

Sussex Industrial Archaeology Society Newsletter

Number 205

January 2025



SERIAC 2024 launched by the Town Crier at Chichester College



Newsletter 205

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Editorial

Welcome to *Newsletter 205* and a New Year, may I wish you health and prosperity.

Increase in Subscriptions From 1 April 2025

Following the AGM where a resolution was passed to increase subs by £10, it was pointed out that such a large increase could be a tipping point causing members to consider whether to renew or not. Your committee accepted this view and have decided that the subscriptions will increase by £5 to £20 and will be reviewed on a more regular basis.

The new subscription rates from the 1 April 2025 will be

Full Member £20

Family member at same address £5

Life member £300

Members who pay by Standing Order are reminded to update the amount payable which is straight forward if one has access to online banking. If not you will need to contact your bank for this to be done.

John Blackwell
Chairman

Forthcoming SIAS Events

All the autumn and winter meetings are held at
West Blatchington Mill Barn, Holmes Avenue,
Hove BN3 7LF

Saturday 18th January, 2.00pm. Brighton Locomotive Works

Guy Hall will be presenting an illustrated history of Brighton Engine Works and will explain the history of this once massive factory in Brighton, a walk around the works itself and the locomotives it produced, from the small early locos, to the most unusual steam locomotives ever produced, Bullied's double ended Leader!

Saturday 15th February, 2.00pm. Industrial History of Lewes, c1700-1900

Sue Berry will be covering the development of diverse industries in the county town during this period. It will include an exploration of how a market and administrative centre's, mainly processing industries, such as candle-making and brewing, altered and why the fortunes of other industries such as iron industries fluctuated.

Saturday 15th March, 2.00pm. Newhaven's Industrial Past and its influence on its present – Part 2

Following Will's previous talk earlier in the year he will present a further selection of images from the large collection held by Newhaven Historical Society at their Newhaven Museum. Currently volunteers at the museum are undertaking a major exercise of sorting and digitising a large cache of photographs and documents, many of IA interest. The nature of industry and employment in the town has changed radically over the last 150 years and the talk will be a further exploration of these changes.

Saturday 10th May, 11.00am. Visit to Tunnel House above the entrance to Clayton Railway Tunnel and Jill Windmill on the Downs above Clayton

The visit to Tunnel House is a rare opportunity to visit the building and its garden behind the castellated entrance to the tunnel. The owner has kindly offered to show us around the house and the grounds with the sound of the trains running beneath the building. The house and gardens are small so the group size has to be restricted. So booking will be essential and places will be allocated on the order of booking. Park in Clayton Recreation Ground on the east side of the road. Entrance to the recreation ground is off the road leading to Clayton Village. Meet at 10.50am at the entrance to the Recreation Ground and we will then walk to the security gate for access to Tunnel House.

The lunch break will occur after the visit and there will be time to purchase lunch at The South Downs Garden Centre, Hassocks – a short distance along the road towards Hassocks. The Garden Centre has a heritage centre with the Budding Foundation of Gardening, some small displays of Sussex Industries such as trug

making and a live display of bee keeping.

In the afternoon we will have a visit to Jill Windmill on The Downs above Clayton. The working post mill was originally constructed in 1821 in Brighton and in the 1850s was pulled up to the top of The Downs using Oxen. The visit will include access to the internal workings of the mill which have been extensively restored. And of course the views from the mill are spectacular.

The Group size for the visit to Tunnel House is restricted so it is essential to book in advance by contacting Malcolm Dawes. Email malcolm.dawes@btinternet.com or tel. 01273 561867

The visit to Tunnel House is subject to the following conditions.

- Heavy rain before the visit will necessitate cancellation of the visit.
- Visitors attend at their own risk. The visit should be regarded as a personal visit to someone's home. No insurance etc.
- Sensible shoes are needed. Watch out for rabbit holes, slippery slopes etc.
- Visitors must not be under 18.
- Illness of the owner of the house may necessitate cancellation of the visit.



Events from Other Societies

Malcolm Dawes

Detailed below are events organised by other societies, which may be of interest to our members. If you have details for future events please send these to Malcolm Dawes, 52 Rugby Road, Brighton, BN1 6EB or e-mail to malcolm.dawes@btinternet.com.

Wednesday 29th January, 7.30pm. *Railways and tram systems of Paris*

Volks Electric Railway Association talk by Tony Gwyther. Donations towards cost of running the meeting. Patcham Community Centre, Ladies Mile Road, Patcham. www.volkselectricrailway.co.uk/news/events

Saturday 1st February, 10am to 4pm. *Open day at the Brede Steam Engines* Steam and working industrial engines. Situated 6 miles from Hastings on A28 to Ashford. For any enquiries email bredesteamgiants@hotmail.com or phone 01424 844882.

Sunday 2nd February, 10.00am. *Geoffrey Mead's "Ambles not Rambles"*

Bedelands Farm in winter. Meet Burgess Hill Football Club, Leylands Park. g.mead@sussex.ac.uk

Tuesday 4th February, 7.30pm. *Warship Ashore! New perspectives on the wreck of HMS Brazen wrecked at Newhaven in 1800*

Newhaven Historical Society & Museum talk by Dr Cathryn Pearce at the Hillcrest Centre, Bay Vue Road, Newhaven. Free parking next to the Hillcrest Centre. Non members £5. www.newhavenhistoricalsociety.org.uk

Wednesday 12th February 7.30pm. *Old Atherington and the washed away villages of Western Sussex*

Chichester Local History Society talk by John Mills, past County Archaeologist. Non Members £5. New Park Centre, New Park Road, Chichester. 01243 784915. <https://chichesterlocalhistory.org.uk>

Friday 14th February, 8.00pm. *A potted history of Archaeology*

Burgess Hill Heritage & History Association talk by Simon Stevens, Project Officer for Archaeology South East. Cyprus Hall, Cyprus Road, Burgess Hill. Small entrance fee. www.burgesshillheritagehistory.org.uk

Wednesday 19th February, 7.45pm, *AGM followed by Quiz set by David Start*

Sussex Transport Interest Group. London Road Station. Non members £2.50.

Thursday 20th February, 2.00pm. *The effect of World War II on Britain's Railways*

RCTS Chichester Branch Meeting. Bassil Shippam Centre, Tozer Way, St Pancras, Chichester. <https://rcts.org.uk/branches/branch-chr-chichester>

Saturday 22nd February, 2.30pm. *What the 60s did to/for Brighton*

Brighton and Hove Archaeology Society, Local History Forum talk by David Fisher. £4 non members. The Fellowship Room, Central United Reformed Church, 102 Blatchington Road, Hove. www.brightonarch.org.uk

Saturday 22nd February, 2.00pm. *Old Atherington and the washed-away coastal medieval villages of West Sussex*

West Sussex Archives Society talk by John Mills former County Archaeologist. Non members £8.00. Clymping Village Hall. www.wsas.co.uk

Saturday 1st March, 10am to 4pm. *Open day at the Brede Steam Engines*

Steam and working industrial engines. Situated 6 miles from Hastings on A28 to Ashford. For any enquiries email bredesteamgiants@hotmail.com or phone 01424 844882.

Sunday 2nd March, 10.00am. *Geoffrey Mead's "Ambles not Rambles"*

Arlington on the the Cuckmere. Meet Arlington Reservoir car park.

g.mead@sussex.ac.uk

Tuesday 4th March, 7.00pm.. *Parker Pen – oral history project*

Contact for the Parker Pen Project is Lara Leslie lara@pressplayfilms.co.uk. Event to take place at the Hillcrest Centre, Bay Vue Road, Newhaven. Free parking next to the Hillcrest Centre. Non members £5. www.newhavenhistoricalsociety.org.uk

Wednesday 12th March 7.30pm. *What did the Victorian's do for Chichester?*

Chichester Local Historical Society talk by Alan Green. Local historian and author. Visitors £5. New Park Centre, New Park Road, Chichester. 01243 784915.

<https://chichesterlocalhistory.org.uk>

Friday 14th March, 8.00pm. *The Devil's Dyke Story*

Burgess Hill Heritage & History Association talk by Chris Horlock. Cyprus Hall, Cyprus Road, Burgess Hill. Small entrance fee. www.burgesshillheritagehistory.org.uk

Saturday 22nd March, Time to be advised on web site. *The Rising Down: Lives in a Sussex Landscape.*

West Sussex Archives Society talk by Alexandra Harris. Entry cost to be advised. Barnham Community Hall. www.wsas.co.uk.

Wednesday 26th March, 7.30pm. *The Spa Valley Railway*

Volks Electric Railway Association talk by Brian Halford. Donations towards cost of running the meeting. Patcham Community Centre, Ladies Mile Road, Patcham. www.volkselectricrailway.co.uk/news/events

Wednesday 26th March 7. 15pm. *The last years of British Steam*

RCTS Chichester Branch Meeting. Bassil Shippam Centre, Tozer Way, St Pancras, Chichester. <https://rcts.org.uk/branches/branch-chr-chichester>.

Tuesday 1st April, 7.30pm.. *Newhaven's industrial past and its influence on its present*

Newhaven Historical Society & Museum talk by Dr Will Pilfold.. The talk will follow the AGM. The Hillcrest Centre, Bay View Road, Newhaven. Free parking next to the Hillcrest Centre. Non-members £5. www.newhavenhistoricalsociety.org.uk

Saturday 5th April, 10am to 4pm. *Open day at the Brede Steam Engines*

Steam and working industrial engines. Situated 6 miles from Hastings on A28 to Ashford. For any enquiries email bredesteamgiants@hotmail.com or phone 01424 844882.

Wednesday 9th April, 7.30pm. *Evidence of the Everyday: social history of the 16th and 17th centuries revealed through witness statements to the Chichester Consistory Court*

Chichester Local Historical Society talk by Dr Linda Robertson, Social Historian. Visitors £5. New Park Centre, New Park Road, Chichester. 01243 784915. <https://chichesterlocalhistory.org.uk>

Friday 11th April, 8.00pm. *The wonderment of middle earth*

Burgess Hill Heritage & History Association talk by Mak Norman. Cyprus Hall, Cyprus Road, Burgess Hill. Small entrance fee. www.burgesshillheritagehistory.org.uk

Monday 21st April , 10am to 4pm. *Open day at the Brede Steam Engines*

Steam and working industrial engines. Situated 6 miles from Hastings on A28 to Ashford. For any enquiries email bredesteamgiants@hotmail.com or phone 01424 844882.

Saturday 26th April, 2.00pm. *Sussex Inn Signs and their history*

West Sussex Archives Society talk by Dr Janet Pennington. Entry cost to be advised. Billingshurst Centre. www.wsas.co.uk

Sunday 27th April, 10.00am. *Geoffrey Mead's "Ambles not Rambles"*

Slaugham in the High Weald. Meet Slaugham church 10am. g.mead@sussex.ac.uk

Tuesday 29th April, 7.00pm. *Freeland's Fair Ground – the Curious History of Oaklands Park, Chichester*

West Sussex Record Office talk by Alan Green. West Sussex Record Office, Orchard Street, Chichester. Phone WSRO 01243 753602 for in person tickets.

Saturday 3rd May, 10am to 4pm. *Open day at the Brede Steam Engines*

Steam and working industrial engines. Situated 6 miles from Hastings on A28 to Ashford. For any enquiries email bredesteamgiants@hotmail.com or phone 01424 844882.

Weekend 10th- 11th May. *National Mills weekend.*

See Mills *newsletter* for further details

Sunday 11th May. *Historic Commercial Vehicles Run, between London and Brighton.* www.hcvs.co.uk

Local Exhibitions of interest

Novium Museum, Chichester

A small exhibition on Selsey Tramway. Until end of 2025.

Pallant House Gallery, North Pallant

Dora Carrington: Beyond Bloomsbury. Peripheral member of the Bloomsbury Group. Highly recommended. Until 27th April.

Do please check details with societies web sites before travelling

*The details of these meetings and events organised by other groups
are only included as a guide and as a service to members:
inclusion here is not intended to be seen as an endorsement.*

E-Mail Addresses

*Members who are not currently receiving e-mails, giving details of
our upcoming talks and visits etc. and who wish to receive such,
please forward your e-mail details to the
Membership Secretary (ron.gordon@myphone.coop)*

SERIAC 2024

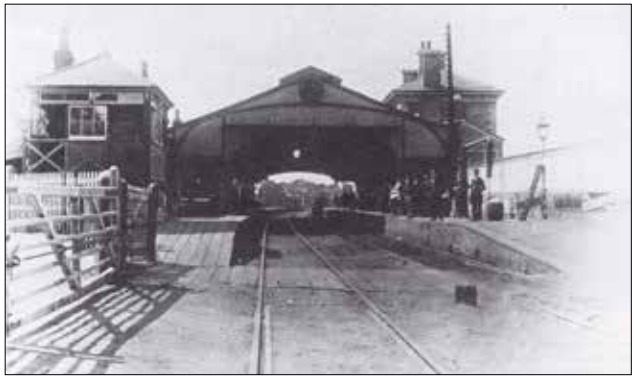
John Blackwell

This year's SERIAC, the first for five years, was held at Chichester College, and hosted by SIAS.

Proceedings got off with a rousing start from Chichester's Town Crier, Richard Plowman, who welcomed the 92 delegates in traditional manner.

The first presentation was by SIAS member and Chichester resident Alan Green entitled **By Rail to Chichester 1846 to 2016**. The City was early entry on the railway map arriving from Brighton via Worthing in 1846 en route to Portsmouth which was reached the following year. The station unfortunately did not compare with cousins in other cities but did sport a cast iron overall roof which lasted into the

1890s The station buildings lasted another 60 years until 1958 when its replacement was built in Festival of Britain style with a lofty booking hall complete with chandelier, clock and decorative tiles. In 1881 a branch was constructed to Midhurst connecting with the LBSCR line from Three Bridges and Horsham but not with that from Petersfield operated by the LSWR. The new line was provided



Chichester station iron roof

with splendidly extravagant stations identical to those surviving on the Bluebell Railway. Sadly traffic did not support such facilities except once a year at Singleton for Goodwood races. Closure to passengers came in 1935 and goods in 1966 except to Lavant the first station out of Chichester where sugar beet and later gravel extraction lasted until 1991. The final line south to Selsey opened in 1897 and rejoiced in the name of The Hundred of Manhood and Selsey Railway. Engineered by the 'King of Light Railways' Colonel H F Stephens it operated in typical style with second hand locomotives and carriages, wood and corrugated iron stations, no gates where it crossed highways and a less than reliable timetable. It struggled on until 1935 never having been connected to the main railway network.

Portsmouth Dockyard – Once the Largest in the World was Dr. Philip McDougall's, presentation. Richard I ordered the construction of the first dock on the site. In 1495 when Henry VII constructed the first dry dock it became a state owned facility for building and maintaining warships. It was somewhat superceded, when Chatham, another Royal Dockyard opened in the mid 1500s and no new naval

vessels were built at Portsmouth for another hundred years. The eighteenth century saw a huge increase in facilities with new docks both wet and dry with buildings and stores necessary for ship construction. One such building was a rope house. A typical warship needed 25 miles of rope which required renewing every three years. The surviving rope house at Portsmouth is over 1,000 feet long and like its two predecessors almost suffered the same fate when in 1776 an American revolutionary, known as John (or Jack) the painter, snuck in with homemade incendiary devices and set fire to the hemp stored in the building. The blaze destroyed all the hemp and gutted the building. Jack escaped but was captured, tried and hung from the mizzenmast of *HMS Arethusa*, this had been removed from the ship and set up outside the dockyard gates. Pulley blocks were another vital part of the rigging, typically 800 were needed for a warship and 100,000 were required by the navy each year. Marc Brunel (father of Isambard Kingdom) proposed to the navy they use his patented block making machine. By 1808 a block making factory was built at Portsmouth powered by steam and by using 45 of his machines, produced 130,000 blocks per year. This was the first application in the world to use machine tools for mass production. By 1860 wooden warships were obsolete and iron hulled ships powered by reciprocating steam engines were being constructed. The first such Royal Navy vessel was *HMS Warrior* launched in 1866 is now restored and on show at Portsmouth. Steel soon replaced iron and 1905/6 saw the construction of *HMS Dreadnought* the first capital ship powered by steam turbines, making this the fastest battleship in the world. (Incidentally she took no part in the Battle of Jutland or any battle in WWI as she was being refitted.)

Why did Britain's Technological Revolution cool down? was the title of Alan Burkitt Gray's (GLIAS) presentation.

In 1963 Harold Wilson, promised "a new Britain forged in the white heat of technological revolution" For a decade or two the UK did invest in technology not just aircraft (Concorde), high speed railways (which introduced Inter City 125 but not the Advanced Passenger Train) but also in modern electronic technology such as telecommunications computers and semiconductors (chips). In 1968 the Wilson government encouraged the takeover of the English Electric Company by the General Electric Company to form a giant electrical engineering manufacturer to compete in the international market. It also created International Computers Ltd (ICL) whose headquarters were in Putney. This brought together all the UK computer manufacturers to create a British computer industry, with staff numbers of 33,000, which could compete with major world manufacturer IBM. (which it never could) The aim was to increase exports and bring economies of scale but neither of these aims was successfully achieved. A major problem for both was their previously individual companies relied too much on the public sector

and a seemingly guaranteed income, such as General Post Office, Inland Revenue Department of Work and Pensions and the Ministry of Defence. Any funding allocated for research and development benefited these contracts with no vision of how the resulting ideas and advances in technology could (and should) have been adapted for commercial and consumer benefit.

Several companies were mentioned but how the following decades with financial crises, governments with different ideologies and agendas, and with few MP's having experience or knowledge of fast moving technology affected them was not considered. I have selected two such which, with the help of the internet, illustrate this.

'System X' a digital switching system developed by GEC Plessey Telecommunications (GPT) with others, for the GPO was installed in almost all telephone exchanges in the UK from 1980 onwards and by 1990 the UK's trunk network was a wholly digital operation unlike any other country but was any attempt was made to develop this global market? Probably not as sales were only made to Jersey, Gibraltar, Hong Kong and some Commonwealth African countries. However pursuing such an option was not helped when the newly privatised BT (ex GPO) brought in Ericsson as a competitive alternative supplier, ending GPT's monopoly. Ericsson later acquired most of GPT's assets but Telent, a British company, currently services and develops BT's 'System X's' exchanges until the next generation of fibre technology is introduced.

Similarly ICL concentrated on its mainframe contracts for public sector departments and when faced with economic pressures in 1980 slashed its workforce by 13,000 to 20,000 with a knock on effect to its R&D budget. In 1981 ICL entered into an agreement with Fujitsu for its chip technology. It consequently ceased manufacturing its own large mainframe machines concentrating on home computers and other office products. More problems and financial crises led to Fujitsu becoming more involved purchasing 80% of the shares in 1990 and in 1998 they became the sole shareholder when acquiring the remaining 20%. It was widely predicted that the company would be floated on the stock exchange but concerns over the 'Millennium Bug' and the bursting of the 'dot com bubble'. This had generated excessive stock market speculation causing computer shares to plummet and caused this option to be abandoned. ICL was rebranded as Fujitsu in 2002 and absorbed into Fujitsu who continued to provide and develop contracts with big name British customers and we are all well aware where that led to.

Another British champion in technology that was taken over by a larger foreign competitor.

Following lunch Jim Beckett from HIAS presented **Burlesdon Brickworks –From Brickworks To Museum**. Their history starts with Edward Hooper who bought Exbury Brickworks, near Southampton, which made white bricks in 1850. In

1863 he was joined by his brother Charles, a retired surgeon and his brother in law Edmund Ashby forming the partnership Hooper and Ashby. Edward died in 1869 and in 1879 Edmund signed a lease for land at Chandlers Ford which had clay deposits suitable for making red bricks. The following year, when Charles retired, Edmund was joined by his wealthy brother Robert Ashby. They invested in a brickmaking machine, worked by steam power, and manufactured by Bennett and Sayer of Derby. This combined a pugmill, an extruder, and wire cutters producing 20,000 bricks per day. With clay beginning to run out a new site at Swanwick on the banks of the River Hamble next to the railway was acquired, on which a new brickwork's was built in 1897. The old works at Chandlers Ford closed when another brickworks, the Northern Works, was added to the Swanwick site in 1903. In the same year the Bursledon Brickworks Company was registered. Both works had steam heated drying sheds and a variant of the Hoffman continuous kiln with multiple chambers, some heating whilst others cooled. By 1935 the works had been extended and an aerial ropeway installed as clay was now being dug a mile away from the works. Production was 20 million bricks each year. After the Second World War, the family business was amalgamated with the Sussex and Dorking Brick Company and in 1959 became Redland Holdings Ltd. Closure came in 1974, the M27 had bisected the site and clay was becoming expensive to extract. The northern part was cleared and is now occupied by NATS, the National Air Traffic Service, and the present museum established in 1977 on the southern part.



Brick Machine Bursledon Brickworks
Hampshire

The final speaker was Dr. Geoffrey Mead (SIAS) with **'A man may have constant employ' The IA of Southern England: an alternative approach.** *The Historical Approach* is the most often used, beginning with Flint Mining, 6,000 years ago, on the South Downs north of Worthing and examining how the mines were dug, the flints extracted, the tools used, the products made, how these were transported and to where. The 1490s saw the introduction of the blast furnace to the Weald of Kent and Sussex producing cast iron. A second process was required to refine this into wrought iron, a forge. By mid sixteenth century there were 50 furnaces and forges in the Weald. The eighteenth century saw the rise of inland spas and resorts for sea bathing, the start of the leisure industry. The quality of the roads to get to these places

was often poor or very poor and led to improvements to their surfaces by imposing a toll on users, the establishment of turnpike trusts. More recent times have seen the growth of suburbia, the introduction of electricity, re-armament in preparation for WWII and in the 40s and 50s the annual seaside holiday. *The Geological Approach*: Using Kent as an example, coastal areas supported fishing with a large fleet at Deal and renowned oysters at Whitstable. Chalk deposits in North Kent at Gravesend and Northfleet together with a plentiful supply of water were ideal for cement manufacture. Roman cement was made at Northfleet in 1796 and from 1846 Portland cement was manufactured when William Aspdin, son of the inventor of Portland Cement Joseph Aspdin, took over the works and built new kilns for its production. Cement production finally ceased at Northfleet in 2008. Coal deposits were discovered to the north of Dover in 1890, when borings for an early channel tunnel project were being made. Five pits were subsequently opened Betteshanger was the last to close in 1989. (Little now remains). The low lying London Clay marshlands along the Thames and Medway estuaries are said “to have built London in the nineteenth century” A more unusual approach is *Animal Vegetable or Mineral*: An animal example being, cattle driven from Wales to London would be fattened on arrival, on pasture, before being taken to Smithfield for slaughter and meat production. This left skins, horns and tails spinning off to other industries for example tanneries in Bermondsey using oak bark in the process. Horn was used for household items such as spoons, beakers and combs. The final approach offered was *Industries Gone in Living Memory*: Blue boulder men, at Rye and Newhaven collected blue flint stones which they carried from the beach to boats in baskets slung from their shoulders. These were transported to destinations such as Runcorn in Cheshire for use in the glass industry and to the Midlands to supply the pottery industries. Horse buses disappeared with the change to motor transport, no horses, no hay, and no stables were needed, a vast redundancy. One can only assume what happened to the horses, meadows were built over and stables repurposed as bus garages. The presentation was illustrated with a superb set of images.





Dr. Geoffrey Mead
Rounding off the talks



Poyntz Bridge opening

The final event was a **Canal Walk** led by Alan Green with a large group of delegates who visited the canal basin, old lime kiln, Poyntz bridge of 1820, restored by SIAS volunteers, the last vestiges of the gas works, a wall lined with retort linings, the rail and bus stations and the bus garage.

Thanks to all the speakers, the catering staff at Chichester College for an excellent day which ran like clockwork. It is hoped that another society in the SERIAC group will be able to continue the event in the next year or two.

Lewes Bus Station

Alan H J Green

On 12th September the Planning Committee of the South Downs National Park voted to approve a development that would see Lewes Bus Station demolished and replace by a housing development with no affordable housing. Access to bus services are to be provided by two bus stops on Phoenix Causeway either side of the busy dual carriageway.

SIAS have been opposed to this development and Alan Green has written letters of objection as well as attending the meeting of the Planning Committee. The decision to approved this development goes against much current thinking on public transport, affordable housing and sustainability, removal of a welcoming transport facilities next to a busy shopping centre, no provision of affordable housing and demolition of a building of good quality causing unnecessary releases of carbon emissions into the atmosphere.

Of particular disappointment for SIAS will be the loss of the last island bus station in the UK. A building of good condition that could have provided such a vital public transport facility for Lewes.



Sussex ports and harbours 1698

“No room for any improvement...”

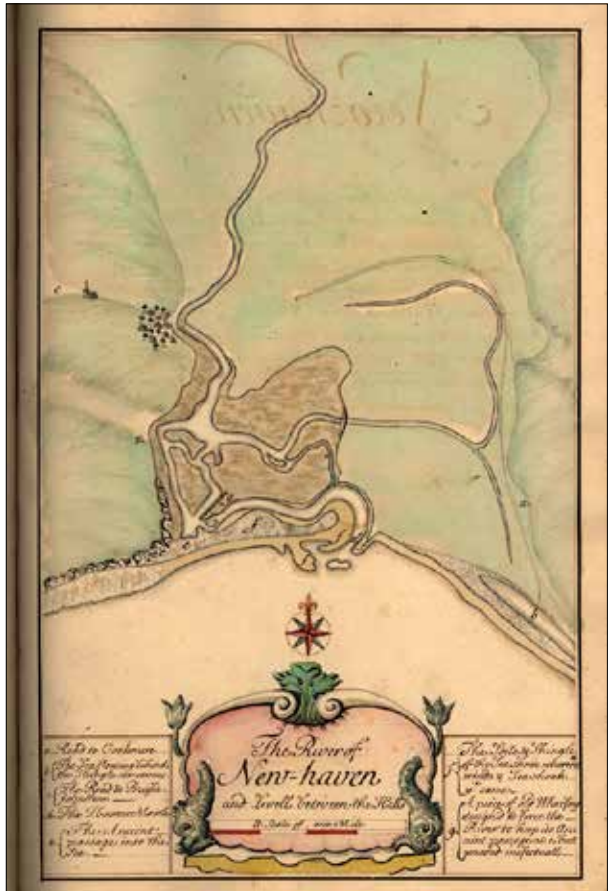
Geoffrey Mead

During 2024 the Ropetackle Arts Centre in Shoreham-by-Sea put on a day conference on ‘Sussex Social History’, where I was giving a paper on Coastal Work Patterns. One of the speakers, Dr Ann Coats, made use of two maps that I was unaware of....and me a geographer! Both were of the late 17th century and showed the south coast of England; one by a Dutch cartographer Johannes Van Keulen, the other by a pair of English map makers Edmond Dummer and Captain Thomas Wiltshaw. While the Van Keulen map showed the Channel coast in general, the Dummer map showed individual ports with the intention of assessing their worth for the Navy. For clarity I have copied the 17th century text of rather curious spellings into modern script.

The late 17th century was one of intense industrial activity in the High Weald of South East England with the Wealden Iron Industry providing a range of goods for both government and domestic and overseas markets. During the English Civil Wars, when most of East Sussex was of a Parliamentary persuasion the Wealden ironmasters produced a range of cannon bringing much work and financial advantage to the area. With the return of Charles II and the steady growth of the British Empire with colonies and plantations in North America and the Caribbean, as well as trading posts in West and South Africa and in India, there was a constant need for all manner of iron goods from cooking pots and fire backs to cannon. With Samuel Pepys’ re-organisation of the Navy the number of ships, and therefore cannon, greatly expanded. All was well in the Weald other than one thing... transport. The guns needed to be on vessels being fitted out in the Navy yards at Deptford and Greenwich, Chatham and Portsmouth; all a considerable distance from the centre of the iron industry in the High Weald. The geology of the High Weald, its heavy clays, steep sandstone and high level heathlands made travel very difficult, time consuming and costly. Daniel Defoe writing of that time noted that taking a huge tree for the shipyard at Chatham from near Tunbridge Wells took ‘two and twenty oxen’ and the journey could take up to three years! For a journey of 28 miles! Using waterborne transport was an alternative to the appalling roads. The Eastern Rother flowing from the east of Ashdown Forest to Rye was extensively employed as were the Ouse and Cuckmere and in West Sussex the Adur and Arun. However the difficulty lay in the final stretch of the rivers as they neared the coast. The constant easterly flow of beach deposits brought about by the Atlantic currents creating ‘Long Shore Drift’ caused sand, and in particular flint shingle, to form offshore sandbars and on shore shingle spits which had the effect of diverting river mouths eastward mainly. At Pagham in West Sussex the opposite occurred where

Selsey Bill caused a change in the current flow westward. Shingle spits diverted the river flow, slowing the stream and thus causing clay and silt particles to form as mudflats. Agricultural practices further upstream also upset the natural order of things and rapid silting would occur. All this made access to the English Channel problematic, especially at times of low tides. The Dummer surveys convey the picture well. Rye was studied in detail, but the final line of the summary made sad reading - *"We look upon this haven as entirely lost..."* Similarly Pevensey [or Pemsey' as they have it]- *"...therefore proper for no use in the service of the Navy."* And no different at 'Cookmere'- *"...very little to be taken notice of at this place for the improvements we are seeking."* Arundel was little better-*"This impediment is the same in proportion at all the other places we have spoken of..."* Chichester fared a similar fate- *"...Rocks called the Oares and the Sands of the Horse. There is no room among them for any improvement for the Navy, nor did there appear to be any place fitting to build a ship of the 4th rate..."*

"It may be observed that the havens and rivers of Rye, Pevensey, Cuckmere, Newhaven, Shoreham & Arundel are now (whatever they have been) no proper subjects for improvement for the Navy, for want of that benefit all useful ports have namely a sufficient in draught of the sea suitable to the rise of tides upon the same coast that there (on springs are) observed to be 19 & 20 ft. upright, for industry by enclosing waste on the one hand, and nature on the other, by the plenty of sullage the sea washes from the higher shores and carries about in motion to lodge again in places more confined and quiet, have by degrees not only filled vast spaces once



doubtless possessed by the sea, with firm ground but have likewise choked up almost ye very passages of the land fresh, which naturally tend to it so that in these areas in the decays of natural things in general the conduits and channels of their being are destroyed with themselves and we doubt without hopes of reviving."

Detail is given on the South Coast ports and harbours which illustrate these difficulties on a more localised basis. The basis for the survey was to give the Navy more detailed information on various havens. As it is an extensive account I have chosen the two principal 21st century ports as exemplars

"Newhaven is distant from



Cuckmere about 4 miles westward and stands upon the river which goes to Lewes and the Wild of Sussex, about 1 ¼ miles from the wash of the sea and is likewise very inconsiderable being stopped up and barred by the same means which hath rendered the aforementioned havens [Rye, Pevensey, Cuckmere] useless, namely by enclosing the waste in the Levels about the same and excluding the in draught of the sea, that in all probability in former times had greater freedom to flow in and out and kept the channel deep and open. But there are now no qualifications to be discerned proper for the Navy."

"The next place westward of Newhaven hath likewise suffered the same fate with those foregoing, this river is the common drain of a very great portion of the County of Sussex, the remains of the ancient castle of Bramber lyeth about 4 Miles above the town whence one might take it to have been a port invested with much better circumstances

heretofore, now it admits nothing improvable; the haven's mouth is a dry bar upon the ebbs of spring tides, and the out sea, in foul weather throws up extraordinary quantities and heaps of beach in the manner of small islands, sometimes here and sometimes there in the very mouth of it, and whether you come in or go out you meet with great difficulty, and hazard, they continue to build new ships from 300 tons downwards, and waiting good seasons with proper care, they get them into these; but with: relation to our enquiry we discern nothing to be accounted for."

The difficulties the Navy had seeking adequate



accommodation for its vessels was mirrored by the merchant fleet attempting to move the timber and iron goods, but especially the heavy, bulky cannon. It was not unknown for merchants to petition Parliament for assistance and the opening of the Ouse mouth at the village of Meeching in East Sussex to avoid the choked river mouth at Seaford created a New Haven. This had taken place over a century before and a similar attempt at the mouth of the Arun brought a straightening of the river to enter the Channel at a point south of the small riverside community of Little Hampton. Shoreham as has been noted in several Newsletter articles in the recent past suffered much economic woe until the Adur mouth was stabilised in the mid 18th century, before the present harbour arms were added in the 19th .

Bluebell Atlantic Project Supporters' Day

Alan H J Green

I have been a supporter of the Bluebell Railway's long running project to build a replica LBSCR Class H2 Atlantic, and, along with the other supporters, received an invitation for a free trip for two behind 32424 *Beachy Head* on 5 October 2024. The offer also included free tea and cake – how could I refuse?

Sadly it looked as though I would have to refuse as it clashed with a SIAS committee meeting at West Blatchington and, as minutes secretary, I don't have the option of not being there. A cunning plan was needed, a plan that had to include transport as I don't have a car. I invited (?coerced) fellow committee member Malcolm Dawes to be my

guest on condition that he drove us to Sheffield Park after the meeting. He agreed. The committee meeting had been brought forward to 0930 to ensure it would end by 1200 in order to give a fighting chance of making the 1300 train. It duly ended at 1155; so far so good. Unfortunately, by the time we finally managed to leave Brighton we had just 29 minutes to get to Sheffield Park, park the car and exchange the voucher for tickets. Malcolm made excellent time and we entered the car park at 1256 – four minutes to spare! Leaving Malcolm to park up I headed for the booking office where the distant panting of a Westinghouse pump heralded *Beachy Head* as being in charge of the 1300 - our luck was in. Then, just as I obtained the tickets, the barrier was closed and *Beachy Head* steamed out on time without us. Our luck was out.

There was an hour and a quarter until the next train (not *Beachy Head*) at 1415 so the only option was to take that to Horsted Keynes and catch *Beachy Head* on its



return trip to Sheffield Park. This was not ideal as not only would it be a short trip, the only place to get a decent head-on shot of it on a train is at East Grinstead.

It was at Horsted Keynes that the timetable began to unravel. The return trip of Beachy Head from East Grinstead had been delayed by the late running of the *Wealden Rambler* dining train, resulting in us arriving 15 late back at Sheffield Park.

We thought we would try to get some photographs of the running-round from the

footbridge but that idea failed when 32424 headed instead into the loco yard. David Jones was on the footbridge and he advised us to go to the station buffet quickly as the free cake was fast running out. We did so but the queue was so long we realised that if we joined it we would miss the 1530 departure. Accordingly we made our way out to await the return of the loco, but things were now getting very G.W.R. (Goes When Ready) and at 1530, when the train was due to depart, 32424 was



still in the yard. It was then announced that the train would be leaving at 1545, so back to the buffet where the queue had subsided but so, unfortunately, had the cake. We managed to secure the last two slices – the only stroke of luck that day. Come 1545 the train still hadn't left, and wasn't to do so for another 10 minutes. Had we chosen to



Beachy Head arriving (late) at Horsted Keynes. Even seen tender first it is an elegant machine. The first coach is the GNR saloon and it was followed by 4 Mark 1's. (Author)

have a return trip to East Grinstead heaven alone knows what time we would have got back so we gave up. The best laid plans of mice and men...

Still, what we did experience was really impressive. Beachy Head, resplendent in BR lined black, a livery that brings out so well the elegant lines of pre-grouping locomotives, looked and sounded superb. The special day had attracted hundreds of supporters of the Atlantic Project, and the first down train headed by Beachy Head had been full and standing from East Grinstead.

It is staggering to think that a working steam locomotive of this size had been built by volunteers in an onsite shed and not at a commercial works as had been



Beachy Head has emerged from the loco yard and, en route to its train, is taking on water at the country end of the down platform, long after it should have departed for East Grinstead. Note the 75A shedplate for Brighton which was the last allocation of the original loco in 1958. (Author)

Tornado. A true triumph of endeavour and engineering skill. If you have not already done so I strongly urge you to go to the Bluebell to savour the delights for yourself



– but allow plenty of time to get there. May the luck be with you!

Still at the water crane and some grumpy old git with a stick gets in the way and deliberately ruins a good photograph. Typical! (Malcolm Dawes)



SIAS sales stand at SERIAC 2024

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**NOTE**

*Please let me have your images and memories for the next Newsletter (or two!) It may be it something you pass every day, but the rest of us may be unfamiliar with. Social media , Facebook, YouTube, etc are growing with increasingly interesting groups that I find impossible to keep up with, if you spot one please let me know. I am always looking for examples of our IA heritage.*

## Sussex Industrial Archaeology Society

Chairman : John S. F. Blackwell, e-mail [johnblackwell@ntlworld.com](mailto:johnblackwell@ntlworld.com)  
21 Hythe Road, Brighton BN1 6JR (01273 557674)

General Secretary and Newsletter Editor : Martin B. Snow,  
e-mail [martin@snowing.co.uk](mailto:martin@snowing.co.uk)  
32 Orchard Avenue, Worthing BN14 7PY  
(01903 208975 & 07836 675472)

Treasurer: Mike Slamo, e-mail [m.slamo171@btinternet.com](mailto:m.slamo171@btinternet.com)  
112 Poplar Avenue, Hove BN3 8 PS (01273 732956)

Membership Secretary: Ron Gordon, e-mail [ron.gordon@myphone.coop](mailto:ron.gordon@myphone.coop)  
52 Barons Down Road, Lewes BN7 1ET (01273 474305)

Chief Editor : Dr. Geoffrey Mead, e-mail [g.mead@sussex.ac.uk](mailto:g.mead@sussex.ac.uk)  
47 Hartfield Avenue, Brighton BN1 8AD (01273 501590)

Programme Co-ordinator : M. H. Dawes, e-mail [malcolm.dawes@btinternet.com](mailto:malcolm.dawes@btinternet.com)  
52 Rugby Road, Brighton BN1 6EB (01273 561867)

Recording Co-ordinator : Vacancy

|             |                |                |                 |
|-------------|----------------|----------------|-----------------|
| Committee : | A. H. J. Green | P. S. Hicks    | Miss. J. O'Hara |
|             | Mrs J Morris   | T. P. A. Ralph | R. Vernon       |

Website : [www.sussexias.co.uk](http://www.sussexias.co.uk)

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Subscribing to the Sussex Industrial Archaeology Society gives automatic membership to the Sussex Mills Group

The Sussex Mills Group also produces a *Newsletter* that is sent to members with this *Newsletter*

## SERIAC 2024



The welcome table

Society stands



Welcome break

