



# Sussex Industrial Archaeology Society Newsletter

Number 154

April 2012



A special treat this issue; a previously unpublished image of a scene that few will fail to recognise.

No apologies for reverting to monochrome on this cover. A rare glimpse of workmen actually working - well almost, a short break for posing for the camera during the laying of the surface for the goods yard at Brighton Station. A view that could readily be reproduced today.

See the article by John Blackwell inside. (*from the Peter Brandon Collection*)

## Newsletter 154

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### Editorial

Welcome to *Newsletter* 154. Quite a mix of subjects this issue, some old images and some new. We are moving into the ‘busy’ season for events, please do consider going to those organised by your committee, don’t forget to let the organiser know of your intention to attend. Malcolm Dawes has been very active finding other events that welcome our members, so do support those too.

While your committee continue to strive to find activities to interest us all, if you have any suggestions or would be prepared to organise an event please do contact one of them - see the inside back cover for names and contact details.

Looking ahead, the Heritage Open Days are in September, we have a rare visit to Ricardo PLC, by the Old Toll Bridge at Shoreham-by-Sea, planned for that weekend and hope to extend it into a day out in the area, so do put it in your diary and look out for other events over that weekend.

If you are not yet booked for SERIAC on 28<sup>th</sup> April then get your placed booked soon. IA is a continually changing process, make a point of joining the Society visit to Coultershaw on 16<sup>th</sup> June to see the latest development at this site that has seen a water beam pump, two (at least) corn watermills and now a Archemidian Screw harnessing the power of the river. Congratulations to Robin Wilson for leading this project and his work in making Coultershaw an active site for visitors.

## **Forthcoming SIAS Events**

### **Malcolm Dawes**

**Saturday 28<sup>th</sup> April. *South East Regional Industrial Archaeology Conference (SERIAC) at St. Bartholomews School, Buckingham Road, Newbury***

Bookings should be made in advance.

[http://biag.org.uk/programme/SERIAC\\_2012\\_booking\\_form.pdf](http://biag.org.uk/programme/SERIAC_2012_booking_form.pdf)

**Weekend 12<sup>th</sup> - 13<sup>th</sup> May. *National Mills Weekend*** See Mills Newsletter for details

**Thursday, 17<sup>th</sup> May, 10.00 am. A visit to the Newhaven Environmental Recovery Facility in North Quay Road, Newhaven**

This magnificent, newly built works has been the subject of much local interest and dispute. Access by car, when leaving Newhaven on A 259 going east, take the first turning on the left immediately having crossed the river, proceed north to the end of the road and report to the office at the weigh bridge. Hi-vis vests, hard hats and sensible footwear are mandatory, some of which is available on site.

Please inform Ron Martin if you wish to attend by 12<sup>th</sup> May as names of attendees have to be submitted *Numbers are restricted so book early.*

**2.00 pm. Bishopstone Tide Mills site**

In the afternoon of the above, we are visiting the where a team from Sussex Archaeological Society have been excavating for several years.

Meet in the car park adjacent to the A259 road at TQ 463 005

**Saturday 16th June at 10.30 am. *An SIAS Sustainable Power Day***

**Visit to see the newly installed water turbine at Coultershaw Mill and special access to view the new waterwheel on the Wey and Arun Canal**

Please consider arranging to car share for these visits.

Start at Coultershaw Beam Pump (SU 973 194). Car parking down the lane to the left of the mill. Over the last few months extensive construction work has been carried out at Coultershaw Mill to repair the sluices and install a 15 Kw Archimedes Screw water turbine. The work has been financed by the Leconfield Estate and the Coultershaw Trust with grants from the South Downs Joint Committee Sustainable Development Fund. The official opening will be in July so the SIAS group visit in June will be able to have a privileged visit to see the turbine working and producing electricity. The visit will be led by Robin Wilson, Chairman of the Coultershaw Trust, who acted as project manager for the work. We will have the opportunity of seeing other historic buildings on the site and hearing about the next Lottery funded project which will include building restoration, an education centre and a new footbridge.

The Trust would appreciate a contribution of £2 - collection at the end of the visit.

In the afternoon members of the Wey and Arun Canal Trust have arranged for us to gain access to the Lording's Waterwheel and adjacent aqueduct near Billingshurst. The

Lording's waterwheel is a very unusual device in that it uses the flow of the local river to provide the power to lift river water into the canal. The wheel is 4m diameter and when rotating at a leisurely 2 rpm manages to lift 250 m<sup>3</sup> in a day. The wheel has recently been rebuilt with galvanized paddles a stainless steel spillway and now helps to ensure that the water level in the length of canal at Lordings is kept to acceptable levels. (This part of the canal is currently isolated from the restored navigable canal to the north). The wheel and the adjacent aqueduct are not usually accessible by car but for our visit special arrangements have been made to allow cars to access the site using a privately owned track.

The visit will be led by a member of the waterwheel restoration team.

The arrangements for the afternoon will be explained before we break for lunch including how to access the waterwheel site. There will be time for lunch in Petworth or Billingshurst or to continue the water theme at the *Onslow Arms* at Loxwood (TQ 041 312) which is adjacent to the Wey and Arun Canal and now has a canal visitor centre. Alternatively on an IA theme you could use the *Limeburners' Arms* (TQ 073 255) which is very close to the access gate for the visit to the waterwheel. If you are planning to come on these visits contact Malcolm Dawes 01273 561867 or email malcolm.dawes@btinternet.com

### **Sunday 1<sup>st</sup> July. *Day tour of Cambridgeshire Mills***

See Mills Newsletter for details.

### **The following visits have been organised by the SIAS Canal Group**

For further details contact Adge Roberts at adgeroberts@yahoo.co.uk  
or 01903 721762

### **Saturday 7<sup>th</sup> July, 10.00 am. *Guided walk along part of the former Portsmouth and Arundel Canal***

A linear 6-mile walk from Barnham to Hunston, combining history and nature. See the engineering remains on the way. Bring packed lunch. Meet at Barnham Court Farm, Church Lane, Barnham – follow signs from *Murrell Arms*.

### **Sunday 8<sup>th</sup> July. 10.00 am to 4.00 pm. *Poyntz Bridge***

The historic canal swing bridge will be in operation during the day. Situated just 200 yards south of the canal basin at Chichester. Poyntz Bridge, built in 1820, is possibly the only single span cast iron swing bridge of its age in the UK. There will also be a display of photos and artefacts illustrating the history of the bridge and the canal.

**At 2.00 pm.** there will be a guided walk around the canal basin led by Alan Green featuring the past industrial history that once surrounded the basin.

### **Saturday 14<sup>th</sup> July, 10.00 am. *Guided walk along the Chichester Canal***

A linear 4-mile walk along the Chichester Canal from Salterns Lock by Chichester Marina, along the towpath to the Chichester Basin. There are many engineering features and remains to be seen along the way. Parking is available at the Marina.

**Advance dates for your diary:**

**Saturday 8th September, IA in the Worthing Area**

A Society Day visiting Heritage sites in and near Worthing.

Starting at Ricardo PLC near the Shoreham Flyover - Details in the July *Newsletter*

**Saturday 22<sup>nd</sup> September, 10.30 am.**

***Visit to Weald and Downland Museum***

***to view the erection of a timber framed building***

A rare opportunity to see the start of the erection of Tindall's Cottage, a large 17<sup>th</sup> Century timber framed building from Ticehurst, Kent. The substantial timber frame is planned to be erected over the weekend with the main frames raised into position during the afternoon of our visit.

At 11.00 am we have arranged a tour of the reserve collection led by a member of the museum. Entry will be at a special group rate of £5.40 per person.

Meet at the entrance at 10.30 am.

The Weald and Downland Museum is located south of Singleton,  
7 miles north of Chichester on the A286

**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](mailto:malcolm.dawes@btinternet.com)

**Thursday 19<sup>th</sup> April, 8.00 pm. *Transport of the Masses***

A general history of the tramcar with a special look at the trams of the local area. Wivelsfield Historical Society talk by Ian Gledhill. Visitors £2.50. Wivelsfield Village Hall. 01444 451568

**Tuesday 24<sup>th</sup> April, 6.30 pm. *William Walker – The Diver who saved Winchester Cathedral***

*Newcomen Society lecture* by Gary Wallace-Potter. Room 0.30 in the Portland Building of the University of Portsmouth, St James Street off Queen Street, Portsea. Free parking in adjacent University car parks from 4.30 pm. Visitors welcome and admission is free. <http://newcomen.com/branches/7>

**Wednesday 25<sup>th</sup> April, 7.30 pm. *Southern Electric Archive Photography***

RCTS presentation by David Brown. Council Meeting Room 2, County Hall, West Street, Chichester. Non-members welcome. [www.rcts.org.uk](http://www.rcts.org.uk)

**Saturday 28<sup>th</sup> April. *Toy and Rail Collectors Fair***

Bluebell Railway - 01825 720800 - [www.bluebell-railway.co.uk](http://www.bluebell-railway.co.uk)

**Weekend 5<sup>th</sup>- 6<sup>th</sup> May. *Magnificent Motors' Rally.* Classic cars, motorbikes, buses, commercial vehicles and traction engines. Seafront, Eastbourne. [www.eastbourne.gov.uk](http://www.eastbourne.gov.uk)**

**Weekend 5<sup>th</sup>- 7<sup>th</sup> May. *Great K&ESR Gala weekend. Visiting locomotives, GWR 42XX and GNR N2.* Kent and East Sussex Railway. [www.kesr.org.uk](http://www.kesr.org.uk)**

**Sunday 6<sup>th</sup> May. *Historic Commercial Vehicles Run, between London and Brighton***

**Sunday 6<sup>th</sup> May. *Veteran and Classic Motorcycle Show***

Amberley Museum - 01798 831370 - [www.amberleymuseum.co.uk](http://www.amberleymuseum.co.uk)

**Wednesday 9<sup>th</sup> May, 7.40 pm. *Trolleybus preservation in the UK***

A look at three museums with working trolleybuses.

Tramway and Light Railway Society presentation by John Zeberdee. £1.50. Deall Room, Southwick Community Centre, Southwick Street, a short walk north of Southwick Railway Station. 01273 306838

**Wednesday 9<sup>th</sup> May, 7.30 pm. *Not quite swinging 60s – Chichester through Stella Palmer's lens***

Chichester Local History Society presentation by Andrew Berriman. £2. New Park Centre, New Park Road, Chichester. 01243 784915

**Weekend 12<sup>th</sup> - 13<sup>th</sup> May. *Southern at War weekend***

Re-enactors, military vehicles, displays and concert parties. Bluebell Railway. 01825 720800 - [www.bluebell-railway.co.uk](http://www.bluebell-railway.co.uk)

**Sunday 13<sup>th</sup> May. *Vintage agricultural vehicle and woodland craft show***

Amberley Museum. 01798 831370 [www.amberleymuseum.co.uk](http://www.amberleymuseum.co.uk)

**Wednesday 16<sup>th</sup> May, 8.00 pm. *Victorian and Edwardian training ships***

Sussex Military History talk by Trevor Cox. *Royal Oak*, Station Street, Lewes. [www.sussexmilitary.org.uk](http://www.sussexmilitary.org.uk)

**Weekend of 19<sup>th</sup>- 20<sup>th</sup> May. *1940s weekend***

Period displays and vehicles. Kent and East Sussex Railway [www.kesr.org.uk](http://www.kesr.org.uk)

**Sunday 20<sup>th</sup> May. *Military vehicle show***

Amberley Museum - 01798 831370 - [www.amberleymuseum.co.uk](http://www.amberleymuseum.co.uk)

**Wednesday 23<sup>rd</sup> May, 7.30 pm. *The Crossrail Project***

RCTS presentation by Simon Bennett. Council Meeting Room 2, County Hall, West Street, Chichester. Non-members welcome. 02392 811360 - [www.rcts.org.uk](http://www.rcts.org.uk)

**Wednesday 23<sup>rd</sup> May, 6.00 pm. *Thomas Newcomen – Pioneer of Steam Power***

Newcomen Tercentenary Lecture by Jim Andrew. Part of the University of Portsmouth's public lecture programme. Admission is free. Reservation essential, contact [events@port.ac.uk](mailto:events@port.ac.uk) or 023 9284 3757.

**Saturday 26<sup>th</sup> May. *Land, Sea and Air, Sussex Military History Society Study Day.* Newhaven Fort. [www.sussexmilitary.org.uk](http://www.sussexmilitary.org.uk)**

**Weekend 26<sup>th</sup> - 27<sup>th</sup> May. *Heavy horses and working animals show***  
Weald and Downland open Air Museum, Singleton, Chichester. 01243 811363  
www.wealddown.co.uk

**Weekend 2<sup>nd</sup> - 3<sup>rd</sup> June. *Tinkers Park Hadlow Down Steam Rally***  
www.tinkerspark.com

**Sunday 3<sup>rd</sup> June. *Harrington vehicle gathering***  
Amberley Museum - 01798 831370 - www.amberleymuseum.co.uk

**Thursday 7<sup>th</sup> to Saturday 9<sup>th</sup> June. *Burgess Hill History Society archive material on display during festival week.***

Terracotta artefacts, photographs, documents, books, maps etc.  
Cyprus Hall, Cyprus Road, Burgess Hill. www.burgesshillmuseum.co.uk

**Weekend of 9<sup>th</sup> - 10<sup>th</sup> June. *Mid-summer steam show***  
Amberley Museum - 01798 831370 - www.amberleymuseum.co.uk

**Monday 11<sup>th</sup> June, 7.30 pm. *An evening with Nick Kelly***  
More railway treasures from Nick's unique collection. Southern Electric Group,  
Sussex Branch talk. £3. Deall Room, Southwick Community Centre, Southwick.  
01273 462049 - www.southernelectric.org.uk

**Wednesday 13<sup>th</sup> June, 7.30 pm. *18<sup>th</sup> Century shipbuilding in Chichester Harbour***  
Chichester Local History Talk by Dr Ian Friel. £2. New Park Centre, New Park  
Road, Chichester. 01243 784915.

**Sunday 17<sup>th</sup> June. *Electric vehicle show***  
Amberley Museum - 01798 831370 - www.amberleymuseum.co.uk

**Sunday 24<sup>th</sup> June. *Fire and commercial vehicle show***  
Amberley Museum - 01798 831370 - www.amberleymuseum.co.uk

**Weekend 30<sup>th</sup> June – 1<sup>st</sup> July. *First World War Event***  
Period displays and vehicles. Kent and East Sussex Railway. www.kesr.org.uk

**Tuesday 3<sup>rd</sup> July, 6.00 pm. *Chichester's Historic Shopping***  
Prof Paul Forster and Alan Green. Chichester Festivities Event at Ede's House,  
West Street, Chichester.

Tickets from Box office, from April onwards (01243 785718). www.chifest.org.uk

**Weekend 7<sup>th</sup>- 8<sup>th</sup> July. *Ardingly Vintage and Classic Vehicle Show***  
ardinglyvcvshow.org.uk

**Saturday 14<sup>th</sup> July. *Sussex Vintage Model Railway Collectors Annual Exhibition***  
Knole Hall, Knole Road, Brighton. www.sussex-transport.co.uk/svmrc

**Weekend of 14<sup>th</sup>- 15<sup>th</sup> July. *Railway Gala weekend – steam, diesel and electric locomotives***  
Amberley Museum. 01798 831370. www.amberleymuseum.co.uk

**Weekend of 14<sup>th</sup> – 15<sup>th</sup> July. *Sussex and Kent Weald Stationary Engine Group Rally at K&ESR Tenterden Station***

Kent and East Sussex Railway. [www.kesr.org.uk](http://www.kesr.org.uk)

**Thursday 19<sup>th</sup> July, 8.00 pm. *A Sussex Farm in the 1950s***

Year in the life of a Downland Farm on cine film. Wivelsfield Historical Society talk by Ian Gledhill. Visitors £2.50. Wivelsfield Village Hall. 01444 451568

**Weekend 21<sup>st</sup> - 22<sup>nd</sup> July. *Toy and Rail Collectors' Fair***

Horsted Keynes Station, Bluebell Railway. 01825 720800  
[www.bluebell-railway.co.uk](http://www.bluebell-railway.co.uk)

**Sunday 22<sup>nd</sup> July *Eastbourne Vintage Bus Rally***

<http://freespace.virgin.net/ian.smith/buses/CBR/CBR01.htm>.

**Sunday 22<sup>nd</sup> July. *Classic Microcar and Scooter rally***

Amberley Museum. 01798 831370 - [www.amberleymuseum.co.uk](http://www.amberleymuseum.co.uk)

**Sunday 29<sup>th</sup> July. *Worthing seafront bus rally***

[www.worthingbusrally.co.uk](http://www.worthingbusrally.co.uk)

**Weekend of 4<sup>th</sup> - 5<sup>th</sup> August. *Edwardian Street Fair***

Amberley Museum - 01798 831370 - [www.amberleymuseum.co.uk](http://www.amberleymuseum.co.uk)

**Weekend 11<sup>th</sup> - 12<sup>th</sup> August. *Vintage Transport weekend***

Displays of historic classic and vintage transport including cars, steam road engines, commercial and agricultural vehicle. BBQ and real ale tents. Bluebell Railway. 01825 720800 - [www.bluebell-railway.co.uk](http://www.bluebell-railway.co.uk)

**10<sup>th</sup> - 16<sup>th</sup> August**

***Association for Industrial Archaeology Conference in Chelmsford, Essex***

Details of programme and booking form at [www.industrial-archaeology.org.uk](http://www.industrial-archaeology.org.uk)

***Do please always check details 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.*

**Subscriptions are now due**

Unless you have paid by Banker's Standing Order or are a life member your subscription became payable on the 1st of April

The rates remain unchanged at £10 for full membership, £15 for a Family membership and £2 for Junior or Full Time Student membership

Cheques payable to S.I.A.S. should be sent to the Treasurer :- Peter Holtham, 12, St Helens Crescent, Hove, Sussex BN3 8EP

Early payment would be appreciated



## Cover Photograph

### John Blackwell

Occasionally, a photograph turns up, the main subject which is of no immediate interest, but after further consideration, turns out to be a little gem. Such is our cover picture, discovered among the collection of the late Dr. Peter Brandon by member and local historian Geoffrey Mead. Photographs of men at work are not that common and although posed, comparison with a similar scene today reveals significant differences, no mechanical aids, merely shovels, wheelbarrows and buckets; a complete lack of protective clothing. The task being undertaken namely laying a surface for the yard is unchanged and one must admit the crisp white shirts, waistcoats and trousers neatly tied under the knee are smarter than some on display today.

The location is instantly recognisable as the lower goods yard of Brighton Station at the top of Trafalgar Street. If one stands on the piazza in front of Trafalgar Place the view is virtually identical with the exception of the enclosing wall and gateway. The Station was built on a man-made plateau with the goods yard 30 feet below the platforms and was originally accessed from the Shoreham line at the west of the station by a tunnel running beneath the platforms. This soon proved impractical and in 1852 a new goods-only line descended from the main line at Lovers Walk, passing through one of the arches of the Preston Viaduct and crossing New England Road by a cast iron bridge made at the Regent Foundry in Brighton and still in position and forming part of a recently opened "greenway" to the Station. In 1894 new goods sheds and offices were built. Closure came in the 1970s and the buildings were then used by National Carriers Ltd, for another decade or so before demolition and construction of the office development of Trafalgar Place in the early 1990s. Behind the workmen can be seen the extended Station of 1882/3. The enclosed cab ramp to platform seven is situated behind the 'office' with the open door and window (see *Sussex Industrial History (SIH) No 28* 1998 for full details).

The *Prince Albert* public house on the opposite side of Trafalgar Street is still providing the same service but the local brewery, Tamplins, which eventually owned over 200 licensed premises in Brighton, sadly brewed its last in November 1973 (See *SIH 32* 2002). Just visible on the north west corner of Frederick Place and facing the *Prince Albert* was another public house the *Holly Bush* where the brew was Brickwoods, this establishment belonged to the Portsmouth and Brighton United Breweries. The pub was demolished about 1970 but the side entrance with door and stained glass fanlight, which can just be discerned on the original print under the bridge, remained for many years before being bricked up.

Fortunately there is a clue to enable an approximate date for the photograph to be established. An advertising hoarding has a theatre poster with the name Constance

Collier appearing in the play *The Fulfilling of the Law*. A little research reveals the play was first performed at the Garrick Theatre, London in April 1921 and then seems to have disappeared without trace. I would suggest the date of the photo to be early 1920s.

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### **Endangered Sites**

The former Coastguards' Station located on the top of Shoreham Fort is being demolished.

Stanmer Barn for which a new use is being sought.

## **AIA Conference 2012**

### **Ron Martin**

The Annual Conference of the Association for Industrial Archaeology is being held this year on 10<sup>th</sup> to 16<sup>th</sup> August in Writtle College, near Chelmsford in Essex

The main Conference starts at 5.00 pm on Friday 10<sup>th</sup> August and continues to 2.00 pm on Sunday, 12<sup>th</sup> August

The additional programme continues until Thursday, 17<sup>th</sup> August

As well as a comprehensive series of lectures these are some of the visits that will be made to :

Sandford Mill, Beeleigh Mill, the Museum of Power at Langford, Aythorpe Tiding Post Mill, Kelvedon Hatch Nuclear Bunker, Flatford Mill (of Constable fame) Thorrington Tide Mill, The East Anglian Railway Museum, Bulmer Brickworks, a cruise on a Thames barge, Stow Maries Aerodrome, Tilbury Fort, LV18 light vessel and Tiptree Jam Museum, as well as visits to Haverhill, Lavenham, Silver End (built for Crittalls' workers) Halstead, Maldon, Harwich and Ipswich

This is almost on our doorstep  
– how about seeing more of you at the Conference –  
these conferences really are a well worth coming to,  
for anyone interested in IA generally

Full details and Application Forms can be obtained from me

## Iron Industry in the Sussex Weald

I make no apology for returning to the subject of cast iron firebacks, The Sussex Weald was a major centre for iron production in the 15<sup>th</sup> to 18<sup>th</sup> centuries; the ease of producing a flat casting direct from the furnace must have both been a lucrative business and fulfilled a need for protection from the fierce heat of the open fires.

A visit to Anne of Cleves House in Lewes, where there is the major collection of firebacks, cannot but inspire one with the wide variety on show there, with many more in store for lack of display space. Short of having a large number of actual fireplaces they are a difficult subject to display and maintain the casual visitors interest, so the opportunity to view so many next to each other is welcome, though the introduction is in a somewhat dated style - it won an award in 1980 - but I doubt that it would catch the eye today. It needs some updating with the recent research by the Wealden Iron Research Group and the typewriter produced text replaced with modern computer produced text. Our expectations are much higher today.

I encourage you to buy a copy of Jeremy Hodgkinson's book - reviewed in *Newsletter* 153, page 20 - and use it as a guide to appreciation of the firebacks on show.



**The Stuart Arms.**

England and France are represented as in the Tudor coat of arms, in the 1<sup>st</sup> and 4<sup>th</sup> quarters. Scotland (a red lion rampant on a gold background with a double red border inset from the edges of the shield decorated on the inner and outer edges with fleur-de-lys) is represented in the 2<sup>th</sup> quarter.

Ireland, (a gold harp with silver strings on a blue background) is represented in the 4<sup>th</sup> quarter.

Anne of Cleves House is open 1<sup>st</sup> February to 30<sup>th</sup> November, admission free to members of the Sussex Archaeological Society. [www.sussexpast.co.uk](http://www.sussexpast.co.uk)

Check for opening times on 01273 474610

## Cement and Concrete in the Nineteenth Century

Ron Martin

Up to the end of the 18<sup>th</sup> century the normal material for bedding brickwork and masonry was lime mortar. This was derived from calcium carbonate which is found in the form of limestone and chalk in Britain and also shells, marble and coral abroad. The process of producing lime is known as limeburning, although this expression is strictly not correct as “burning” involves the consumption of oxygen. The process of heating to a temperature of 900 °C causes the material to release carbon dioxide leaving calcium oxide. The equation  $\text{CaCO}_3 + \text{heat} = \text{CO}_2 + \text{CaO}$ , explains this reaction. Calcium oxide is known as quicklime due to its violent reaction when exposed to water and the resultant material is calcium hydroxide ( $\text{CaOH}_2$ ) also known as hydrated lime. Lime has been used extensively in the building since 4,000 BC for making mortar and for plastering. A full description of limekilns in Sussex was published in *Sussex Industrial History Issue 23*, copies of which can be obtained from the General Secretary £2.50 plus £1.00 p and p.

The disadvantage of lime for use as a mortar is that, when pure, it is non-hydraulic, i.e. it will not set under water or in damp conditions. The Romans had discovered that if the lime was mixed with pozzolana, which is clayey material derived from volcanoes, the resultant mortar was hydraulic. They used this for waterproofing and also made concrete with this material; for example the roof of the Pantheon in Rome was of *in situ* concrete. It is presumed that any pozzolana used by the Romans in Britain was imported. As often happened when the Roman Empire collapsed, much of their technology died also and consequently the use of concrete in buildings in Britain virtually ceased.

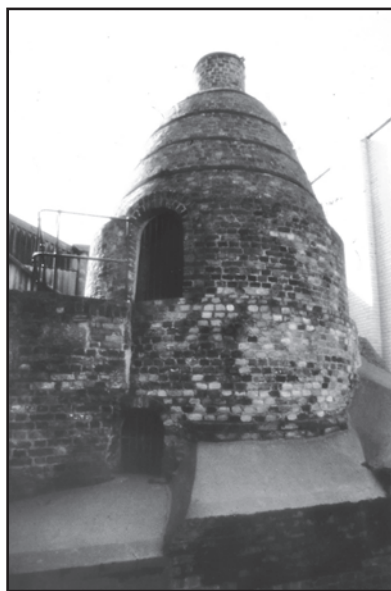
It was not until the Industrial Revolution in the mid 18<sup>th</sup> century that the increased demand for large industrial buildings and engineering works required the need for something better than lime as a constructional material. Various innovators came forward with different solutions to the problem, viz:

**John Smeaton**, when he built No.3 Eddystone Lighthouse in 1756 experimented with hydraulic lime derived from Blue Lias limestone and added pozzolana for making the mortar for the construction. The lower courses of this structure are still in position on the rock, the superstructure having been re-erected on Plymouth Hoe as Smeatons Tower.

**James Parker** patented a cement he called “Roman Cement”.<sup>1</sup> This was made from a natural occurring material now called septaria which are nodules of clay and chalk found on the Isle of Sheppey<sup>2</sup> and was used extensively in the Regency period particularly for external rendering. It can be easily identified due to its brown colouration.

**James Frost** patented a cement in 1822<sup>3</sup>, which he called ‘British Cement’, the mixture of limestone and siliceous earth being mixed together and calcined in a kiln. Although this material is chemically very much the same as modern Portland Cement manufacture he specifically excluded any argillaceous material. His plant in Swanscombe was managed from the 1840s by I.C. Johnson

**Joseph Aspdin** is normally considered to be the inventor of Portland Cement. He was a Yorkshire bricklayer who was granted a patent in 1824<sup>4</sup> for the manufacture of Artificial Stone. In his patent he used the expression “and which I will call Portland Cement”. The patent is vague as to the proportions of material and to the method of firing. He moved, together with his



son William to Northfleet in Kent and continued to manufacture his material in a very secretive manner, the kilns being used were bottle kilns and the firing was at a temperature specifically to avoid sintering.<sup>5</sup> (See illustration). He did not envisage using the material for concrete,

**Isaac Johnson** Other manufacturers tried unsuccessfully to emulate Aspdin’s formula for Portland Cement but it was not until about 1842, when a rival firm, managed by Isaac Johnson, inadvertently over-fired a batch, and the resulting clinker, when ground, turned out to be better than Aspdin’s material. This was really the beginning of Portland Cement proper.

**William Ranger** was the son of William Ranger a builder and surveyor of Brighton and in 1832 was granted a patent for the production of Ranger’s Artificial Stone. The patent covers both mass concrete and precast concrete, although most of it refers to the latter. He used Dorking Lime which is hydraulic and was mixed as quicklime with hot or boiling water with the addition of iron sulphate. The patent suggests that the moulds could be struck in ten minutes, which seems highly dubious, although it is also stated that the blocks needed two or three months to mature.<sup>6</sup> Locally they were used by Charles Barry for the “Pepperpot” of 1830 at the north end of Queens Park.<sup>7</sup> And was also possibly used for the 1832 Barry building of the Royal Sussex County Hospital which was also built by Ranger. In both these cases the walls were subsequently rendered. His concrete was also used extensively for many other projects in Woolwich and Chatham. The diagram in the patent is not dimensioned but extrapolating from the thickness of the sides of the moulds, the

blocks illustrated would be 11" x 7½" x 6½". The moulds were made of wood with four iron clamps which were wedged around the mould. Oddly there is also shown an iron rod passing horizontally through the centre of the block, whose function is unexplained. His use of hot water to slake the lime might have been because hydraulic lime does not slake at such a high temperature as pure lime and he wanted to achieve the most violent slaking that was possible to encourage rapid setting. The use of boiling water on a building site or concrete works seems highly dangerous.

The Royal Engineers was the pre-eminent organisation for civil engineering in this country in the 19<sup>th</sup> century and they carried out a series of experiments under the direction of Colonel, later Major General Pasley, when he was the Director of the Royal Engineers. His experiments were somewhat flawed and the conclusion he came to was that cement was satisfactory for use in mortar for brickwork but not for masonry or for concrete.<sup>8</sup> The material he was using was not Portland Cement. The publication of his book *Pasley on Cement*, had the effect of inhibiting the development of concrete in Britain and it was not until after Pasley's death in 1862 when further serious interest in concrete was possible.

**Capt. H.R.D. Scott** published a paper in 1857 about a new cement he had patented made by burning sulphur in kilns where lime was being burnt. This produced what was in effect a gypsum plaster but later in 1861 he marketed this as Selenitic Cement (named after his wife Selina).<sup>9</sup>

Due to the reluctance of the Royal Engineers to endorse the use of Portland Cement concrete, when Lt. Ardagh built Newhaven Fort in 1866 he used Scott's cement for the revetments of the dry moat, laid in situ. This was confirmed when core samples were taken in 1978 and tested by the Materials Laboratory of 62 CRE.<sup>10</sup> At Rye Harbour, there was a concrete works opened by Lee and Sons in 1859 for the manufacture of concrete block for the Admiralty Pier in Dover Harbour.<sup>11</sup> Between Rye Harbour village and the mouth of the River Rother there is a cottage called *Limekiln Cottage*, currently the offices of the Rye Harbour Nature Reserve. I am told that there were limekilns adjacent to the cottage. Although there is no record of the materials being used in the works it seems probable that the concrete being used for Dover was possibly Scott's concrete similar to that used at Newhaven Fort, the date being similar to the works being carried out by Ardagh at Newhaven. I would be grateful if someone could confirm this.

There are also some large precast concrete blocks adjacent to the cottage which probably created a temporary wharf when the raw materials and fuel for the limekilns could have been unloaded. How these blocks were handled is questionable as each weighs some 5 tons.



The Barry Building of the Royal Sussex County Hospital in 1832

There were wind-powered cement mills at Arundel and at Amberley, being converted from corn mills in 1825, but there is no knowledge of the kilns which produced the cement.<sup>12</sup>

In the later years of the nineteenth century Portland cement began to be used in quantity and rotary and other kilns were being developed for burning the material. In Sussex, cement works were erected at South Heighton (Newhaven Works), at Lewes, at Beddingham (Rodmell Works), and at Upper Beeding (Shoreham Works). A full description of the last named is to be found in *Sussex Industrial History Issue 34* (2004) available from the General Secretary price £3.95 plus 80p P&P. An experimental cement shaft kiln using the flotation process, patented by Dr. Geoffrey Martin was built at Beddingham in 1929. A full description of this is to be found in *Sussex Industrial History Issue 22* available from the General Secretary price £2.25 plus 80p P&P.

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## **The Double-Decker Train**

**John Blackwell**

Much interest was shown about a slide at one of my presentations for railway enthusiasts. It was of the double-decker train which was built at Lancing Carriage Works and returned there periodically for overhaul. Although it never ran in service in Sussex it had its origins in the county and a few notes may be of interest.

Capacity on London suburban services had been a problem for the Southern Railway since pre-war days. Post-war they evaluated a proposal to increase the existing eight-car electric sets to ten-car working, initially on the south-eastern section. In addition to the capital cost of 66 new two-car sets, virtually every platform would require lengthening. Faced with this problem O. V. S. Bulleid, the Chief Mechanical Engineer, came up with one of his revolutionary ideas, a double-decker train. Such trifles as the gauge restrictions that dogged the south-eastern section were not allowed to thwart him. His ideas were indeed ingenious; smaller wheels thus lowering the floor whilst taking the roof line to the limit, commode (door) handles were dispensed with and foot boards omitted except for the driver and guard. Lancing Carriage Works built the train in the summer of 1949 consisting of two four-car units. Each unit seated 508 with a further 44 tip-up seats under the top deck windows (an increase of 122 + 44 on a standard 4Sub unit). Passengers could stand upstairs or down and frequently did. Motor coaches had five upper and five lower compartments and trailers had six upper and seven lower. The middle compartment of each carriage did not have stairs and thus seated twelve. Otherwise each upper compartment was reached from the lower by a short flight of stairs; both lower and upper seating eleven. The train comprising of both four-car sets entered service on November 2<sup>nd</sup> 1949 but was withdrawn the following day. It re-emerged on November 18<sup>th</sup> but did not last long, this time because of the failure of the welded wheelsets. It did not return to traffic until January 6<sup>th</sup> 1950, following considerable modifications to the wheels and bogies.

The routes it operated on were from Charing Cross and Cannon Street to Gravesend Central via Dartford (all routes) and via the Brighton lines to Selhurst and Lancing for maintenance and overhaul only. The train was not a resounding success, indeed some passengers would boycott it and wait for the next service. Complaints arose concerning the cramped and stuffy conditions of the top deck. The top deck windows were sealed and a forced ventilation system was used which drew air from beneath the carriage and out under the feet of the passengers on the top deck. In theory this increased the air flow to those passengers but it had its problems as former occupiers of the top deck will testify - it was like a refrigerator in winter and a





glasshouse in summer. More worryingly because of the lack of footboards there was an increase in the number of persons falling between train and platform despite the helpful “Mind the Gap” announcements. The absence of the commode handles exacerbated loading and unloading problems particularly at London Bridge and the termini where platform occupation was at a premium and complaints were made by passengers who felt trapped on the top deck as the train emptied out. Despite cost benefits the new British Railways Board announced in 1951 that no more would be built and that ten-car trains were the answer to their capacity problems. However they remained in service on the original routes for another 20 years until withdrawal on 1<sup>st</sup> October 1971 having run 700,000 miles. Following withdrawal, three coaches (two motor and a trailer) were purchased privately and hauled to The Ashford Steam Centre, the rest being broken up. With the demise of the Steam Centre the trailer was cut up. Currently one motor unit is deteriorating in the open air on a farm at Sellindge in Kent and the other is a long term restoration project at the Northamptonshire Ironstone Railway Trust.

*An article by David Monk Steel in Southern Notebook Spring 1997 is acknowledged as the source of information for the above article.*

## Fragments of 19<sup>th</sup> Century Industry

Geoffrey Mead

I recently acquired some books and papers of historical interest from the estate of an old colleague, the late Dr. Peter Brandon; amongst the volumes were a few loose undated pages which seemed to have been part of a 19<sup>th</sup> century trade or street directory, circa 1876. The intriguing entries were for a range of trades. Some traditional trades would be familiar to IA practitioners; one such as Barton's of Tunbridge Wells -

*'Inlaid and mosaic wood manufacturer to Her Majesty and the Royal family'*

There must have been problems with other traders as the notice added to the advert stated-

*'No connection with any hawker'.*

ESTABLISHED, 1720.

THOMAS BARTON,

(Successor to EDMUND NYE),

INLAID AND MOSAIC WOOD

MANUFACTURER

To Her Majesty and the Royal Family,

93, Mount Ephraim, & 48, Parade, Tunbridge Wells.

NO CONNECTION WITH ANY HAWKER.

*Awarded the First Prize in the First Class for Skilled Manufacture*

AT THE

TUNBRIDGE WELLS INDUSTRIAL EXHIBITION, 1864.

*Agent to the Star Life and Manchester Fire Insurance Offices.*

Similarly, the agriculture of the county was represented by a prominent industrial concern, John Every, Phoenix Iron Works Lewes, manufacturers of-

*'Chicken feeding machines, new and improved patterns. No1 barrel holding about 3 quarts price £2.15.6...India Rubber Nozzles 2/-'*

Familiar to all gardeners, are Sussex trug baskets made by Thomas Smith & Sons at Herstmonceux, and one is illustrated on the whole page advert (on page 20), however here the term used throughout is-

*'Sussex Truck Basket...a set of baskets in great variety, for gardening and household purposes etc. 12s'*

A point central to all members of SIAS is of course Amberley, and that is represented by Pepper and Son of Amberley, Arundel-

*'Lime and Brick manufacturers, cement and chalk merchants, Grey Ground, Grey Stone, Blue Lias and Agricultural Lime(Grey or White) and Chalk (large or Small)'*

Alongside the traditional topics of IA interest were some more intriguing entries; for Reeves the still famous Lewes photography firm and their neighbour, The Steam Printing Works-

*'Work Executed with the greatest Promptitude and Economy'*

A whole page was devoted to Pullinger's mousetraps of Selsey. (SIH 24) Colin Pullinger was a man of wide skill for not only were mice in his sights, for the advert carried the following

*'An improved beetle and cockroach trap - catch hundreds in one night 1/-'*

A wide range of advertisements reflected the diverse economy of the county at that time; with education [still an important employer] represented by Clifton House School, Eastbourne-

*'Established 1836-terms Fifty Guineas per annum, daily pupils 16 guineas'*

Several entries were for Brighton addresses-

*'G Hammond, Ironmonger 50 North St, Brighton Gasfitter, Smith etc. Artizan's Tools. Cutlery, Electro-plate, Japanned and Papier Mache trays, Baths, Trunks, Dish Covers, lamps, fenders and Fireirons, Curbs, Tile Hearths, Gas Fittings, Knife Cleaning Machines. Brushes, Brooms, Door Mats, Kitcheners, Cottage Ranges, Builders Ironmongery at Wholesale Prices.'*

This sounds remarkably similar to the stock in trade of Dockerill's of Church Street today and only a block away. The address [if numbering is the same] is now Jason's Café. Wealthy Brighton residents and traders may have had recourse to-

*Browning & Woodroffe. Original importers of Sparkling Vouvray Champagne in 1867. Wine & spirit Merchants. Retail branch offices, Station St Lewes and Old Brighton Wine House, 157 Western Road, Brighton.*

The premises at 157 would have been demolished in the council widening of that section of Western Road in 1926; Boots the Chemists magnificent store opened in

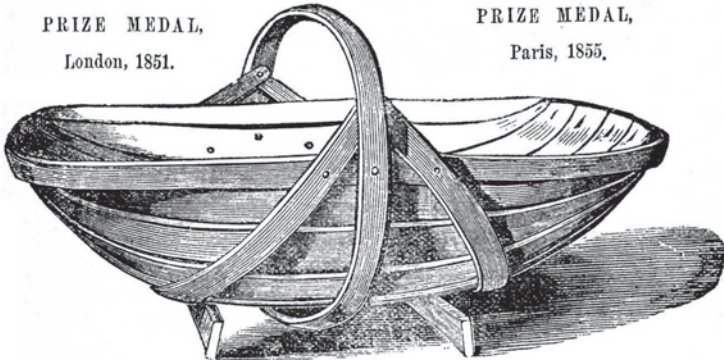
1928 and is now Argos and MacDonald's. Champagne to Big Macs...a metaphor for Western Rd in general!

*Royal German Spa, Queen's Park, Brighton. Under the patronage of Her Majesty. Established 1825. Struve & Co. The original and only genuine manufacturers of Brighton Seltzer and Pyrophosphate of iron waters. The purest, most delicious and most refreshing of all Tonic Waters, prepared with Distilled Water.*

## THE SUSSEX TRUCK BASKET.

PRIZE MEDAL,  
London, 1851.

PRIZE MEDAL,  
Paris, 1855.



BASKETS FOR AGRICULTURAL PURPOSES.  
BASKETS FOR GARDENING PURPOSES.  
BASKETS FOR HOUSEHOLD PURPOSES.  
BASKETS FOR STABLE PURPOSES.

ALSO

Fancy Baskets in great variety, suitable for Bazaars, Fancy Fairs, &c.

A SET OF BASKETS, assorted sizes, for Gardening and Household Purposes, &c., 12s.

Assortments of FANCY BASKETS for BAZAARS, &c., from 20s.

*N.B.—These Baskets have been supplied to HER MAJESTY THE QUEEN and a great many of the Nobility.*

**THOMAS SMITH & SONS.**  
SUSSEX TRUCK BASKET WORKS,  
**HERSTMONCEUX.**

Brighton 'natives' of a certain age... [i.e. ME!] will remember from their youth, Hooper Struve's mineral waters [including peculiarly green lemonade]. The German Spa - or its surviving portico - remains at the foot of Queen's Park and is now the

location of a local children's nursery. A few adverts were for long-gone premises in the North Laine, the main industrial quarter of Brighton until after WWII.

*'Prudden and Son Bookbinding extraordinary, speciality 'Leisure Hour' Quiver' - Spring Gardens, Church St (close to the Presbyterian Church) Queen's Road. Established 1836'*

Spring Gardens today is a wind tunnel between LA Fitness and the huge electricity sub-station, but well into the 20<sup>th</sup> century it was a residential street with a candle makers, French polishers, bookmakers, and three separate printing works, presumably one of these was associated at an earlier period with Prudden.

*William Brown "Sussex Brass Manufactory, Beer Engines and all kinds of Brass Work Manufactured on the Premises. 22 New Road Brighton. Casting every day. Old work re-lacquered equal to new."*

My street directories only go back to 1925 and they show nothing resembling a brass manufactory in New Road; street numbering does change from time to time and 1925 shows that address to be the Unitarian Chapel. It is certainly a trade that would be in the North Laine, and there was a brass manufactory in Gloucs Street until the 1980s.

*'William Henry Webber [from the late firm of Patching & Webber] Builder, Contractor and Oven Builder. Ovens carefully repaired. Furnaces altered. Smoke consuming appliances. Boilers set, all Sorts and Sizes. Brewers' coppers set. Maltsters' furnaces lined and builders' work generally. Residence 42 Clifton Street. Offices 28 Portland Street, Brighton.'*

We are on safer ground here; Portland Street was an important industrial site with a range of businesses, many with related products to Webber's. Pikes Directory 1925 lists amongst the domestic residences, three builders works, a surgical appliance manufacturers, two mechanical engineers, plumbers, wire works, motor engineers, two tailors, saddlers, antique restorers, brass founders, glass bevellers, French polishers. The site on the corner of Church Street was until the mid-1980s an 18<sup>th</sup> century industrial complex of old stables, used as a car spares business and Patching's builders yard of much antiquity and of a simple architectural merit. Adjacent was Blaber's Portland Foundry where hot metal castings could be seen taking place with seemingly scant regard for 'Health & Safety'!

This was just a glimpse of a 19<sup>th</sup> century industrial picture, but often a glimpse by its very fleeting nature, captures the essence of a situation. Sussex with its brass founders, oven builders and lime works is one we as industrial historians are well versed in, but this is a Sussex of mouse traps and photographers, champagne dealers and private schools. A more complete pattern of employment than just considering the remnants we see today if we only look at surviving structures of rail and road, water and power.

## The Mysterious Bridge

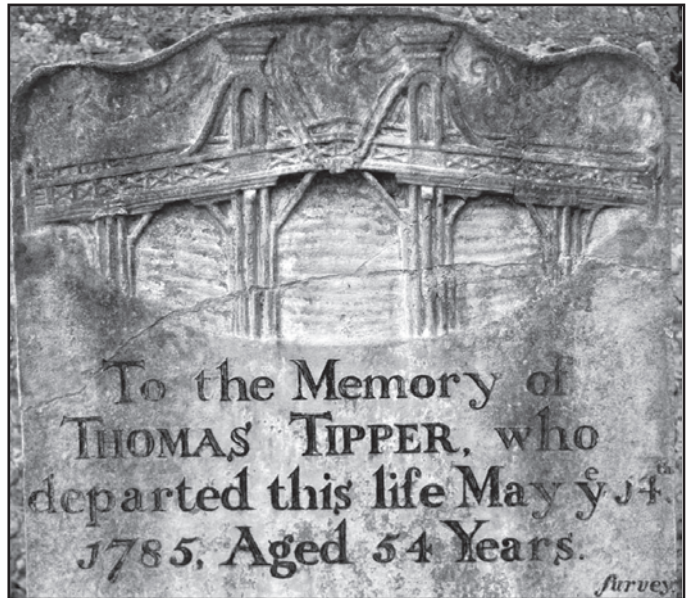
Malcolm Dawes

The SIAS Newsletter includes a list of events run by other Societies in Sussex and we include a recommendation that you should check with the organiser of the event before travelling, in case there have been any changes. I recently went to a meeting that I thought was going to be an evening of 1950s public information films and didn't bother to check beforehand. The films had been cancelled and instead we had a quiz night identifying unusual objects around Sussex. A great disappointment and no one to blame but myself. But surprisingly the evening led to a trip around Sussex that included a mysterious bridge, a tombstone in a windswept graveyard, Thomas Paine and how graphic artists try to interpret engineering.

One of the quiz questions was the location of a tombstone with a carving of a bridge. Most of us recognised the bridge as the old bridge in Newhaven that stood on a site near to the current swing bridge. The carving looked intriguing in that it appeared to be an extremely detailed representation. So a trip to the parish church in Newhaven ensued and a few days later we were in the graveyard of the church high on the hill to the west of the town. Thankfully the tombstone was in a prominent position and in a reasonable condition. The carving is in fact very detailed and shows the towers, deck and the ropes or possibly cables that were used to lift the decks. The grave is Thomas Tipper's who must have been a well known resident of Newhaven. The inscription says he was blunt but kind, spoke his mind, versed in Philosophy, Physics, History and Surgery and made his money by brewing a beer called Old Stingo. Not surprisingly he was a friend of Thomas Paine – famous Lewes resident and author of *The Rights of Man*.

The bridge was built in 1784 and survived to 1866 when it was replaced by the iron swing-bridge in 1866. (This was the swing-bridge that was opened and closed by a gang of men turning a large capstan on the bridge). There are few images of the 1784 bridge and very few photographs of it. Some articles have described it as a cantilever bridge but from the engraving it appears to be a drawbridge. Bridges where the deck is hinged to rotate upwards are today referred to as bascule bridges. *Bascule* is a French term for seesaw or balance and as the term suggests bascule bridges have opening decks with counterweights so they require little energy to open and close the bridge. However the carving of the bridge shows no signs of any counterweights and the ropes or cables are shown as curved which suggests in the closed position the cables are not carrying any load. At first glance the bridge has the appearance of a suspension bridge but there are no vertical hangers between the cables and the deck, and suspension bridges cannot be opened - they rely on the main cables to be permanently anchored at either end of a bridge and to be continuous along the length of a bridge. So the cables/ropes shown on the carving must have been used to pull the decks up so as to let ships

pass through the bridge. The sides of the deck have deep trusses which would provide stiffness to the decks which confirms that the main cables were not required to support the deck but just to raise them. The carving shows a divide in the construction of the decks at mid span which also confirms that the bridge was a drawbridge.



The lack of any counterweights to balance the weight of the opening deck would have been a major problem. Presumably four gangs of men must have been used to pull the four cables to open the bridge. There must also have been some method of restraining the movement of the cable when the deck was lowered. Perhaps some method of gearing combined with a capstan but whatever the system any opening must have required a great deal of muscle.

The struts under the deck are also unusual. Such struts are used to provide additional support to bridge decks. Many of Brunel's Cornish timber viaducts used such strutting systems. Presumably the decks were not strong enough to span large distances and even the central movable span needed additional supports. The central span struts were probably permanent so it appears from the carving that they were constructed to leave a reasonable gap in the centre sufficiently wide to enable the masts of the sailing ships to pass through the bridge.

In my researches I came across articles produced by Newhaven Town Council and discovered that they have used an image of the bridge for their crest. However the image on their crest appears to have been artistically reinterpreted. The bridge is shown with two towers but many of the cables no longer exist and strangely there now appears to be two opening spans both to the right of each tower. Just how this version of the bridge could have ever been opened will remain a mystery.

So what started out as a visit to watch some old films turned into a fascinating trip around Sussex and uncovering history that still needs some explanation. Perhaps it's best to go along to meetings not quite knowing what to expect.

## **The Atlantic Rebuild – January evening meeting**

### **Malcolm Dawes**

David Jones started our winter series of talks with an excellent presentation on the rebuilding of an Atlantic locomotive which is currently taking place at the Bluebell Railway.

The Atlantic Class of locomotive has a wheel layout of 4-4-2 with the name dating back to the locomotives used in New Jersey on the line to Atlantic City. This type of locomotive was used by many British railway companies but was not used by the London Brighton & South Coast Railway until Douglas Earle Marsh became Superintendent in 1904. He came from the Great Northern Railway where he had been responsible for introducing the Atlantic Class and wanted the LB&SCR to use the same class of locomotive. At the time Brighton Works were in need of improvement and did not have the facilities to build large locomotives so Marsh arranged with the GNR for Atlantic locomotives to be built at Doncaster for the LB&SCR. These locomotives were named the “H” class with the later Brighton built Atlantics as Class “H2”. They were mainly used for the heavy boat trains from Newhaven and many were still in service up the 1950s. The last Atlantic to be scrapped was *Beachy Head* which in 1958 hauled a special train from Victoria to Newhaven and on to Brighton but was then taken directly to Eastleigh where it was scrapped.

The idea to rebuild an Atlantic was due to the discovery in 1987 of two ex Atlantic boilers that were being used by a joinery company at Maldon in Essex. They had been salvaged from GNR locomotives that had been dismantled some years before. One boiler in good condition was purchased for £12,700 and transferred to the yard at Sheffield Park Station. The building of a Brighton Atlantic had begun.

The frame and wheels of a Class B4 tender were located which was similar to the H Class tender. Six tender wheels from another similar Brighton locomotive were also discovered and these items became part of the rebuild.

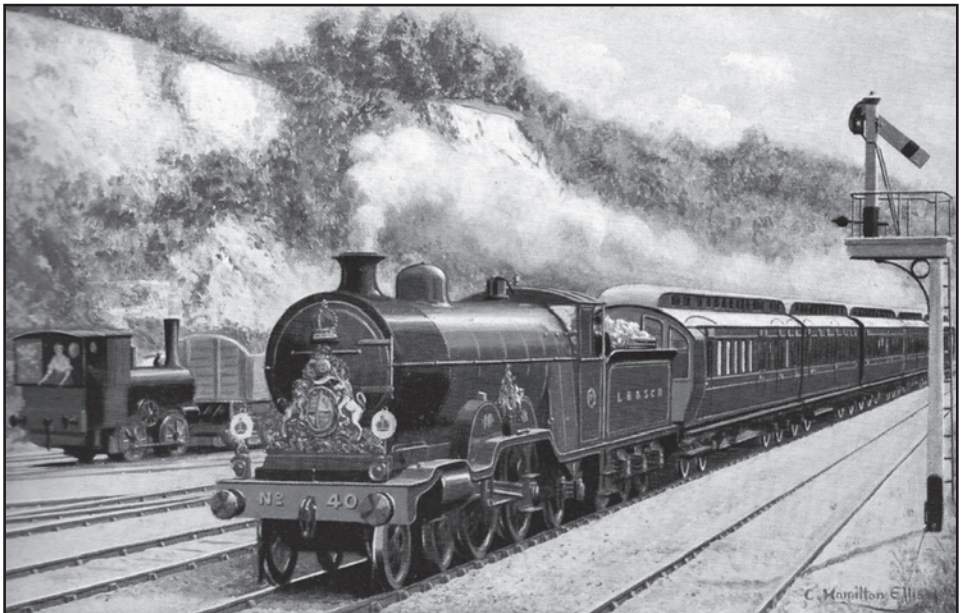
Any work had to be carried out in the open air at Sheffield Park which was not ideal so progress was slow and it was felt that the rebuilding project could only be successful if the work was carried out under cover. In 2001 the Atlantic Rebuild project was relaunched, fund raising activities were increased and in 2006 the Atlantic Group’s building was formally opened. At the ceremony the original regulator handle that had been taken from *Beachy Head* before it was scrapped was given to the Group. The project now had an original part so the rebuild could now, with a little imagination, be called a restoration.

Parts are now made in the workshop but many items require the input of commercial foundries fabricators and machine shops across the country. Wooden patterns are



made locally with the castings produced by specialist companies. Plate cutting is carried by a local company in Crowborough using a high pressure water jet capable of cutting through 5 inches of steel. Many parts are made in the workshop by a fabrication process – welding together small cut pieces to form the required form. Forging of parts is no longer possible as Sheffield Forgemasters have ceased to accept one-off jobs. However it is still possible to obtain forged billets which can be cut to produce parts such as connecting rods. It is becoming more difficult to find companies in the UK who are capable of producing the parts required for the rebuild. Quality and accuracy are an increasing problem which is a sad comment on the UK's manufacturing ability.

Sponsorship of parts has been used as a successful way of financing the rebuild and if any reader is interested there are still many items still available for sponsorship. The latest projected date for completion of the project is 2016 with the final cost of £1 million.



One aspect of the LB&SCR that David told us about was quite a surprise. The Brighton Atlantic shown in the picture is of a royal train. Such special trains required the use of the highly prized LB&SCR white coal that can be seen in the tender. And of course it was this coal that produced the Atlantic's white smoke that can clearly be seen in the picture. (Ed- note month of publication).

## Mystery Photo



(Martin Snow)

### Do you know your IA?

Where is this, who made it, when was it made, why is it of interest to us?

### Update

The fence posts in *Newsletter 153* are located alongside a long causeway cum-bridge in deepest Sussex far from any (former) railway lines - or as far as one can get in a county that once had a maze of lines with seemingly little distance between them. Again, something that one would merely drive past without a glance as to their source. Found while recording the bridges of the Adur basin with the aid of a SERIAC bursary, I will be making a presentation at the SERIAC conference in Newbury on 28th April.

Please keep an eye out for examples of IA items and, if possible, let me have a picture, either for this feature or to provide inspiration for a future article.

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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.

## Sussex Industrial Archaeology Society

- President : Air Marshal Sir Frederick Sowrey,  
Home Farm, Heron's Ghyll, Uckfield.
- Chairman : J. S. F. Blackwell, E-mail johnblackwell@ntlworld.com  
21 Hythe Road, Brighton. BN1 6JR (01273 557674)
- Vice-Chairman : M. H. Dawes, E-mail malcolm.dawes@btinternet.com  
52 Rugby Road, Brighton, BN1 6EB (01273 561867)
- General Secretary : R. G. Martin, E-mail martin.ronald@ntlworld.com  
42 Falmer Avenue, Saltdean, Brighton. BN2 8FG  
(01273 271330)
- Treasurer, Membership Secretary and Archivist : P. J. Holtham,  
E-mail pandjholtham@virginmedia.com  
12 St. Helens Crescent, Hove. BN3 8EP  
(01273 413790)
- Chief Editor : Dr. B. Austen, E-mail brian.austen@zen.co.uk  
1 Mercedes Cottages, St. Johns Road,  
Haywards Heath. RH16 4EH (01444 413845)
- Newsletter Editor : M. B. Snow, E-mail martin@snowing.co.uk  
32 Orchard Avenue, Worthing. BN14 7PY  
(07836 675472)
- Programme Co-ordinator : M. H. Dawes, E-mail malcolm.dawes@btinternet.com  
52 Rugby Road, Brighton, BN1 6EB (01273 561867)
- Committee : Mrs. Diana Durden A. H. J. Green C. C. Hawkins  
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Stone Cross, Pevensey. BN24 5PD (01323 760595)  
Western Area : Brig. A. E. Baxter – 9 Madeira Avenue,  
Worthing. BN11 2AT (01903 201002)  
Central Area : J. S. F. Blackwell – Address above  
Northern Area : E. W. Henbery, 10 Mole Close,  
Langley Green, Crawley. RH11 7PN (01293 406132)
- Website [www.sussexias.co.uk](http://www.sussexias.co.uk)



The roof timbers of Tindall's Cottage being examined after years in storage prior to re-erection. This will be the highlight of the Society visit on 22<sup>nd</sup> September, when this building will be re-erected on the Weald and Downland Museum site.  
*(Martin Snow)*



The new turbine at Coultershaw, during installation in March 2012. There is a Society visit to Coultershaw on 16<sup>th</sup> June, when it is hoped that members will be able to see the Archimedes Screw Water Turbine in action.  
*(Martin Snow)*