straights at night.

Such was the beginning of the fiasco which would be recorded by history as the "Dash up the Channel": since the Kriegsmarine decided to leave Brest at night passing Dover in the daylight mists and completely wrong-footing the British.

Although now somewhat out of sync with expected timing, the *Scharnhorst*, *Gneisenau* and *Prinz Eugen*, having travelled some three hundred miles without



Schlachtschiff *Scharnhorst*

This file is licensed under the Creative Commons - Attribution-Share Alike 3.0 Germany license Attribution: Bundesarchiv, DVM 10 Bild-23-63-07 / CC-BY-SA

detection; still had to pass through the narrows of the Dover Straights.

Everything available, albeit rather late, was now thrown at the formidable battle group which now consisted of some thirty ships, having collected a defensive screen of six destroyers and numerous E-boats and minesweepers. Overhead the Luftwaffe were able to maintain a superior air cover of mainly ME109s and FW190s,

from their close range airfields in France.

Although the bravery of the British attacking forces was outstanding and almost suicidal, their endeavours turned out to be totally ineffectual.

MTBs and MGBs never got past the E-boat screen. The antiquated Swordfish, Beaufort torpedo and Hudson bombers with limited Spitfire protection were sitting ducks for the ack-ack screens and superior German fighters.

The shore-batteries at Dover, virtually blind in poor visibility with ineffective and inefficient radar, only got off 33 rounds and did not score a single hit.

As a last ditch attempt at naval interception, six old RN destroyers, relieved temporarily of convoy duties, made steam from Harwich but apart from being bombed by the RAF who were unaware of their involvement, never got near enough to make the torpedoes that were fired effective.

Such it was that the formidable German battle fleet arrived in safe home waters almost completely unscathed; suffering just slight mine damage to *Scharnhorst* and *Prinz Eugen*.

The "Dash up the Channel" is now documented as much for its chaotic, suicidal approach by the British as it was for a propaganda coup by the Germans at the time.



## A New Bolter for Lowfield Heath Windmill *by Peter James*

At last we have almost finished the bolter by employing a firm of carpenters working to a detailed specification I (Peter James) compiled; cheaper than millwrights perhaps!

The work so far has involved the installation of the output shutes, hopper, and vibrating feed shute, which works a treat when the drum is manually turned.

Early next year they will fit the feed spattle at the bottom front of the hopper together with its control arm, crook string and twist peg control (on the spout floor).

After that all that's required to finish is the fitting of a suitable bolting cloth and the output shute cloth tailings (feeding down into sacks), but these are not included in the current work specification.

December 2017

☞ A bolter is a sifting machine used for grading the flour.  
See also: [www.lowfieldheathwindmill.co.uk/news.php](http://www.lowfieldheathwindmill.co.uk/news.php)



Feed hopper and top of bolter  
at stone floor level



Output shutes on spout floor

Vibrating feed shute,



Surrey Industrial History Group Lecture 9 January 2018  
**The development of the Motor Car in the Inter-war Years**  
*by Trevor Williams report by Eric Brough*

Mr Williams presented an evenings talk focussing on developments of passenger automobile technology in the mid-20th Century. He illustrated the presentation with examples from his own ownership of many vehicles and from a deep interest and appreciation of car technology. Among the cars he had first-hand family knowledge of were:

- Austin 12hp (1920)
- Ford 8hp (1934)
- Talbot 20hp (1935)
- Jowett 8hp (1938)
- Wolseley Hornett (1933)

It was remarked that the ‘horsepower’ rating, used commonly at the time for taxation purposes and derived from the RAC, was a poor indicator of actual power. Its formula ignored the piston stroke and this omission consequently had some distorting effect on the overall design of engines at the time

After WW2, Britain found itself with a large stock of older ‘pre-war’ designs and a large number of independent manufacturers. This situation was slow to change and persisted for several years before ‘modern’ post-war designs came into production, one the first being the Morris Minor.

Petrol was scarce and rationing was in place. This led to a number of small, very economical, offerings appearing such as the Bond Minicar\* of 1949. Otto-cycle petrol engines of varying configurations were the norm; diesel engines in passengers cars were extremely rare.

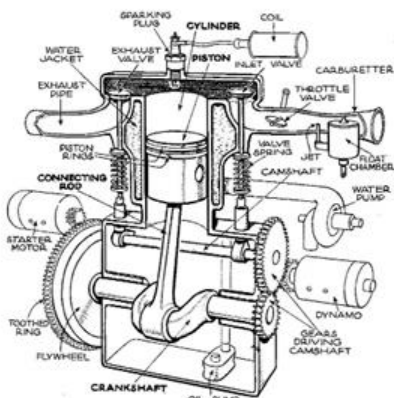
\* see image of Bond Minicar page 1  
[https://commons.wikimedia.org/wiki/File:1951\\_Bond\\_Minicar\\_Deluxe\\_Tourer.jpg](https://commons.wikimedia.org/wiki/File:1951_Bond_Minicar_Deluxe_Tourer.jpg)  
 Photo: Mighty Antar, Creative Commons Licence

Much of the talk was framed around individual components or subsystems that changed significantly during this era:

**Engines**

Sliding valves were replaced by poppet valves

Side-valve engines were initially common and this design was particularly suited to single cylinder engines. They were easier to build, but inefficient – although they did make the regular chore of de-coking the cylinder head relatively easy.



[https://commons.wikimedia.org/wiki/File:Single-cylinder\\_T-head\\_engine\\_\(Autocar\\_Handbook,\\_13th\\_ed,\\_1935\).jpg](https://commons.wikimedia.org/wiki/File:Single-cylinder_T-head_engine_(Autocar_Handbook,_13th_ed,_1935).jpg)  
 Public Domain: scanned by Andy Dingley

As larger multi-cylinder engines became more prevalent, overhead valves became the norm. These were initially operated by pushrod and return spring arrangements, but suffered from inertia issues at high revs. Overhead camshafts driven by cambelts [& chains] became the norm.

Early oil lubrication was a simple splashing of oil in the sump by the rotation of the crankshaft. Improved manufacturing techniques permitted pumped lubrication through oilways drilled into the crankshaft and connecting rods.

Similarly, the engine cooling system evolved from a passive thermosiphon towards a pumped and pressurised approach.

Crankshaft-fixed magnetos gave way to battery-based electrical systems.

Starting handles gave way to separate starter motors – by way of hybrids such as the Bosch ‘Dynastart’ starter/generator unit.

Development of carburettors and distributors proceeded apace for power and economy – though now all superseded by electronic injection/ignition systems.

**Transmission**

Early cars typically had ash-framed bodywork mounted onto a chassis to which the front and rear axles were attached. Transmission was to rear wheels via a propshaft (fitted with a pair of universal joints [a.k.a. Hookes joints] to accommodate rear axle movement) and a differential.

Straight-toothed gearboxes were superseded by helical gears, though these needed dog-clutches and a double-declutching style for smooth gear changes.

Automated and semi-auto gearboxes had patchy beginnings, often being very heavy and inefficient. The epicyclic Wilson Preselector was a notable innovation.

Citroën were credited for the early mass introduction of front-wheel drive and monocoque steel body construction.



[http://michel-dugolut.pagesperso-orange.fr/traction\\_avant.htm](http://michel-dugolut.pagesperso-orange.fr/traction_avant.htm)

**The rest**

Wheels evolved from spoked to more solid construction and single knock-on wing nut fittings gave way to multiple fasteners.

Early tyres had no steel reinforcement and inner tubes. Punctures were very frequent.

*(Continued on page 7)*

### The Value of Money by Robert Bryson

In 2003 I wrote an article for the Newsletter on the historic value of money. Fifteen years on you get even less for your pound, so I thought it would be a good idea to update it.

Often when reading an article on industrial history, or even a Victorian novel, one encounters a reference to the cost of an item. Whether it was the expenditure of 3d on candles and 10d on soap in 1874, or a contract for £14,800 to supply of a massive 100” Cornish pumping engine and four boilers for the Grand Junction Waterworks at Kew in 1869; the relationship to today’s prices is not immediately obvious.

While a cost of living index has been maintained since 1914 it is not easy to track inflation even from then, as the retail price index was rebased in 1974 and again in 1987. Obviously the basket of goods in 1750 would have included candles but not cars and today’s salaries are higher in real terms (after allowing for inflation). It was only after 1870 that real wages rose decisively above the

medieval level of around £6000 to £7000 pa per family at today’s values. Between 1860 and 1914 real wages doubled, greatly increasing the purchasing power of the family and contributing to an increase in the life expectancy and average height of the population. Since then average household income has further increased to approximately £30,000 pa. This figure is some four thousand pounds (15%) higher than the figure of £26,000 pa I originally quoted in 2003; however the cost of living has gone up by more than 50%. (RPI index Oct 2002-Oct 2017)

It is interesting to note however that the cost of goods has not always increased, as has been the post war experience. In fact over most of the 19<sup>th</sup> century prices actually fell as the cost of manufacturing and transporting goods declined. Prices at the start of WWI (1914) were only

roughly double those of 1750. During WWI prices doubled again but fell between the wars so that prices in 1939 were actually below those of 1919. Since WWII (1939) prices have risen just less than sixty fold. The most aggressive period was 1974-1981 when inflation was rarely less than 10% and prices tripled. Even with lower inflation prices have risen by 275% since 1987.

Using figures from a House of Commons Research Paper I have plotted the value of the pound back to 1750. The graph assumes the value of the pound as of August 2017 is equal to one. In order to determine the present value of any sum of money you need to project upwards

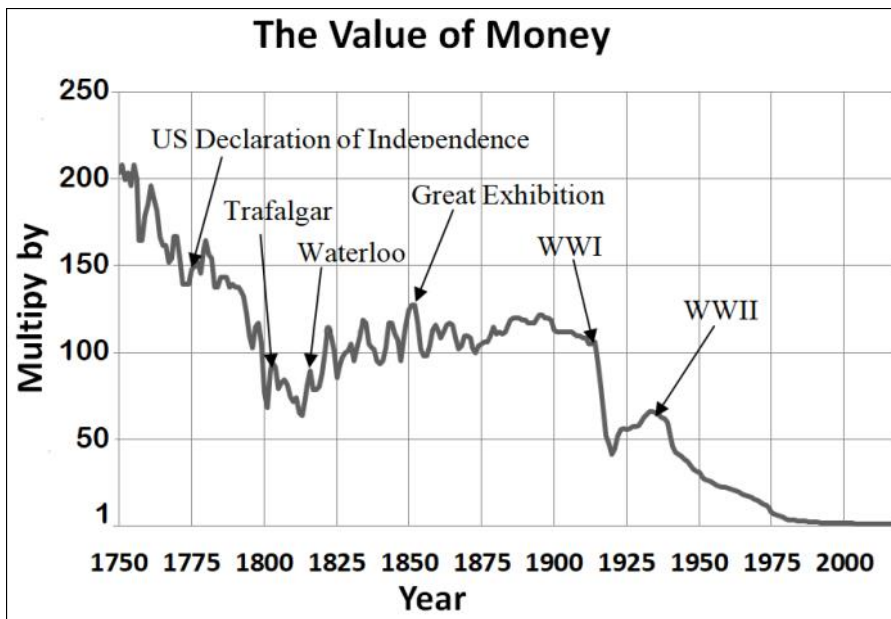
from the date in question and multiply the sum of money by the figure indicated.

Obviously you may need to recall that there were 20 shillings in a pound and 12 pence (d) in a shilling but many of you will remember that. Thus 2d around 1896 is worth a pound today, just as six pence (6d) was in 1944 and a shilling in 1963.

For example, a 12 hp Rover car ordered in 1915 cost

£350; the price being held for the 1915 season despite rising costs. This figure has to be multiplied by a factor of about one hundred, which brings the sum to £35,000 in today’s money (similar to the current price of a Jaguar XE or an Audi A4). But then one has to remember that the value of family income was only about 40% of what it is now, which accounts for why the Rover was such a luxury at the time.

As we all know, houses are considerable more expensive in real terms than they were some years ago. Take a typical pre-war three bedroom semi in Brook Ave Edgware. Such a property was sold in April 1938 for £835, which using the graph equates to a value of £51,500 in today’s money. Unfortunately for potential buyers houses on the street now cost more than half a million pounds, ten time this amount. □



(Continued from page 6)

Early suspension systems were almost always based on leaf/’cart’ springs. Damping was provided by friction shock absorbers. Many innovations were initiated in the mid 20th century to refine these aspects of vehicle handling.

Steering systems improved via Ackerman linkage geometry and steering column gearing that provided better feedback to the driver.

Braking systems were drum-based; discs not being introduced until the mid 1950s. Mechanical linkages (which required mechanical equalisation between the two wheels on an axle) gave way to hydraulic operation.

Electrical systems became increasingly used throughout the cars – trafficator indicators an early example.

The lecture concluded with a few further slides from Mr Williams’s collection and the audience thanked him for an enjoyable talk. □

## The Surrey Hearthstone Mining Industry and the Hearthstone Trade

by Paul W Sowan

In the first half of the 20th century hearthstone was a well-known material in the domestic scene, usually kept under the kitchen sink, or in the scullery. It was a mineral pigment used to whiten natural stone surfaces such as hearths, door-steps and flagstone floors. Samples are usually to be found in reconstructed 19th or early 20th century shops and sculleries in open air museums such as at Amberley, Beamish, or the Black Country. I noted some at Cheddleton flint mill during an AIA visit last year, and more is displayed at the Brewhouse Yard Museum at Nottingham. As usually encountered, hearthstone was sold as small rectangular blocks of crushed stone moulded into shape, or as powder in sprinkler canisters. It was mined in east Surrey from the Upper Greensand beds which lie below the Chalk but above the Gault Clay, outcropping along the foot of the North Downs escarpment.

Hearthstone was much used to smarten doorsteps of terraced houses lacking front gardens in northern industrial towns. And, just as painted platform edges are still found on dimly lit railway station platforms, hearthstone was probably used on stone staircases in equally dimly lit workhouses, factories, infirmaries, and such places. Surprisingly, a great deal of this humble material came from the mines in east Surrey. How and why the hearthstone trade originated and how it became dominated by mining enterprises in Surrey is far from clear.

The first recorded occurrence of the word 'hearthstone' as a mineral pigment recorded in the Oxford English Dictionary is from 1840. In *'Peter Parley's Annual'* (a Christmas or New Year's volume of stories for children), we read (page 15) that 'Mosette ... with her wet feet left many black marks on the hearth-stoned kitchen floor'. Peter Parley appears to have been a pseudonym used by William Martin [1801 - 1867]. Henry Mayhew [1812 - 1887] in his *'London labour and the London poor'* (1851), writing about street traders, mentioned 'the hearthstone barrow, piled up with hearth-stone, bath brick, and lumps of whiting'. Hearthstoning the doorstep is a domestic chore often mentioned in recollections of working class urban life.

### Rise, extent and decline of the hearthstone mining trade

The once flourishing hearthstone trade depended in large part on the products of mines or underground quarries at Brockham, Betchworth (two mines), Reigate, and Godstone (something like five mines), with probably some much smaller scale working at Gatton and Merstham. These evidently commenced production of the pigment in the 19th century and continued into the 20th, the last mine to close being that operated at Colley Hill, Reigate, by the Reigate Mines Ltd in or about 1961. The sometime Hearthstone & Whiting Trades Association was incorporated as a limited liability company in 1920 and had as members listed in 1925, the Godstone Mines, the Brockham Lime & Hearthstone Co. Ltd, Reigate Mines Ltd, and the Surrey Mining Company Ltd (at Betchworth). However, by then this was a declining trade. Claude William Cawley's mine at Betchworth had closed before World War I, and the Brockham Company abandoned its mine in 1925. The problem of engaging domestic servants, and the introduction of red quarry tiles for hearths and doorsteps, were to blame according to one company source.

### Quarry waste

The hearthstone trade, at least in Surrey, appears to date from around 1820. Working the very much older underground building-stone quarries, from the Roman period onwards, generated very large volumes of quarry waste in the course of extracting squared blocks of Reigate (or Gatton or Merstham) stone. This waste was useless for building purposes, consisting of small and irregular chippings generated in cutting out the blocks and rough-shaping them underground, and also probably came from beds of rock too thin to yield useful sized blocks. Many accounts suggest the hearthstone was found in distinct beds of a different mineral nature, although detailed analysis of the mineralogy of stone samples fails to support that contention. This very fine-grained rock consists mostly of several kinds of the mineral silica, mostly chemically precipitated cristobalite with smaller proportions of chert-like amorphous silica and quartz sand grains. The remainder is mostly calcite, feldspar, white mica, glauconite and traces of clay minerals. Although often referred to as a calcareous sandstone there is insufficient crystalline quartz to justify the term. It is neither calcareous sandstone nor sandy limestone, and has no formal geological name. Similar material found locally in France has been called gaize. In reality, almost all the stone beds in the Upper Greensand mine and quarry tunnels would make acceptable hearthstone, whereas only certain beds were thick enough to be useful for building and had relatively satisfactory resistance to weathering.

An unidentified entrepreneur at an unidentified location appears to have seen and seized a market for the waste, and founded the hearthstone trade. The most likely candidates for this initiative may well have been the Hall family at Merstham from, it has been claimed, 1824 onwards. They had succeeded Jolliffe & Banks as operators of the chalk pits, lime kilns, and underground quarries at Merstham, a pioneering civil engineering partnership which had supplied greystone lime to civil engineering works as far distant as Howth Harbour near Dublin, and Heligoland near the German coast, as well as docks and harbours, and bridges in London and the south-east and other places in England. The Croydon, Merstham & Godstone Iron Railway opened between Merstham and Croydon in 1805, extending the Surrey Iron Railway from Wandsworth to Croydon which had opened two years earlier, obviously facilitated access to the London market and beyond.

There is some evidence for small-scale production of other rocks in other locations for use as mineral pigment for natural stone surfaces, although what is known so far suggests that the east Surrey mines dominated the market, even supplying the industrial cities of northern Britain.

### Artificial hearthstone

So flourishing was the demand for hearthstone in its day, that at least 26 patents for 'artificial hearthstone' were applied for by parties throughout England and even southern Scotland. It is, of course, very difficult, if not impossible, to assess the commercial success of these patents, which often specified various chemical industry waste products as ingredients. But it is probably significant that James Hall [1814 - 1890] of Horley registered a provisional patent 3712 in 1875 for 'improvements in the manufacture of artificial; hearthstones'. This called



for ‘ground green sandstone found above the Gault Clay in the neighbourhood of Betchworth in Surrey and in other localities mixed with Portland cement and moulded into blocks’. The Hall family had for a short period an interest in the chalk pits and Upper Greensand at Betchworth as well as at Merstham, noted in Robert Hunt’s UK Mineral Statistics for 1858, but not mentioned in C G Dobson’s history of the Hall company (although James Hall’s patent is noticed).

**Documentation and archaeology of hearthstone mining**

Mine and quarry tunnels in the Upper Greensand are still accessible at Gatton, Merstham, pre-1933 Chaldon, and Godstone. Those at Gatton, Merstham and Chaldon were worked almost exclusively for building stone or, on a smaller scale, for making (rather than whitening) stone hearths. At the several sets of tunnels either side of, and underneath, the A22 at Godstone Hill, however, areas exclusively exploited for squared building-stone are recognisable, and quite distinct from areas mined for hearthstone. In the quarry tunnels, all or most of the quarry waste has been left underground or, in places, subsequently taken out for sale as hearthstone. Very distinctive tool marks are left by picks and wedges where squared blocks have been removed. In hearthstone mining the material was hacked out in smaller and irregular lumps, leaving quite different pick and wedge marks on the working faces and mine walls. And as almost everything, apart from lumps of stone containing

chert nodules was taken out, very little waste has been left underground.

**Conclusions**

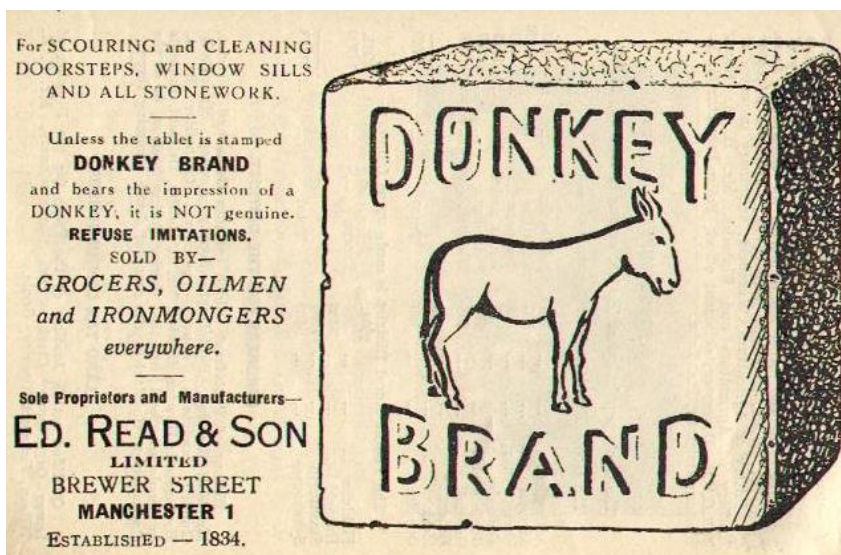
At first, hearthstone was exploited as a means of getting rid of by sale otherwise useless waste from building-stone quarries. Later, as at Godstone, both building-stone and hearthstone were worked at the same time. And by the 20th century new mines, as at Betchworth and Brockham, were worked exclusively for hearthstone. Exactly by whom, when, and where in east Surrey the trade originated is not clear, although this somewhat obscure rural industry appears to have dominated the British market.

**Further information**

The industry in Surrey is relatively, if patchily, well documented, and such company records as I have rescued for Brockham, Betchworth and Reigate, especially, have all been deposited at the Surrey History Centre at Woking. And as I commenced researching this east Surrey industry in the early 1960s, I have enjoyed interviewing some of the last miners to work underground in the county. More recently Peter Burgess of the Wealden Cave and Mine Society has continued this research underground and in archives, engaged in further oral history projects, and examined newspaper files. A small team (of which I was a member) of WCMS members, has completed a detailed survey of the extensive mine and quarry tunnel complexes as Chaldon and Godstone, and smaller sites at Gatton and Merstham. Nick Catford has made an excellent photographic record of the underground workings. Some of his images have been published in his 2013 volume ‘*Secret underground London*’ which features sites in and around Greater London more or less as bounded by the M25, especially in pages 256 to 277. The Croydon Caving Club and WCMS websites provide convenient access to much relevant information and many subterranean photographs. Books and articles such as the following are also recommended: BURGESS, Peter M, 2008, *Surrey’s ancient stone mines*. Crawley: author: 204pp [ISBN 978-0-9556081-1-7] and SOWAN, P W, 1976, Firestone and hearthstone mines in the Upper Greensand of east Surrey. *Proceedings Geologists’ Association* 86(4), 571 - 91. □



Merstham Quarry - a source of hearthstone  
([www.28dayslater.co.uk/](http://www.28dayslater.co.uk/))



Donkey Brand scouring blocks probably used ‘artificial heathstone’

## Diary February 2018

- 1 Thu Brunel Museum: Boat Tours Every Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday; meet 10:40 at Embankment tube station (not pier) for a boat trip along the Thames, then a train journey through the oldest tube tunnel in the world and descent into the underground chamber. No booking required; £10.
- 1 Thu Anne of Cleves House: New Season.
- 1 Thu London Museum of Water & Steam: Winter opening hours Wednesday-Friday 10:0-15:00; Weekends & school holidays 11:00-16:00.
- 1 Thu London Canal Museum: Working the Boats by Kirk Martin; 19:30.
- 2 Fri Wandle Industrial Museum: Beddington Park Walk every Friday around Beddington Park or Waddon Ponds; free; meet at 10:00 by St Mary's Church, Church Road, Wallington SM6 7NJ; refreshments available at church after walk.
- 4 Sun Kirkaldy Testing Museum: Open Day.
- 4 Sun IWA: Guided Waterside Walk - The Olympics, Three Mills, & Bow Back Rivers; meet at 14:30 outside Bromley-by-Bow tube station.
- 4 Sun Lambeth Local History Forum: West Norwood Cemetery Tour; 11:00.
- 4 Sun Croydon Airport Visitor Centre: Openday.
- 4 Sun Brunel Museum: Guided River Walk; meet at Bermondsey tube station and be guided to the Brunel Museum and below into the Grand Entrance Hall; every Sunday & Monday 10:40 & Wednesday 18:15; late opening after Wednesday's walk; no booking required; £10.
- 5 Mon Hampshire Industrial Archaeology Society: History of Hydraulics by Steve Skinner.
- 5 Mon Croydon NHSS: The Living Wandle by Rebecca Watts.
- 6 Tue 

Surrey Industrial History Group Guildford Lecture Series: Eric Alliot RFC, RAF and From Icarus to Airbus by Michael Alliot, son of an Aviation Pioneer.
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- 7 Wed Newcomen Birmingham: Plastics – their origins and development from Parkesine to Bakelite by Dr Susan Mossman.
- 7 Wed Docklands History Group: The Cubitts and the River Thames by Chris Everett.
- 8 Thu 

Surrey Industrial History Group Leatherhead Lecture Series: Crossrail by Patrick Griffin, Crossrail
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- 8 Thu Loughton & District Historical Society: The David Wilkinson Memorial Lecture - The Great Fire of London by Gustav Milne; 20:00; £1.50.
- 8 Sun Museum of London Docklands: Docklands Regeneration + Crossrail Walk; 14:00; £12.50; paid advanced booking.
- 9 Fri - 11 Sun Watercress Line: Special Pre Spring Steam Gala - unlimited travel for one day; £25.

Venues, Times & Contacts are on page 3.

## Diary February 2018

- 10 Sat - 18 Sun Royal Gunpowder Mills Waltham Abbey: Open Days 11:00-16:00; £10.50/£9.
- 10 Sat STEAM: Meet the Railway Workers; fortnightly.
- 10 Sat Lambeth Local History Forum: Brixton Market Heritage Walk; 14:30.
- 10 Sat Sussex Industrial Archaeology Society: Film Night; 19:30.
- 10 Sat Chatham Historic Dockyard: New Season starts.
- 12 Mon - 16 Sun Brooklands: School Half Term Activities including Car Rides.
- 12 Mon Watercress Line: Regular train timetable starts - unlimited travel for one day £16.
- 12 Mon - 18 Sun Amberley Museum & Heritage Centre: Half term Opening.
- 13 Tue Cuffley Industrial Heritage Society: De Havilland Museum by Alistair Hodgson.
- 14 Wed Newcomen London: The Development of the Engineering Drawing Office by Ivor Lewis.
- 14 Wed Didcot Railway Centre: Half Term Steam Days.
- 15 Thu Watford & District Industrial History Society: The History and Restoration of the Paddle Steamer Medway Queen by Pam and Mark Bathurst; 20:00; North Hall, Queens' School, Aldenham Road, Bushey WD23 2TY; www.wadihs.org.uk.
- 16 Fri Newcomen London: On the Centenary of the Royal Air Force, 1918-2018. Leonardo Torres Quevedo and the RNAS by Dr Francisco A Gonzalez Redondo. *Please note: venue is The Gallery, Alan Baxter Associates, 75 Cowcross Street, EC1M 6EL, (through the archway, in the basement behind the building), at 18:30.*
- 17 Sat Brooklands: Concorde Champagne Day: details from flyconcorde@brooklandsmuseum.com or 01932 857381 ext 237.
- 17 Sat Wandle Industrial Museum: Winter Walk - Visit the ponds and hills of Mitcham Common every Saturday afternoon at 14:00; meet at Mitcham Junction station (bus stop on bridge); easy 3-4 mile circular walk.
- 17 Sat - 18 Sun Didcot Railway Centre: Steam Days.
- 18 Sun Brooklands: Winter Classic Breakfast; gates open 07:45. Breakfast served from 08:00 until 09:30; Test Hill ascents (am).
- 18 Sun IWA: Guided Waterside Walk - Limehouse, Thames, & Docklands; meet at 14:30 outside Westferry DLR station (by the Cycle Hire Point).
- 18 Sun Peckham Society: Recent Archaeological Projects in Southwark by Gill King; 15:00; Goose Green Centre, St John's Church, Goose Green, East Dulwich Road, SE22; www.peckhamsociety.org.uk
- 19 Mon BIAG: Concrete Housing by John McGuinness.

**Diary February 2018**

- 20 Tue 

Surrey Industrial History Group Guildford Lecture Series: Heroes & Villains of the Basingstoke Canal by R Cansdale, Basingstoke Canal Society.
- 20 Tue Newcomen Portsmouth: Dirty but Necessary: South Hampshire and the Seaborne Coal Trade 1700-1850 by James Thomas.
- 20 Tue Greenwich Industrial History Society: Unlocking Deptford Creek - Industrial and Domestic Development Through the 19th Century by Michael Delap; 19:30.
- 20 Tue 

Surrey Industrial History Group Guildford Series: Heroes & Villains of the Basingstoke Canal by R Cansdale, Basingstoke Canal Society
- 21 Wed Brooklands - Royal Aeronautical Society Weybridge Branch: The Bristol 188 Stainless Steel Research Aircraft - Flight Test Trials and Tribulations by John Thorpe, FRAeS; 18:45; £2.50 at the door.
- 21 Wed GLIAS: Iron Men - C19th-Engineer Henry Maudslay and his Circle by David Waller.
- 22 Thu 

Surrey Industrial History Group Leatherhead Lecture Series:  
LEO The Lyons Computer by Neville Lyons
- 22 Thu Honeywood Museum Friends of Event: Sutton Borough's Varied Bus and Rail Services and how they have changed over the past decades by John Parkin; 19:30; £5, including tea and coffee from 19:00; (£4 Friends); please phone 020 8642 4778 to book.
- 24 Sat 

Surrey Archaeological Society: Annual Symposium - SIHG will have a small display about the Abinger Trip Hammer; 10:00-17:00; book online £12; Peace Memorial Hall, Woodfield Lane, Ashted, KT21 2BE.
- 26 Mon Railway and Canal Historical Society: Railway Safety and a Culture Change by David Maidment.
- 26 Mon Croydon Natural History and Scientific Society: Camden Town - Dreams of Another London by Tom Bolton.

**Diary March 2018**

- 1 Thu 

Surrey Industrial History Group Leatherhead Lecture Series: The Merchant Navy at War Pt III including The Falklands by Richard Mellor
- 1 Thu London Canal Museum: The Thames Tidal Defences by Nathan Ellis, Environment Agency; 19:30.
- 2 Fri - 11 Sun Chatham Historic Dockyard: Royal Dockyard Tours - Civilisation Festival.
- 3 Sat Brooklands: Concorde Champagne Day: details from flyconcorde@brooklandsmuseum.com or 01932 857381 ext 237.
- 4 Sun Brooklands: British Car Day / Austin Morris Day + Test Hill in action.
- 4 Sun Kirkaldy Testing Museum: Open Day.
- 4 Sun IWA: Guided Towpath Walk Along the Regent's Canal: King's Cross – Granary Square – Camden; meet at 14:30 outside King's Cross station (taxi rank).
- 4 Sun Lambeth Local History Forum: West Norwood Cemetery Tour; 11:00; www.lambethlocalhistoryforum.org.uk.
- 5 Mon HIAS: The Southampton & Salisbury Canal Revisited by Jon Sims.
- 6 Tue 

Surrey Industrial History Group Guildford Lecture Series:  
Shieldhall - Thanks to the Heritage Lottery Fund by Graham Mackenzie, Chief Engineer of SS Shieldhall.
- 7 Wed Newcomen Birmingham: James Watt and the Lunar Society by Dr Jim Andrew.
- 7 Wed Docklands History Group: The Lea Valley's Electronic Secrets by Dr Jim Lewis; 18:00.
- 8 Thu 

Surrey Industrial History Group Leatherhead Lecture Series: Bridges by Geoff Roles
- 8 Thu Loughton and District Historical Society: The History of Staples Road by Chris Pond.
- 10 Sat Lambeth Local History Forum: Brixton Market Heritage Walk; 14:30.
- 10 Sat Museum of London Docklands: Docklands Regeneration; 14:00; £12.50; paid advanced booking.
- 11 Sun Brooklands: Mach 2 for Tea: details from flyconcorde@brooklandsmuseum.com or 01932 857381 ext 237
- 11 Sun Dorking Museum: Guided Walk on the Deepdene Trail + entry to the Hope Mausoleum; 14:00-15:30; £4, book online to receive joining instructions.
- 13 Tue Westcott Local History Group: Time to Thank Them - A history of the VAD (Voluntary Aid Detachment) During the 1st and 2nd World Wars by John Drewry; .20:00; Westcott Reading Room, Institute Road, Westcott, Dorking RH4 3NP; www.westcotthistory.org.uk/.

Many thanks to all who have sent in contributions.  
***Please send in reports or photos of holiday visits or thoughts on local, national or international Industrial Archaeology by 15 April 2018***  
 for the next SIHG Newsletter!  
**Any articles or images, whether long or just a brief note will be appreciated - both by the editor and by the readers!**

The SIHG Newsletter is now issued quarterly, covering:

<i>February</i>	<i>May</i>	<i>August</i>	<i>November</i>
<i>March</i>	<i>June</i>	<i>September</i>	<i>December</i>
<i>April</i>	<i>July</i>	<i>October</i>	<i>January</i>

**Diary March 2018**

- 13 Tue Cuffley Industrial Heritage Society:  
A Female on the Footplate by Christine Adams.
- 14 Wed Newcomen London: Changing Waterscapes -  
Managing Water in 18th-Century London by  
Dr Carry van Lieshout.
- 15 Thu 

Surrey Industrial History Group Leatherhead Lecture Series: Alexander Raby and the Downside Mill by Richard Savage, SyAS
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- 15 Thu Watford & District Industrial History: The Sto-  
ry of B17 Flying Fortress Choo-Z-Suzy and her  
Crew by Chris Scivyer; 20:00; North Hall,  
Queens' School, Aldenham Road, Bushey  
WD23 2TY; suggested minimum donation of  
£4; www.wadihs.org.uk
- 15 Thu East London History Society: The Streets of  
London - The Booth Notebooks East by Jess &  
Mike Stone.
- 17 Sat - 18 Sun Kempton Steam Museum: Gizmos  
and Gadgets Galore + Triple in steam + railway  
running + Sunday only, Morris dancers.
- 17 Sat Royal Gunpowder Mills; Walking Tour - Royal  
Gunpowder Mills, Waltham Abbey; book at  
www.invitationtoview.co.uk/properties/royal-  
gunpowder-mills/.
- 18 Sun IWA: Guided Towpath Walk Along the Grand  
Union Canal - Little Venice and Paddington  
Green; meet at 14:30 outside Paddington  
station, Bakerloo line Praed Street exit.
- 18 Sun Honeywood Museum: Walk from Hackbridge  
up the Wandle and along Mill Lane exploring  
Hackbridge - Green Living and Working in  
Carshalton's Industrial Heartland led by An-  
drew Skelton and John Phillips; meet at 14:00  
on Hackbridge Green; £3.50 (£3.00 Friends);  
please phone 020 8770 4297 to book.
- 19 Mon BIAG: London Docklands by Colib Oakes.
- 20 Tue Newcomen Portsmouth: Railways and Warfare  
1865-1914 -  
The 'World' follows the Yankees by Bob Otter.
- 21 Wed Brooklands - Royal Aeronautical Society  
Weybridge Branch: The Work of Weybridge's  
Flight safety Department - its pioneering role in  
flight safety and accident prevention  
by Bob Bishop and Alan Simmons; 16:45;  
£2.50 at the door.
- 21 Wed GLIAS: James Brindley in London and his  
Plans for the Thames by Victoria Owens.
- 22 Thu Surrey Industrial History Group Leatherhead  
Lecture Series: Members' Short Talks.
- 22 Thu Honeywood Museum Friends Event: - Ponds,  
Houses and People 1890-1914 by John Phillips;  
; 19:30; £5, including tea and coffee from  
19:00 (£4 Friends); please phone 020 8642  
4778 to book.
- 23 Fri - mid June Chatham Historic Dockyard:  
Powerful Tides - 400 Years of Chatham and the  
Sea - inspiring artists from JMW Turner to Eric  
Ravilious and Yinka Shonibare;  
at No.1 Smithery; £22.00/ £19.50 (online  
price).  
*Venues, Times & Contacts are on page 3.*

**Diary March 2018**

- 24 Sat - 25 Sun Ancient Technology Centre:  
Pre-History Weekend; £10 payable on the gate.
- 25 Sun Brooklands: Mini Day - Clubs and enthusiasts  
from all over the UK; Test Hill in action; visitor  
parking in The Heights off Wellington Way.
- 25 Sun Shalford Mill: Reopens for the new season.
- 26 Mon Railway and Canal Historical Society:  
History & Restoration of the Wey & Arun Canal  
by Alan Johnson.
- 31 Sat - Apr 2 Mon Crofton Beam Engines: Easter  
Weekend Steaming.

**Diary April 2018**

- 1 Sun Michelham Priory Watermill: New Season;  
Open most afternoons; £9.80/£8.80 (including  
house & gardens); Upper Dicker, Hailsham,  
East Sussex BN27 3QS; 01323 844224,  
[https://sussexpast.co.uk/properties-to-discover/  
michelham-priory](https://sussexpast.co.uk/properties-to-discover/michelham-priory).
- 1 Sun Bursledon Brickworks Industrial Museum: New  
season; Open Wednesdays, Thursdays and Sun-  
days; 11:00-16:00.
- 1 Sun - 2 Mon Chatham Historic Dockyard:  
Festival of Steam & Transport 2018; £18/£15.
- 1 Sun IWA: Guided Towpath Walk Along the Regent's  
Canal - Mile End to Limehouse; meet at 13:30  
outside Mile End tube station.
- 1 Sun Kirkaldy Testing Museum: Open Day.
- 1 Sun Mapledurham Watermill: New Season; open  
Sundays & Holiday Mondays; 14:00-17:00.
- 1 Sun Amberley Museum & Heritage Centre: Vintage  
Car Show; £12.50.
- 3 Tue - 13 Fri Brooklands: Easter Holiday Activities  
including Car Rides; (weekdays only & exclud-  
ing Bank Holidays).
- 3 Tue Crossness Engines: Guided Tour 11:00-14:00; a  
talk about the site and the work being done by  
the Trust, then break for refreshments before  
taking a look at the buildings and engines.  
Be sure to wear flat shoes! The engine Prince  
Consort will not be in steam for this event.  
Tickets must be booked through  
Eventbrite prior to the event; £12 plus booking  
charge (£1.49).
- 4 Wed Newcomen Birmingham: Richard Trevithick's  
Lambeth Engine by David Hulse.
- 4 Wed Docklands History Group:  
The Strangest Ship that Never Sailed the Sea by  
Chris Ellmers.
- 5 Thu London Canal Museum: Canal People  
by Tony Condor; 19:30.
- 5 Thu Camden History Society:  
Tunnels Under Holborn  
by Antony Clayton; 19:30; £1; Camden Local  
Studies and Archives Centre, Holborn Library,  
32-38 Theobalds Rd, London WC1X 8PA;  
[www.camdenhistorysociety.org/](http://www.camdenhistorysociety.org/)
- 5 Thu Leatherhead & District Local History Society:  
The Museum reopens for the new season.0



## Diary April 2018

- 7 Sat Brooklands: Concorde Champagne Day: details from [flyconcorde@brooklandsmuseum.com](mailto:flyconcorde@brooklandsmuseum.com) or 01932 857381 ext 237.
- 8 Sun Brooklands: The MG Era with a cavalcade on the Mercedes-Benz World circuit, a Concours d'Elégance and ascents up Test Hill; visitor parking in The Heights off Wellington Way.
- 8 Sun Museum of London Docklands: Walking Tour - Docklands Regeneration and the development of the Crossrail project; 14:00; £12.50; Paid advanced booking.
- 8 Sun Crossness Engines: Family Open Day Prince Consort Under Steam; No need to book; 10:30-16:00.
- 9 Mon Hampshire Industrial Archaeology Society (HIAS): Lucy Houston, the Lady who Saved the Nation by Colin van Geffen.
- 10 Tue Cuffley Industrial Heritage Society: History of the Smallest Room by Peter Padwick.
- 11 Wed Newcomen London: John Pender (1816-96), The Cable King by Stewart Ash.
- 12 Thu – 15 Sun Industrial Explorer Tour - In North Kent; details from Bill Barksfield, Heritage of Industry Ltd, The Gables, 20 Main Road, East Hagbourne, Oxon OX11 9LN UK. Tel: 01235 352275 (09:00-17.30); [bill@heritageofindustry.co.uk](mailto:bill@heritageofindustry.co.uk), [www.heritageofindustry.co.uk](http://www.heritageofindustry.co.uk)
- 15 Sun London Bus Museum at Brooklands: Spring Gathering The Classic Bus Show Featuring an exhibition of "Brooklands and Buses"; Visitor parking in The Heights off Wellington Way.
- 15 Sun IWA: Guided Towpath Walk Along the Regent's Canal: Little Venice to Camden; meet at 14:30 outside Warwick Avenue tube station.
- 16 Mon BIAG: Slide Show presented by Bob Hoskins and Peter Trout
- 17 Tue Crossness Engines: Guided Tour – See 3 April for details.
- 18 Wed GLIAS: London's Underground Edwardian Tile Patterns, by Douglas Rose
- 18 Wed Honeywood Museum: The Discovery in the Basement - the Knights-Whittome Glass Plate Negative Photographic Collection by Abby Matthews; 19:00-20:00; Free; Please email Abby Matthews to book your place or call 020 8770 4746.

*Venues, Times & Contacts are on page 3.*

## Diary April 2018

- 19 Thu East London History Society: Meet The Authors - Whitechapel in 50 Buildings by Rachel Kolsky & Louis Berk.
- 21 Sat Wey & Arun Canal Trust: Morning boat trips + celebrating the completion of Gennets Bridge Lock; AGM 14:30; North Hall, Village Hall, Guildford Road, Loxwood, Billingshurst RH14 0SF.
- 21 Sat - 22 Sun Kempton Steam Museum: Model Railways Exhibition + Triple in steam and railway running both days.
- 21 Sat Royal Gunpowder Mills Waltham Abbey: Walking Tour; book at [www.invitationtoview.co.uk/properties/royal-gunpowder-mills/](http://www.invitationtoview.co.uk/properties/royal-gunpowder-mills/).
- 21 Sat SERIAC 2018 - South East Regional Industrial Archaeology Conference: at The Windsor Boys' School; see details on page 2 and the enclosed booking form.
- 21 Sat – 22 Sun Kempton Great Engines: Steaming Weekend + Model Railways Exhibition.
- 22 Sun Brooklands: Drive It Day - to encourage owners of all types of classics to get their vehicles out and drive them; this initiative is by FBHVC (Federation of British Historic Vehicle Clubs) and welcomes vintage and classic vehicles of all types.
- 22 Sun Amberley Museum & Heritage Centre: Spring Bus Show.
- 22 Sun Crossness Engines: Family Open Day; non steaming; No need to book.
- 24 Tue Greenwich Industrial History Society: The Yantlet + The Royal Arsenal's Forgotten Out-Station by Ian Bull.
- 29 Sun Brooklands: Velocette Motorcycles & Morgan Three Wheelers; #displays in the Paddock, Motoring Village and Finishing Straight + ascents up Test Hill. Visitor parking - Heights off Wellington Way.
- 29 Sun IWA: Guided Towpath Walk Along the Regent's Canal - King's Cross – Hitchcock's Hackney; meet at 14:30 outside King's Cross tube station (taxi rank); £10/£8.
- 29 Sun Bursledon Brickworks Industrial Museum: Spring Steam Up.
- 30 Mon Railway and Canal Historical Society: London Group AGM + Eastleigh Locomotive Works by Colin Boocock.

### Surrey Industrial History Group Officers

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