



Sussex Industrial Archaeology Society Newsletter

Number 143

July 2009



Society Chairman, John Blackwell, driving the golden spike on the section of restored track on the northern abutment of the former Selsey Tramway bridge over the Portsmouth and Arundel Canal near Hunston, south of Chichester. See report inside. *(Martin Snow)*

Newsletter 143

Contents

July 2009

New Edition of : The History of Chichester's Canal	2
Editorial	3
Forthcoming SIAS Events	3
Events from other Societies	4
SERIAC 2009	6
Part of the Selsey Tramway Reborn	9
De Witt Kilns	10
Another Arun bridge to be replaced	12
Update: North Stoke Suspension Footbridge	15
The dig for Casher Bridge at Chishester Marina	16
Request for information	16
The Hundred of Manhood and Selsey Tramway	17
The British Railways Photographic Unit	21
Book Review: Lost Villages of East Sussex	22

New Edition of The History of Chichester's Canal

by Alan H J Green

Since its publication by the Society in 2005 this book has continued to sell well, with a second edition in 2006 and a reprint in 2007. As stocks of the second edition have now run out Alan Green has prepared an enlarged, third edition which is now available. (ISBN 978-0-9512036-2-0)

This edition contains some new and previously unpublished material, most excitingly about the pumping station at Ford. The Boulton & Watt drawings and specifications for Ford Pumping Station, together with John Rennie's correspondence, have been found at Birmingham City Library, enabling its story to be told for the first time. One of the drawings has been reproduced in the book so we at last know what the pumping station *really* looked like! An in-depth account of the pumping station, together with more of the drawings, will be published in a future edition of Sussex Industrial History. Other new information on the Sussex Line of the Portsmouth and Arundel Navigation has come to light regarding the abandonment of the Ford to Hunston section and the industries that sprung up around Chichester Canal Basin, and all this has been included, along with an update on the canal's revival story.

The new books will be supplied to our regular outlets as they reorder, but meanwhile it can be obtained now from our Secretary, Ron Martin, at the cover price of £7.50 plus £1.00 post and packing.

All profits from the sale of this book are used to fund the Society's conservation work to structures on the Portsmouth and Arundel Navigation.

Editorial

Another threatened bridge in this issue, but good news on the North Stoke Suspension bridge. Another bridge is our main feature this month, that on the former Selsey Tramway. No apologies for so many bridges, hopefully the next issue will only have good news on the threatened ones.

After many years of decay and false starts comes news that work on the De Witt Limekilns at Amberley has started, see the article on page 10.

A few items have been held over for the next newsletter. I have some items on mile stones, if you have any thoughts, material or image(s), please let me have them in time.

Forthcoming SIAS Events

Malcolm Dawes

Saturday 1st August, 10.30am. *Industrial Littlehampton Day.* Guided walk around Littlehampton with Dr Ian Friel, the leading expert in this field. We hope to include a visit to the last working boatyard. There is a break for lunch but you need to make your own arrangements – there are plenty of suitable eateries around or you can eat your sandwiches on the beach. Meet at Littlehampton Railway Station.

Please notify Alan Green (01243 784915) if you will be attending.

Saturday 12th September, 10.30am. *Guided history walk of the route of the Portsmouth & Arundel Canal from Barnham to Hunston* led by SIAS member Adge Roberts. Parking at Barnham Court Farm, Barnham. 01903 721762.

Sunday 13th September, 10am to 4pm. *Poyntz Bridge operating day.* Opportunity to cross the unique, cast iron, Poyntz canal bridge, just south of Chichester canal basin. Bridge in operation by SIAS.

2.30pm *Guided walk around the basin, looking at its industrial past,* by Alan Green. 01903 721762.

Saturday 31st October, 7.30pm. *The Building Process in Georgian and Regency Brighton.*

A talk by Dr Sue Berry. West Blatchington Mill Barn, Holmes Avenue, Hove.

Saturday 21st November at 2.00pm. AGM followed by illustrated talk by John King on *London's Airports – the Inter-War years*, covering Gatwick, Heston, Gravesend and the airport that never was at Lullingstone.

West Blatchington Mill Barn, Holmes Avenue, Hove.

Information for members on Heritage Open Days in September. Many buildings are opened up to the public during September as part of the Heritage Open Days event. Many of these buildings have an industrial archaeology interest. Events outside of London run from 10th to 13th September. Details from www.heritageopendays.org.uk Events in London are for the weekend of 19th/20th Sept. www.londonopenhouse.org

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

Sunday 26th July. *Worthing seafront bus rally.* www.worthingbusrally.co.uk

Sunday 26th July. *Classic cars from the 50s, 60s and 70s.*

Amberley Museum. 01798 831370.

Sunday 2nd August. *Classic Microcar and Scooter Rally;* bubble cars, three-wheelers and scooters. Amberley Museum. 01798 831370.

Sunday 2nd August. *Eastbourne Vintage Bus Day.*

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

Saturday 15th August. Burgess Hill Local History Society Museum open from 10am to 12noon. Cyprus Hall, Cyprus Road, Burgess Hill.

www.burgesshillmuseum.co.uk

Saturday 15th – Sunday 16th August. *Vintage Transport weekend.*

Vintage cars, traction engines and trains. Free Vintage Bus service on the Sunday.

Bluebell Railway. 01825 720800. www.bluebell-railway.co.uk

Saturday 22nd - Sunday 23rd August. Shoreham Air Show.

Shoreham airport. www.shorehamairshow.com

Monday 31st August, 10am to 4 pm. *Special Bank Holiday Event Day at the Brede Steam Engines.* Steam and working industrial engines. Situated 6 miles from Hastings on A28 to Ashford. 01323 897310.

Friday 4th September – Sunday 6th September. *Amberley Beer festival with over 20 different beers, many from Sussex.* Friday evening, Saturday day and evening, Sunday day only. Amberley Museum. 01798 831370.

Wednesday 9th September, 7.30pm. *Turnpike Roads of Sussex.*

Chichester Local History Society talk by Dr Brian Austin. £2. New Park Centre, New Park Road, Chichester. 01243 787592.

Saturday 12th September. Burgess Hill Local History Society Museum open from 10am to 12noon. Cyprus Hall, Cyprus Road, Burgess Hill.

www.burgesshillmuseum.co.uk

Saturday 12th September. *Behind Bluebell Open Day.*

Launch of 50th anniversary events with an opportunity to see behind-the-scenes railway preservation work. Bluebell Railway. 01825 720800.

www.bluebell-railway.co.uk

Saturday 12th- Sunday 13th September. 10.30am to 5.00pm.

Fernhurst Furnace Open Days. Tours of the furnaces, charcoal burning, musket and cannon demonstrations, cookery and refreshments. 1 mile west of Fernhurst. SU879283. www.fernhurstsociety.org.uk/furnace

Sunday 13th September. *Amberley Bus Show.* Ride on buses dating from the Edwardian era to recent times. Amberley Museum. 01798 831370.

Wednesday 16th September, 7.30pm. *Research methods used for Sussex WWII army sites.* Computerised GPS used for investigation of bunkers, trenches and defence works. Sussex Military History Society talk by Peter Hibbs. £3 non-members. Function Room, The Royal Oak, Station Street, Lewes. 01323 487170.

Saturday 19th - Sunday 20th September. *Miniature Steam and Model weekend.* Over 60 model steam engines in action. Amberley Museum. 01798 831370.

Friday 25th September, 7.00pm. *A history of Bosham.*

Chichester District Museum talk by Lesley Green. Ravenna Suite, Westgate Leisure Centre, Chichester. Tickets 01243 784683 or on the door.

Sunday 27th September, 2.30pm. *The Geology and Building Stones of Old Bosham.* Walk with David Bone. Details from Chichester District Museum. Tickets 01243 784683.

Sunday 27th September. *Craft day, traditional skills and crafts.* Amberley Museum. 01798 831370.

Wednesday 7th October, 7.45pm. *The Wealden Iron Industry.*

Beeding and Bramber Local History talk by Jeremy Hodgkinson. Village Hall, High Street, Upper Beeding. 01903 812847.

Sunday 11th October. *Autumn vintage vehicle show.*

Vintage cars, motorcycles buses and lorries. Amberley Museum. 01798 831370.

Tuesday 20th October, 7.45pm. *Life with Steeplejack Fred.*

An evening with Sheila Dibnah. The talk will be preceded by a slide show of traction engines by John Bishop. Special Event at Hailsham Pavilion, George Street, Hailsham. Box Office 01323 841414.

Friday 23rd - Sunday 25th October. *Giants of Steam weekend.*

Running of larger locomotives plus a visiting engine. Free Vintage Bus Service on the Sunday. Bluebell Railway. 01825 720800. www.bluebell-railway.co.uk

Sunday 1st November. *London to Brighton veteran car run.*

Do please 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.

Seriatic 2009

John Blackwell

This year's conference was hosted by Hampshire Industrial Archaeology Society at the Guildhall in the centre of Winchester and was attended by a record number of SIAS members.

The first speaker was James Freeman who showed a splendid collection of historical slides *Evoking the Memory of King Alfred Motor Services*. Founded by Robert Chisnell in 1922 the company which throughout its life remained in family ownership served the City of Winchester and the developing suburbs operating with a peak of 35 buses and employing 100 staff each vehicle displaying the company's distinctive King Alfred logo. Taken over by Hants & Dorset in 1973 the buses were spread over that company's routes but were fondly remembered by many including our speaker. He bought his first KA bus in 1981 and formed the Friends of KA Buses (FoKAB) in 1985. From this initial purchase the group has become one of the most successful bus preservation groups, having restored more than ten buses and owning almost every KA bus left in the world. Their annual running day which is held on January 1st should not be missed.

A 16th Century Search for Alum in the Isle of Wight was the title of Rob Martin's talk Rob is Chairman of The IOW IA Society and obviously a keen DIY chemist judging by the results of his experiments which were used to illustrate the complex chemical processes involved. Alum was used as a mordant (fixative) for the vegetable dyes used in the medieval cloth industry. At that time it was imported, principally from the papal states. The mined alum shale (iron pyrites) was burnt in clamps, then steeped in water for the solids to precipitate after which kelp (seaweed) or large amounts of urine were added and the mixture boiled down and crystallised. Following the Reformation and to avoid reliance on imports, deposits in England were sought. In 1564 a Dutchman living in London, Cornelius de Voz was granted the patent or sole right to search for copperas (used as mordant for black dyes and ink) and alum in England. de Voz set up an alum works in the west of the IOW at what became Alum Bay but this was unsuccessful due to lack of a local fuel supply and the complex chemical process. Within a few years the patent was transferred to James Blount, 6th Lord Mountjoy, who set up three plants near Bournemouth using shale from Alum Chine. By about 1600 these brief ventures had finished. The vertical strata of alum shale can still be seen in the cliff face at Alum Bay. By the late 17th century a more successful industry had been established in Yorkshire and Durham where the seams were horizontal and coal for fuel plentiful.

Dr. Celia Clark next gave a fact packed presentation entitled *Vintage Ports: The Future of Historic Dockyards* using examples of imaginative re use from around the world. With technological advances and defence cuts historic dockyard sites are being vacated. How these are disposed of varies for example in the UK they are sold to the highest bidder, normally a developer e.g. Gunwharf (HMS Vernon) at Portsmouth when most historical references, unless listed, are obliterated. The USA identifies what needs to be kept on a site which can then be transferred free, but even though this gives some protection there can be internal conflict regarding reuse and little public influence. For reuse there is a need to know the historical development of the site (preferably backed up by photographic records); including specialised industrial structures and pioneering new technologies. Block cutting, corrugated iron, prefabricated multi storey iron frame and panel structures, ship testing tanks, and reinforced structures were given as typical examples. Who is to pay to sustain complex infrastructures such as dock walls, basins, caissons, cranes etc? Dr Clark's conclusion was that the private sector alone cannot achieve reuse without massive government support particularly in the start up phase and an imaginative long term vision, including public participation, is needed to provide sustainable reuse. The block mills at Portsmouth, containing Marc Brunel's and Henry Maudsley's mass production machinery, have finally been re-roofed but no use for the building has been found.

“No engineer in his senses would take a railway through Chat Moss”. These words were uttered by Francis Giles as he gave Parliamentary evidence against the Liverpool & Manchester Railway Bill for which he was never forgiven by George Stephenson and who subsequently received a bad press from some historians. Was this justified, was the question posed by Dr. Bill Fawcett in a masterly exposition *Francis Giles, Engineer:- Success or Failure*. Of course Giles (1787-1847) had been paid by opponents of the bill and professionally had to put the case against. He was known to his contemporaries as a very able surveyor and route planner, frequently employed by John Rennie. He engineered a number of canals; the Ivel Navigation in Bedfordshire and the Hertford Union, and harbours including the first Southampton Docks. He was engineer to the Newcastle and Carlisle and the London and Southampton railways but chose to use many small contractors which had served him well in the past on smaller projects but after two years of works there was little progress and he was removed from both by his major investors. Did these problems, justify subsequent criticisms or were these the outcome of a propaganda campaign by an unforgiving George Stephenson. After all, George was similarly removed from at least two railways; the Grand Junction and the Maryport and Carlisle.

Tichfield Canal or New River – A matter of interpretation was the title of a well researched talk by John Mitchell. The traditional view is that by 1611 the River Meon was un-navigable and a new canal from the estuary, (which was closed off to the sea) to Tichfield (near Fareham) was constructed by the 3rd Earl of Southampton. There is no evidence to support this view but much to the proposition that the exit was not closed and that a new watercourse was made 100 years later. There is no mention of an expensive canal in the Earl's papers but our speaker postulated that in 1738 a 'new river', not a canal, was made with a control sluice at the sea end. This was constructed at a higher level than the existing water meadows, the purpose of which was to feed these with fresh water by means of culverts. Site investigation supports this interpretation but no financial or documentary evidence has yet been found.

The day's final lecture was *A Century of Clean Water Supply in South Hampshire* by Dr Martin Gregory. Winchester's first supply was in 1837 from a borehole in Romsey Road, this enterprise failed but pumping was recommenced in the 1850s when thirteen miles of main was laid to supply 2,500 homes but only 700 signed up. In 1851 Mansbridge pumping station was opened by Southampton Corporation supplying water to residents from the River Itchen. This moved to Otterbourne in 1888. The South Hants Water Company was formed in 1876 to supply Romsey and the villages down the Test Valley with a pumping station at Timsbury. In 1898 Twyford was opened by the South Hants concern and supplied in addition to its normal domestic and trade customers a significant market in softened water, for ocean liners, which continued until 1969. The steam boilers and engines remained as back up until then and were transferred to the Twyford Waterworks Trust in 1974.

After the conference we were transported by a vintage King Alfred Bus for a guided tour of Twyford Waterworks. This proved to be the highlight of the day for many and a visit is highly recommended. Many thanks to all concerned for an excellent and well organised conference.

**Association for Industrial Archaeology Conference.
4th - 10th September.**

To be held at the University of Lincoln. Three day conference with programme of visits to industrial archaeology sites.

Further details and booking form available from -
www.industrial-archaeology.org.uk

Part of the Selsey Tramway Reborn

Peter Holtham

A history of the railway built by H.F. Stephens connecting Chichester with Selsey is given in an article by John Blackwell in the Society's *Newsletter No. 129*. The line was built in 1897 with very little engineering work. Roads were crossed on the level except at a point near Selsey where the present B 2145 was passed under. An obstacle was the Chichester branch of the Portsmouth & Arundel Canal that was crossed at Hunston by a lifting bridge designed by Stephens. Information about the bridge can be found in an article by Alan Green in *Sussex Industrial History No. 31*. The railway ceased to operate in 1935 and was dismantled. Much of the track bed can be traced and some platform remains exist at Chalder and Hunston. The lifting bridge at Hunston was owned by Chichester City Council and was removed prior to WW2. The north concrete abutment remains, the one on the south side having been blown up as an army exercise in the war.

Members of our Society and the Chichester Ship Canal Trust wanting to construct a memorial to the railway decided to replace a short length of track on the bridge abutment at Hunston. A set of wheels have been attached to the rails. On the 4th of May the trip boat *Richmond* left Chichester Basin with an invited party of some 34 officials of the S.I.A.S., the Ship Canal Trust and the Col. Stephens Society. As it was not possible to moor at the bridge John Mills, Archaeologist at West Sussex County Council, Laurie Cooksey, the author of the definitive history of the line and John Blackwell, our chairman disembarked at Hunston Wharf and were taken by road to the bridge. Here each drove a "golden" spike into a sleeper holding a rail and the exhibit was declared complete. The official party returned to Chichester after making a stop at Hunston Wharf to view the model of the railway line at the former bridge and other attractions in a marquee. All agreed that Alan Green is to be congratulated for a very well organised pleasant day out.



Members of the Party watching the spiking ceremony (Martin Snow)

De Witt Kilns, Amberley Museum

Dr. Clare Seymour

Sitting in the middle of the site, the De Witt Kilns can, in many ways, be seen as the heart of the Museum. They are a bold testament to the site's industrial history as a quarrying and lime-burning operation which flourished for over 100 years. With the development of the Museum since 1979 when it first opened to the public, many new exhibitions and re-located buildings have joined and somewhat overshadowed the collection of original quarry buildings.

With the restoration and interpretation of the De Witt Kilns, the Museum visitors will be left in no doubt as to the site's former history and will be encouraged to explore the other quarry buildings with renewed interest.

The De Witt Kilns project will be the biggest ever undertaken by the Museum. Following a grant of nearly £400,000 from the Heritage Lottery Fund, work began on site earlier this year. The project team consists of Ralph Mills (lead consultant and structural engineer), Phil Daventry (quantity surveyor), Fred Aldsworth (archaeologist), Richard Prior (Museum trustee) plus other Museum staff and volunteers.

In March, the Cathedral Works Organisation (Chichester) Ltd. started the structural repairs. Over time and due to the immense heat from the kilns when they were operational, the east wall and south-east corner have deteriorated badly and become unstable. The insertion of steel ties across the top of the kiln block, block stitching and repointing will provide the necessary stability to prevent any further problems.



View of the top of the De Witt Kilns, prior to start of restoration.

The uppermost layer of the chalk and spoil will be removed from the top of the kiln block and a waterproof membrane and drainage installed. Restoration work to the insides of the kilns is planned and the shedding over the western platform will be reinstated by volunteer labour. The original track on either side of the kilns will be replaced and, under the shedding, wagons will be restored by volunteers, providing a point of interest for visitors.

Imagemakers have been appointed as the exhibition designers and will be working closely with the Museum team to provide an interpretation of the kilns within the context of the whole site.

The final part of the project is to improve the footpaths and access ways to the kilns. New viewing points will be installed and some of the vegetation which has screened the kilns from the railway line and main Museum road will be removed to open up vistas of the kilns, thus encouraging people to visit the structure.

The structural repairs are due to be completed by the end of this year. The interpretation and access works will be completed the following year with an official opening early in 2011.



The scaffolding to the east of the De Witt Kiln

Another Arun Bridge to be replaced

Alan H. J. Green

In *Newsletter No 141* I reported on the pending demise of the suspension bridge over the River Arun at North Stoke, a structure that is to be replaced by West Sussex County Council. Now a planning application has been received by Arun District Council for the replacement of another bridge across the Arun, this time at Offham, the work being proposed by the Norfolk Estate. In the company of Chris Bryan, I made a site visit on 17th January to inspect the structure, but unfortunately it had already been closed off, with access onto it being barred



Fig 1 A long view of Offham Bridge looking east (Chris Bryan)

The structure (GR TQ 031087) is an occupation bridge carrying a farm track over a cut of the River Arun next to the Mid Sussex railway line. The farm track then crosses the railway on a level crossing but soon peters out in the field beyond.

History of the site

The cut of the River Arun and this occupation bridge have an interesting history as both came about as a result of the completion of the Mid Sussex railway line, which opened in 1863.

The London Brighton and South Coast Railway Company, in an Act of 1860¹, was granted, inter alia, powers to construct the Mid Sussex Junction Railway between Hardham and the West Coast line at Ford, via Arundel. At the instance of the Commissioners of Sewers, the LB&SCR were required to construct at Offham a

deviation (described as *a new cut or channel*) of the River Arun parallel to the new railway, and to provide a bridge across it to accommodate a farm track².

Section XXV of the Act prescribed the layout of the bridge which was to comprise two openings each of forty feet and three others of thirty feet and it also stipulated that on completion, the cut and the occupation bridge would be considered as part of the River Arun (i.e not part of the LB&SCR) to be vested in the owners of the river and come under the jurisdiction of the Commissioners of Sewers for the Rape of Arundel. The deposited plans for the Act refer to the track as *Occupation Road*.³

The LB&SCR, as required by the Act, duly submitted a drawing of the proposed cut for the approval the Commissioners of Sewers. Dated 25 June 1861⁴, this drawing indicates that the bridge would have one 90 foot span over the river and two side spans of 30 feet each which is at variance with the provisions of the Act. The overall length of the bridge as specified in the Act would have been 170 feet with five openings whilst that on the plan would have an overall length of 150 feet and only three openings. This change obviously came about as a result of negotiations between the LB&SCR and the Commissioners after Royal Assent had been given to the Bill.



Fig 2 Close up of the pier on the east bank and the upstream truss. The level crossing over the Mid Sussex line can be seen in the background. (Chris Bryan)

In the early 1920s the Arundel Estate Office and the Commissioners for Sewers contested their obligation to maintain the bridge since the Southern Railway had been observed carrying out some repairs. The Southern's District Engineer at Brighton wrote to the Arundel Estate on 9th October 1923 to say that he had carried out the repairs *under a misapprehension* and that responsibilities for the structure were, in fact, as per the Act. Solicitors became involved and it the Commissioners for Sewers were still contesting the matter on 9th September 1925 when the correspondence stops suddenly.⁵

The existing structure

The present bridge is a three-span, continuous, half-through structure with riveted wrought iron trusses carrying a (now) substantial timber deck. The openings correspond with those given of the plan submitted to the Commissioners of Sewers (see above) having a main span of 91' 5" (27.87m) and side spans of 30' (9.15m). The trusses, are at 13' 1½" (4.0m) centres and their ends are protected against impact from road traffic by substantial cast iron posts. The superstructure is supported on piers at the water's edge and bank seats at the extreme ends. The piers consist of cross-braced, cast iron, 'H' section columns that splay outwards towards their bases.

The trusses seem unbelievably flimsy, a fact reflected in the three-ton weight restriction that is doubtless the reason behind the proposed reconstruction; modern farm machinery vastly exceeds the design loadings of a horse and cart.

The proposed works

The proposed works covered by the planning application are to demolish the existing superstructure and replace it with a standard Bailey bridge, supported on the existing piers and new concrete bank seats. The new structure thus complies with the 1861 agreement with the Commissioners of Sewers regarding layout of spans, but it will lack the charm of the existing.

Reference

¹ 23 & 24 Vic. Cap clxx1

An Act to enable the London Brighton and South Coast Railway to make certain alterations to their Coast Lines and... a new Channel for the River Arun and other Works

² WSRO LD/II/MM/1 a collection of six letters, mostly regarding the opinions of Mrs Few & Co, solicitors of the Strand, London, on the liabilities for the maintenance of the bridge. They quote the fact that the cut and the bridge were provided "at the instance of the Commissioners" implying that the Commissioners had petitioned the Bill at select committee stage in order to have these features included in the Act.

³ WSRO QDP/W127 Sheet 3 thereof covers the works in the Offham area.

⁴ WSRO LD/II/LS2/2. The Commissioners have added their comments to the drawing.

⁵ WSRO LD/II/MM/1 op cit. Unfortunately only one side of the exchange of letters – Messrs Few's – is included.

Update

Reprinted from the May 2009 Newsletter of The Amberley Society

North Stoke Suspension Footbridge

It is with great pleasure that I can confirm that the Amberley Society have saved the bridge. West Sussex County Council has this week released a statement to the media announcing that the bridge will be repaired by the Army. The 70 Gurkha Field Support Squadron of 36 Engineer Regiment will repair and restore the bridge to its original design and in some respects, on completion, will be better than new. There are to be a few improvements to some of the detail fittings and to the protective coatings.

The Royal Engineers have already completed their full structural survey and plan to be back on site to dismantle the bridge at the end of May*. It will then be taken to the Squadron's Maidstone base where the parts will be inspected and repaired. Once these are back in place at North Stoke, new timber decking, parapets and anchor points for the main cables will be installed. The existing tower foundations and, hopefully, the towers will be retained.

Completion is scheduled for late July and we will be organising an event to celebrate the occasion. The Gurkhas have promised to cook a curry and perform their famous sword dance. If anyone would like to help organise the event, or suggest how we celebrate, please let me know.

Six months have now passed since Tim Ralph, a keen walker, alerted us to the plight of the bridge. Throughout the campaign we have worked closely with Jon Perks, the Principal Rights of Way Officer, and Ian Steel, Consultant Engineer, at West Sussex County Council. Various initiatives were put forward and the outcome is all we could ever have wished for. There are two people without whom this could never have been achieved: Reggie Trench and his colleague John Fitzmaurice, from Birdham. Both are retired Royal Engineers and their tireless and enthusiastic efforts resulted in the Army taking up this interesting project as a training exercise. Back in February the whole project looked to be in jeopardy because of Afghan troop surge requirements.

At the AGM one of our members very kindly and generously offered to underwrite the costs should we decide to organise the repair ourselves. 'Plan B' was readied as back-up and I am most grateful to Mackley Construction, of Henfield, and Archibald Shaw, consultants from Chichester, for their swift response. Mackley had a surveyor on site within two hours of being contacted.

The offers of support and help from so many has been of great encouragement in seeing this project through to a successful conclusion. Others who have been helpful include David Locke at North Stoke Farm, and James Steele-Sargent, of Arun Landscapes, who offered workshop space, plant and facilities near the site.

* The bridge has now been removed.

The dig for Casher Bridge at Chichester Marina

Following the earlier unsuccessful dig for this bridge (subsequent to a Magnatometry survey in February 2008 which produced an anomaly just a little bigger than a swing bridge which is approx. 10' x 40') A bridge was rumoured to be buried nearby. A trench some 4' x 4' and 'L' shaped about 2' 6" wide and 5' deep was dug, a second visit to remove the loosely backfilled earth and increase the size of trench was carried out on 24th January 2009. The backfilling had acted as a sump for the surface water from the car park and before going down 12" we were baling out and this carried on to about 4' in depth and of course, the soil was reduced to liquid mud which when thrown off a shovel on to the spoil heap liberally decorated the cars of some of the diggers. The trench had to be backfilled before leaving the site for safety reasons. The next time we increased to 6' x 5' and went down to 7' 4" (the magnatometry survey apparently only penetrates to approx. 6')

At this depth we appeared to be in the natural soil (which was clay) all the rest having been land fill; mostly hard pressed clay and flint and chunks of tarmac (a pick axe job all the way). The dig was orientated across the anomaly/bridge and at this length we should have hit one of the main longitudinal beams of the structure as they are spaced at approx. 3' 3" centers. We found nothing. A thin steel probe was used up to depth of some 12" right across the bed of dig and into the ends and this also found nothing.

Much disappointment joined the aching backs. The mystery is now, what created this big anomaly on the printout.

If we can raise the necessary funds we may hire a mechanical mini digger and have another go later in the year.

Request for Information

I would be very grateful if, in the next issue of the SIAS Newsletter, you would make mention of the fact that I have started researching the history of the former aerodromes at Wilmington (Eastbourne) and Pebsham (Hastings) and that I would be very grateful to hear from anyone who has or can point me in the direction of any information, documents and photographs, concerning these aerodromes and their flying clubs/operators, that I have not yet traced. For the avoidance of doubt – and to avoid putting members to the trouble of directing me to sources that I have already investigated – I am aware of the files held in the ESRO, Wealden DC, Hastings BC, the National Archives and Eastbourne Library. More specifically I shall be very grateful if any member can shed light on (a) what became of the papers of the Eastbourne Flying Club post 1939 and (b) flying activity at Pebsham prior to 1940. I can be contacted by e-mail at msandek.davis@free.fr or by telephone on 00 33 5 49 72 04 69.

Please reply direct to Mr. Michael Davis (Ed.)

The following is an updated version of the article that first appeared in Newsletter 129 January 2006

The Hundred of Manhood and Selsey Tramway

John Blackwell

The Selsey peninsular lying to the south of Chichester was originally an island and formed part of the Hundred of Manhood (main wood) so it was originally part of a huge forest. It was, and still is, primarily an agricultural, sparsely populated area except for the post-war development at Selsey.

By the end of the nineteenth century, improvements in communications between Chichester and Selsey were mooted. The Selsey Railway and Pier Act of 1888 would have provided a connection to the LB&SCR at Chichester and terminated with a pier for steamers near the Coastguard Station at Selsey. Capital required was £75,000 but the scheme was not proceeded with. In 1895, a simpler scheme omitting the pier, estimated at £21,000, was proposed but this also ran into difficulties, probably with local landowners, until it was resuscitated at a meeting attended by City worthies at the Dolphin Hotel, Chichester, on the 11th March 1896. From this meeting, the Hundred of Manhood and Selsey Tramways Company Limited was formed. As this was a tramway running on private land it was not subject to Parliamentary Acts. It had to make inconvenient detours by skirting fields and running through farms to get a right of way. To say the line was economically constructed would be an understatement. There were no signalling or crossing gates and the rails were of light weight with little or no ballast around the sleepers to which the rails were directly spiked. The estimated cost of £12,000 was exceeded with construction and land costs of £21,750 and rolling stock £3,268; the deficit was raised by further share issues.

H.F. Stephens was appointed Engineer in January 1897. The contractors, Messrs. Mancktelow Bros. of Horsmonden Kent, previously used by Stephens on the Rye and Camber Tramway, undertook to lay the permanent way within four months, following delivery of the materials. They were presumably also responsible for the station buildings, as they were of the same corrugated iron sheeting on wooden framing as used on the Rye and Camber. The line opened for traffic on the 27th August 1897. It was some 8 miles long and built to standard gauge. An inauspicious start to the line's career was made with the first train arriving an hour late to make the inaugural journey from Chichester with three coaches, only two of which could be accommodated at the platform. The lines prospectus had stated "it is not intended or desired to run trains at express speeds"- a statement which proved all too true in the years to follow. In 1898 a *Railway Magazine* reporter noted, after arriving forty minutes late at Selsey and fifteen minutes after the train was advertised to

return; "I am told that originally the Company did not state the arrival times of trains. I am rather surprised that they do so now; it is an overbold stroke of policy". The line was managed by Stephens and formed part of his 'empire' controlled from Salford Terrace in Tonbridge. It prospered until about 1920. Indeed in 1913 powers were sought for a Light Railway Order for a branch from Hunston to West Itchenor and East Wittering with a 200 ft long pier at West Itchenor. The First World War intervened and the powers lapsed in 1921. The line continued to operate without parliamentary powers until January 1924 when application was made under the little used Railway Construction Facilities Act of 1864 for a change of name to the "West Sussex Railway Co." This did little for the railway other than to give it a legal status and bring its operations under the scrutiny of the Ministry of Transport. Importantly, after Stephen's death in 1931, this empowered the ailing line to enter into negotiation with the Southern Railway with regard to re-construction, working and management of the line, Stephen's lines having been left out of the 1923 grouping. The Southern Railway was not interested and with increasing bus competition (services from the city centre started in July 1920) passenger traffic decreased from 102,292 in 1919 to 13,416 in 1931, when a receiver was appointed. By November 1934 there was only one train per day each way and on the 19th January 1935 the service was "suspended until further notice". Shortly after this the line's assets were disposed of for scrap.

There were eleven stations on the seven mile line and today, 75 years after closure, the course of the line can still be largely followed. The Chichester terminus was situated south of the LB&SCR station and behind Terminus Road opposite the canal basin. There was a single track connection between the two companies but neither companys' locomotives were allowed on the other's metals. A modern office block is now on the station site. On leaving the terminus westwards, a sharp curve was negotiated, now covered by factories, across Terminus Road; then over what is now the bypass before crossing Stockbridge Road. Here the line continued along the present footpath and then along the west bank of the canal, crossing by a bridge at Hunston SU 861 022. This lifting bridge was built for and owned by Chichester City Council who charged the tramway rent of £2 per annum. The original drawings no longer exist but its eccentric design would be typical of the Colonel's hand. Several men were required to open the bridge for small sea going vessels that were horse drawn from Birdham Lock to Chichester basin. All that remains today are the concrete abutments on the northern side and the platelayer's cottage, on the south side to the west of the footpath. This footpath follows the course of the railway to the site of Hunston Station SU 859 015 which was situated

to the east of the main road to Selsey. The remains of the platform, which was substantially built of concrete with brick edging, can still be found on the opposite side of the hedgerow adjoining the road.

Hoe Farm Halt SU 862 004 was a private “station” for the local farmer/ landowner with no building. Chalder Station, SZ 860 992, a mile further on, had the standard corrugated iron and timber framed hut. The platform remains have recently been cleared of undergrowth and the foundations for the hut to the rear of the platform can be clearly seen. The next stop Sidlesham at SZ 860 973 was near the site of a tide mill erected in 1755 with eight pairs of stones. It lost its source of natural power in 1876 with the reclamation of Pagham Harbour but continued working until 1906 using steam power. The building collapsed around 1920 but the foundations are still visible. On 15th December 1910 there was a catastrophic flood which inundated 2,000 acres of the reclaimed land in one hour, flooding the line to a depth of 12 feet. A shuttle service to Mill Pond Halt at SZ 856 981, a temporary stopping point some half mile north of Sidlesham was followed by a two-horse omnibus journey, (a portent of things to come!) to Ferry Station to connect with the shuttle to Selsey. At this date the Company was prosperous enough to pay for a mile long embankment across Pagham Harbour, 15 feet high costing £2,500. The harbour was not reclaimed after the flood. The original station building was placed at right angles to the track, facing the road and not on the reconstructed timber platform. The hump where the road was raised, the embankment running south and the abutments of a bridge crossing a rife at the southern end are still clearly visible from the footpath.

Ferry Station at SZ 856 963, a wooden halt, was situated where the track crossed the main road on a very dangerous (and still dangerous) blind bend. With no gates and increasing motor traffic, it is not surprising there were several accidents here in latter years. From here one can still discern the straight alignment south to Golf Club Halt at SZ 855 946 a private “station” for members. Here was the site of a major derailment on the 3rd September 1923, when the fireman of the locomotive was killed. Although the inquest verdict was accidental death, the Chief Engineer, Stephens, was held indirectly to blame as there was evidence of neglect in the upkeep of the track. One juryman declared it was possible within 200 yards of the accident to lift out spikes supposedly holding rails to the sleepers.

Selsey Bridge Halt at SZ 857 939 was situated in a cutting near the present Police Station but has been completely obliterated. This was the temporary terminus of the line from August to November 1897. A siding just north of the station served the Trojan Brickworks; another brickworks had sidings south of the canal bridge at

Hunston. Selsey Town Station at SZ 862 936 has been completely covered by modern housing but was near Allendale Close. Railway Road has reverted to its previous name Church Road and a terrace of housing built for railway employees survives now numbered 27-33. Chichester and Selsey Stations were the only ones with any form of illumination, both being lit by gas supplied from local gas works. There was a small goods shed. Transport of produce, particularly in the early days, and the Pullinger patent mousetrap, provided an important income to the company. Of the total receipts in 1933 of £2,400, £1,800 was for carriage of goods. The loco shed with facilities for six engines was also sited here.

On the 1st August 1898 the line was extended half a mile to Selsey Beach Station at SZ 866 934. This extension only worked during the summer months and had closed by 1912. Remains of the platforms and the alignment could still be found until the early seventies when they disappeared under the new East Beach car park.

The Company only bought one new locomotive, *Selsey*, in 1897. The other locomotive used at the line's opening, *Chichester*, was built in 1847. Various other decrepit locomotives between 20 and 40 years old were used at different periods in the line's existence. Carriages fared slightly better, three being purchased new for the opening and a further one in 1900. Seven second-hand carriages were obtained between 1910 and 1916, the time of the line's greatest prosperity.

Because of the poor condition of the locomotives and in a bid to reduce operating costs, Stephens pioneered the use of rail cars. They were comparatively cheap to purchase, economical and flexible to run and spares could be obtained from the local garage. These were basically a lorry/bus chassis with flanged wheels on which was mounted a body with wooden seats. In 1924 a Ford set arrived, followed in 1928 by a Shefflex set. A set consisted of two identical vehicles back to back with a wagon for light goods and luggage coupled in between. Only the leading vehicle was used as motive power the rear one being towed. It was noted by one traveller "like being transported in an oil drum leaving one with a continual ringing in the ears, the stench of petrol in the nostrils and an extremely sore behind".

Further reading:

Edward Griffith: The Selsey Tramways. 1974

K Smith & V Mitchell: Branch Line to Selsey. Middleton Press 2005 reprint

Pullinger Patent Mousetrap, SIH 24, 1994

Alan Green: Hunston Canal Bridge SIH 31 2001

Laurie Cooksey: The Selsey Tramway, White Swan Publications, 2006

Alan Green: A Colonel Stephens "Find" SIH 37 2007

The British Railways Photographic Unit

Alan Green

The January SIAS lecture always takes place on the same day that the Brighton Circle have an afternoon meeting at West Blatchington, and our lecture always has a railway theme in order to give the “Gricers” amongst us the opportunity of indulging in a railway day by attending both events.

The Brighton Circle lecture was by Trevor Povey on *Railways to the Dyke*. This had already been heard by some SIAS members but was none the worse for that; it was a highly informative and well-delivered talk.

For the SIAS lecture we were fortunate to have John Goss to talk about his work for the erstwhile BR Central Photographic Unit, which he joined in the late 1960s. John began his talk in outlining the history of the Photographic Unit, originally part of British Transport Films, which existed to create images for railway publicity, to record important events and to take progress photographs of major engineering works. One of the more esoteric functions was photographing stocks of tickets at Victoria and Waterloo for the monthly ticket audit.

John began his talk by explaining his twin passions for photography and railways, and how he landed the BR job after having abandoned his initial aspirations to become a lawyer. He then showed a wide selection of slides of the photographs he took for record and publicity purposes, including launching of new ships for Sealink, the early runs of the prototype HST and APT (including a once-in-a-lifetime shot of the two side-by-side at Swindon), the start of *Motorail*, the best-kept station awards and covers for rail holiday brochures. Although some of these ventures seemed but yesterday, it was sobering to reflect that the High Speed Train actually took to the rails 35 years ago!

In the second half John showed a selection of slides illustrating major civil engineering works which, by the 1980s, had become the staple diet of the Photographic Unit at Waterloo. As much of this work took place at night great demands were placed on the photographer’s skills to produce shots of plant and machinery in action in artificial light. John’s dramatic picture of a *Thermit* rail-weld being made in pouring rain outside Brighton signal box was case in point.

As the effects of the approaching privatisation began to be felt the Photographic Unit was wound up and John, the sole survivor, came under the wing of the Chief Civil Engineer at Croydon until he retired in 1994.

The mark of a good talk is that the audience are entertained and informed in equal measure, and the near-capacity crowd at West Blatchington Mill were certainly so rewarded. The wide-ranging talk, illustrated with some truly stunning shots, was delivered with much humour and left the audience wanting more.

Book Review

Lost villages of East Sussex

by Peter Longstaff-Tyrrell

Reviewed by Robin Jones

This book, subtitled Balsdean, Bishopstone Tide Mills & Holywell in living memory, cover the activities which took place in these villages in the recent past. The map on the front cover shows the location of Balsdean on the South Downs, north of Rottingdean and to the east of Woodingdean. Bishopstone Tide Mills is between Newhaven and Seaford and Holywell is located at the western end of the promenade at Eastbourne.

Illustrated with many early black and white photographs, there is more written about Balsdean, including a section covering the military activity particularly in the Second World War. Mention is also made of the Chapel and the 1930s Pumping Station at Balsdean.

The Tide Mills at Bishopstone follows on with the origins explained. Photographs include early views when the mills were working together with a familiar scene of the windmill above the granary. Photographs of the display boards, giving information about the history of the area, erected around the site today are also included.

Finally, many early photographs of Holywell illustrate this part of the book and various buildings erected on the site described, including Holywell Coast Guard Station. Although I personally have an interest in paddle steamers, I could not understand the reason to include five photographs of these vessels, seen in the late 1880s, in this part of the book.

Overall however a well researched book with details of these three lost villages, together with a comprehensive list of sources and suggestions for further reading. At £8.99 and published by GoteHouse Publishing, this is a useful addition to the library of members who are interested in this subject.

© 2009 Contributors and Sussex Industrial Archaeology Society
Published quarterly in January, April, July and October.

Contributions for the next Newsletter should be sent to the Editor by the 12th September 2009.

Opinions expressed are those of the respective authors and do not necessarily reflect the views of the Society unless specifically stated.

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 : Brig. A. E. Baxter,
9 Madeira Avenue, Worthing. BN11 2AT (01903 201002)

General Secretary : R. G. Martin, E-mail sias@ronmartin.org.uk
42 Falmer Avenue, Saltdean, Brighton. BN2 8FG (01273 271330)

Treasurer, Membership Secretary and Archivist : P. J. Holtham,
12 St. Helens Crescent, Hove. BN3 8EP (01273 413790)

Chief Editor : Dr. B. Austen, 1 Mercedes Cottages,
St. Johns Road, Haywards Heath. RH16 4EH (01444 413845)

Newsletter Editor : M. B. Snow, E-mail news@sussexias.co.uk
32 Orchard Avenue, Worthing. BN14 7PY (01903 208975)

Programme Co-ordinator : M. H. Dawes, E-mail malcolm.dawes@btinternet.com
52 Rugby Road, Brighton, BN1 6EB

Committee : C. Bryan Mrs. Diana Durden A. H. J. Green
C. C. Hawkins P. J. Hill Dr. Claire Seymour
R. Taylor R. L. Wilson

Area Secretaries : Eastern Area : R. F. Jones – 3 Nutley Mill Road,
Stone Cross, Pevensey. BN24 5PD (01323 760595)
Western Area : Brig. A. E. Baxter – Address above
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



Model of the Selsey Tramway Bridge over the canal at Hunston (*Martin Snow*)



Offham Bridge on the Arun (*Chris Bryan*)