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Change of Address

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COMMITTEE MEMBERS

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E.W. Henbery	P.J. Holtham	E.W. O'Shea	R.M. Palmer	G.C. Thomerson

EAST SUSSEX RECORD OFFICE: REMOVAL

The public search room of the Record Office is now at The Maltings and not at Pelham House. Documents are no longer produced from the strongroom between 1 p.m. and 2 p.m. (the search room remains open, however, throughout lunch time). Appointments are usually unnecessary. The new address is: East Sussex Record Office, The Maltings, Castle Precincts, Lewes, East Sussex. BN7 1YT, and the telephone number for enquiries and orders is Lewes 5400 extension 12/359. Parking facilities are in North Street only five minutes walk away.



# SUSSEX INDUSTRIAL ARCHAEOLOGY SOCIETY

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NEWSLETTER NO. 42

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FORTHCOMING VISITS AND EVENTS

28th April, Saturday 2.30p.m. Meet at Chichester Canal Basin SU 859042, park in Terminus Road. Visit to Poyntz Bridge and Chichester Canal.

19th May, Saturday 10.30a.m. Meet at Argos Mill, Mayfield TQ 570283. Parking will be difficult, please take care. Frank's Mystery Tour of Mills.

23rd June, Saturday 7.00p.m. Members' Evening at West Blatchington Windmill, Hove TQ 278063. Two or three members are still needed to give a few minutes talk on their pet interest in Industrial Archaeology. Please let Don Cox know if you are coming, it is essential for refreshments.

14th July, Saturday 10.30a.m. All day visit to Shoreham Harbour. Plans are beginning to come together. John Farrant will talk on the history of the port using items in the Museum to illustrate some of the points. After lunch Alan Allnutt will show us around the harbour using some of the knowledge he gained as Engineer to the Shoreham Harbour Board.

We shall assemble at the Marlipins Museum in Shoreham High Street. I would suggest that you park cars in the car park at the Adur Centre on the west side of the Norfolk Bridge, there is usually plenty of space there - it is FREE - and it is not too far to walk to the Museum.

IRA VISIT

23rd September, Saturday 2.00p.m. The East Kent Mills Group have suggested another 'get-together' to listen to some talks on mills of one sort or another. One talk will be on "Measuring and Recording Mills". Other talks are to be finalised. Do come. This meeting will be held in the Lecture Room of the Public Library in Tunbridge Wells (as last year).

POYNTZ BRIDGE RESTORATION

With the light evenings we are now hoping to make progress on this project. West Sussex County Council are again backing S.I.A.S. in the vigorous way they did with Coultershaw Water Pump. They have already donated £300 with £500 to come in 1984/5, and a County Surveyor's team will grit blast the cast-iron work and apply a priming coat after which we must immediately apply an undercoat.

Calculations show that an appreciable quantity of steelwork will be needed for holding the broken girders together and relieving the cast-iron of tensile stresses. Rolled steel sections are alas very expensive.

ICE HOUSES IN SUSSEX

In the 18th and 19th centuries most large estates possessed ice houses where ice, which was gathered off any open water on the estate, was stored for use during the summer months.

It is one of my objectives to identify, record and ultimately prepare a measured drawing of all the existing ice houses in Sussex. The following is a list of all those that I know of still existing, although it may include some of which I have a record but have not yet confirmed.

If any member knows of any that I have missed will they please let me know.

WEST SUSSEX

Parish	Location	Map Ref.
Arundel	Arundel Castle	TQ 015075
Barlavington	Burton Park	SU 975173
Chichester	Kingsham Farm	SU 861037
Bognor Regis	Hotham Park	SZ 936995
Duncton		SU 965167
Eartham	Slindon House	SU 958083
Findon	Findon Place	TQ 115086
Findon	Muntham Court	TQ 109096
Funtington	Woodend	SU 817093
Harting	Uppark	SU 778176
Harting	Uppark	SU 783177
Hassocks	Crown Point House	TQ 305156
Linch	Hollycombe	SU 853294
Midhurst	Cowdray Castle	SU 888215
Patching	Dulaney Cottage	TQ 08 06
Plaistow	Shillinglee Park	SU 976218
Parham	Parham Park	TQ 065145
Petworth	Petworth House	SU 976218
Rudgewick	Hedgecocks	TQ 123358
Rudgewick	Hermongers	TQ 099343
Shiplet	Knepp Castle	TQ 155211
Sompting	Peverel House	TQ 161054
Steyning	Wiston House	TQ 156124
Westhampnett	Goodwood House	SU 886088
West Dean	West Dean House	SU 865128
Worth	The Hall	TQ 320361
Worth	Rowfant House	TQ 325373
Westbourne	Nutbourne	SU 77 05

EAST SUSSEX

Parish	Location	Map Ref.
Battle	Battle Abbey	TQ 75 7
Bodiam	Cottage Hospital	TQ 7 2
Buxted	Busted Park	TQ 481229
Chailey	Ades	TQ 401194
Crowhurst	Crowhurst Park	TQ 774135
Folkington	Folkington Manor	TQ 5604
Forest Row	Hammerwood House	TQ 446384
Forest Row	Kidbrooke Park	TQ 418344
Forest Row	Pixton Hill	TQ 437354
Frant	Eridge Castle	TQ 56 35
Glynde	Glynde Place	TQ 458093
Hamsey	Coombe Place	TQ 391123
Hartfield	Bolebrook Castle	TQ 47 37
Hurst Green	Iridge Place	TQ 738268
Maresfield	Maresfield Park	TQ 462248
Maresfield	Twyford Lodge	TQ 395312
Little Horsted	Horsted Place	TQ 469183
Newick	Newick Park	TQ 423195
Ringmer	Norlington Farm	TQ 446131
Rotherfield	Chant Farm	TQ 557304
Rodmell	Rodmell Manor	TQ 420062
Stanmer	Stanmer House	TQ 336095
Uckfield	The Rocks	TQ 466216
Wadhurst	Wadhurst Park	TQ
West Firle	Firle Place	TQ 475070
Withyham	Buckhurst	TQ 50 35

R. G. Martin

PLATEWAY OR RAILWAY TO EAST GRINSTEAD - IN 1818?

A map entitled Roads to Eastbourne, being apparently sheet 2 from an unidentified atlas, shews what seems to be a plateway or railway running north-eastwards from East Grinstead, disappearing over the county boundary after four or five miles or so. The map, shewing roads from London to Eastbourne, etc., uses the same conventional symbol for the Eastbourne 'plateway' as it does for the Surrey Iron Railway, (c.1803 - 44), and was published 12th Feby 1806 by Laurie & Whittle, no. 53 Fleet Street, London. A new edition, 1818.'

By 1818 of course the SIR extension, the Croydon, Mersthan & Godstone Iron Railway, had also been opened and was operating, but this is not shewn.

A number of maps of this period shewed proposed but never - built plateway or railway lines, and perhaps that at East Grinstead was one such? Possibly a member may be able to provide some details of the purpose and destination of this line, and say if it was ever built?

Paul W. Sowan, 96a Brighton Road, South Croydon, Surrey. CR2 6AD

BRIGHTON CHAIN PIER

Newsletter No. 41 contained a description of the form of construction of the pier. This note is to add background information.

Construction of a pier 1134ft. long on an open coast in 1822/23 was an outstanding engineering achievement and the designer, Capt. Samuel Brown, RN., did not make it easier by using 255ft. suspension spans. Ryde Pier (opened in 1814) at 1740ft. was longer but the Solent is sheltered water and the form of construction was orthodox, piled trestles supporting short spans.

Like Ryde the original purpose for the Chain Pier was communication (steamer service to France), but this gradually began to appreciate the attraction of a walk on the pier and this habit received a boost with the passing of the Bank Holiday Act in 1871 which brought lots of day trippers to Brighton.

Captain Brown's choice of suspension spans was made because he was the proprietor of a chain works. In 1817 he had patented a design for wrought iron links which he used in the construction of Union Bridge, Berwick on Tweed, opened in 1820, still in use. Thomas Telford had discussed chain design with him for a bridge across the Mersey at Runcorn proposed in 1813 but not built. Moreover Telford's design for the chains of the Menai Bridge opened in 1826 was influenced by Brown's success at Berwick on Tweed. He used a somewhat similar bar link design for his chains but in a more sophisticated arrangement than Brown's.

The only other suspension pier was erected at Sea View, I.O.W. in 1881. It was a light timber structure 1050ft. long and was finally demolished rather than repaired after neglect during the 1939-45 war.

Fortunately the imposing appearance of the Brighton Chain Pier with its Egyptian style cast-iron towers has been captured for posterity by the painting of J.M.W. Turner.

Alan Allnutt.

TIMBERLEY VIADUCT (TQ 023138)

When the London, Brighton and South Coast Railway extended their West Sussex line from a new junction at Hardham south of Pulborough to join the coast line south of Arundel in 1861-63, the route followed the River Arun to take advantage of the Arun Gap through the South Downs. Eight bridges were required in the flood plain of the Arun River, the longest being Timberley Viaduct, 528ft. with 15 spans. It is now one of the oldest surviving metal viaducts in the South East but fortunately the inevitable strengthening of metal bridge spans has not altered its original appearance.

The 30ft. approach spans, which are the same design as several of the bridges, were strengthened in 1894 by replacing the cast-iron rail bearers by mild steel rivetted plate girders which are invisible except from underneath. The cast-iron (outer) parapet girders and the cast-iron trestles remain unchanged.

Over the river there is a 106ft. long wrought iron open truss span of two "bow-string" girders with unusual end castings which also act as bearings for the adjacent plate girders. It has not been necessary to strengthen these main girders as they were designed for four tank engines on each track and thus they were adequate for all the heavy class 'L' 4-6-4 tank locos introduced by L.B. Billinton in 1914.

The two spans, one at each end of the bowstring trusses have unequal length girders to compensate for the 60° skew angle between the river and the railway. They are plate girders with curved (in cross section) top flanges, an innovation by I.K. Brunel who employed curved compression flanges on many of his bridges. (The nearest one in use takes the Slough to Windsor branch over the River Thames). These spans are said to have been renewed in 1894 using mild steel, but they are exactly as the 1861 wrought iron design down to the last detail. The Chief Engineers of the L.B. & S.R. at the time was F. D. Bannister.

To get to the aqueduct go to Bury village and walk ½ mile upstream along the west bank of the River Arun. There is a footpath.

Alan Allnutt

In 1853 Sir Godfrey Webster of Battle Abbey died leaving the estate heavily encumbered and was succeeded by his brother Augustus (1). A third brother, Frederick, was acting as the estate agent and he seems to have been responsible for the plan to expand brickmaking activities in an attempt to improve overall profitability. The existing brickyard at Marley Farm was re-equipped with the latest machinery and a second yard was established on the west side of the new railway line, just north of Battle station (TQ 755159). Trial holes were sunk to ascertain the quality of the clay, two coal-fired Scotch kilns (2) were built and a railway siding was constructed at a cost of £200

The evidence for this flurry of activity is to be found in two ledgers, one for Marley Farm and the other for the Abbey estate brickyard(3). These record purchases of new plant and materials for buildings and kilns, as well as expenditure on labour. There is no space here for a detailed analysis but a list of the machinery purchased may be of interest as an indication of what was available at that date.

It seems clear that the Marley Farm yard was to concentrate henceforth on the production of tiles and agricultural drainpipes, as the main items were: "Clayton's bill for the tile machine and pugmill-delivered: £62. 12s. 9d." and "Pipe machine and pugmill: £57. 17s. 6d." These pugmills were horse-operated, as horse labour was listed as a separate item. The new brickyard was equipped with a "Bearls patent hand brick machine (sic): £22. 12s. 0d.". On another page of the ledger this was described as "Patent brick machine 633 with die and cutter complete."

The Websters' decision to invest in this new machinery was probably a result of the Great Exhibition of 1851. Also, in 1850, Edward Dobson had published A Rudimentary Treatise on the Manufacture of Bricks and Tiles (4) in which a number of machines are illustrated. On pages 62 - 65 are a description and drawings of a horse-operated clay-mill with one pair of rollers, made by Clayton & Shuttleworth of Lincoln, which may provide a clue to the identity of the Henry Clayton who supplied the Websters' tile machine. However, Dobson does not mention the firm of Baylis & Glover who supplied the brick machine, for which carriage was paid from London.

It is sad to have to record that all this investment did not pay off. The Marley Farm yard (the site of which has never positively been identified) apparently ceased production after about 1855 and the new yard failed to attract customers. The only sizeable order obtained was from a man called Kempton, to whom 103,800 bricks were delivered at Forest Hill Station involving quite large sums for carriage by rail, but he defaulted and no money was ever received. In 1854, the brickyard's deficit of £1268. 7s. 6d. had to be written off by the estate.

The Websters' financial affairs deteriorated rapidly and the Battle Abbey estate was put on the market in 1857(1). The brickyard continued in operation under the new owner Lord Harry Vane but, from a list of stock and accounts of 1875 and details of income and expenditure in 1886-8 (6), it never seems to have been a very profitable concern. It was offered for sale in 1901 (7) and was abandoned shortly afterwards(8).

Footnote: If readers can offer any further information about the machines and their makers or suppliers, this will be appreciated.

References:

1. Judith A. Brent. A Catalogue of the Battle Abbey Estate Archives. East Sussex Record Office Handbook No.6 pp.14-15
2. The coal-fired Scotch kilns here referred to were probably of the type illustrated on p.21 of Martin Hammond, Bricks and Brickmaking. (Shire Publications, 1981). They represented an innovations, as the kiln at Marley Farm was wood-fired and therefore likely to be of the traditional Sussex open-topped pattern.
3. ESRO BAT 2954, 2955.
4. Reprinted ed. Francis Celoria as Vol5 of the Journal of Ceramic History(1971).
5. ESRO TDE 158. Battle Tithe Map of 1859.
6. ESRO BAT 2477, 2486-9. 7. Battle Museum Library. Sale catalogue with map.
8. Third ed. O.S. (1905) Sheet. LVII/4

M. Beswick

Although not now in Sussex, due to the boundary changes of 1901, when built in 1866 Tunbridge Wells West Station was the furthest west point of the London and South Coast Railway one third of a mile away from their deadly rival the South Eastern Railway at Tunbridge Wells Central. The terminus of the East Grinstead - Tunbridge Wells Railway, it was planned on a magnificent scale with the station building in the Victorian Gothic style to be used as a hotel.

Now threatened with closure a visit is a must but not on a Sunday when it is closed. Set at the head of an approach way (note the cast-iron lamp standard), the Gothic style front with clock tower needs to be examined for many surprises, 'inside' note the booking hall with working gas lights, platform toilets, goods shed and engine shed; the canopies were removed a decade ago on both the up and island platforms.

The single line track, opened in 1881, between the West and Central Stations is worked by train staff handed from the signal box to the two trains per hour which run to or from Uckfield. In 1956 there were 66 departures and 70 arrivals per week day plus 9 goods trains and a shed of 25 engines. During the 18 hours between 6 a.m. and midnight there was on average a passenger train arriving or departing every eight minutes. The routes were 1. Oxted and London via Edenbridge Town, 2. Oxted and London via East Grinstead, 3. Three Bridges via East Grinstead, 4. Uckfield, Lewes and Brighton, 5. Heatfield, Hailsham and Eastbourne, 6. Tonbridge and Sevenoaks via Central. (Railway Magazine, January 1956).

John S. F. Blackwell

A SUSSEX AVIATION ANNIVERSARY

The story of any pioneer and enthusiastic inventor is often one of lack of cash. Jose Weiss - an ex-Parisien engineer and artist living in the Arun valley in the early years of this century and working on both powered and un-powered aircraft hit on an ideal solution. Concentrating all his energies on his practical research into flying-particularly with 12 feet span model gliders - until he ran short of money, he would take his sketch book to some well known and picturesque spot: armed with a quantity of drawings he would then set up a production line of oil paintings in his studio. These sold very well in America and financed yet further experiments in model and, ultimately, manned flight.

Weiss must have been an engaging character - bearded and knickerbockered - with a clarity of mind to see the principles of stability provided by a swept wing. It was this touch of genius that so excited Frederick Handley-Page, one of the small band of Britons working laboriously on getting into the air in the period up to 1910. Handley-Page must have been impressed by a Sussex "first" the previous year when Weiss's bird-winged glider flew from the north slope of the Downs above Amberley piloted by Eric Gordon-England (who had never flown before) but who obviously had supreme confidence in the designer and constructor. The flight lasted for approximately one minute and involved a gain in height of around 40 feet - it may well have been the first recorded soaring flight by a glider in the United Kingdom.

On 27th June, 1984, the Chalk Pits Museum plan to present a lecture to the Amberley Society to commemorate the exact date of the 75th Anniversary of the flight from Amberley Mount. TV South are due to provide coverage in a news slot and it is hoped that amongst other exhibits a model of Weiss's glider will be on display to mark the event.

Acknowledgements

Harald Penrose, "British Aviation - The Pioneer Years" (Putnam 1967)

F. Sowrey.



Details of the A.I.A. Conference are now available. This is to take place at Aberystwyth from Friday, 14th September to Sunday, 16th September, 1984.

The theme is to be mining in Mid Wales and there will be lectures on the Geology, Archaeology and History of Mid Wales, the Lead Industry, Botany and Mineral Prospecting, the Aberystwyth Mint and the Roman Gold Mines at Dolcaucothi. There will be visits to the Llywernog Mining Museum and the Nantyrarian Forest Centre or the Cwmstwyth Mine with a trip on the Aberystwyth to Devil's Bridge narrow gauge steam railway. The Rolt Memorial Lecture will be by Professor John Harris on French Industrial Espionage in the Eighteenth Century. The main programme starts at 17.00 on Friday and finishes at 13.00 on Sunday.

Further events take place during the following three days and these include lectures on Welsh Water, the Work of the Centre for Alternative Technology and the Work of the Aberystwyth Plant Breeding Centre with excursions to Bronfloyd and Frongoch Mines, the Abermawr Sawmill, the 18th century blast furnace and Centre for Alternative Technology at Machynlleth and Towyn, the Roman Gold Mines at Dolcaucothi and a trip on the Tal-y-llyn Railway.

The cost for the basic Conference is £49.00 per head for Residential and £37.00 for non-Residential, with additional charges of £12.75p for full-board for each additional night. The costs of excursions has to be added for the further events.

Full details of programme and charges and the Booking Form can be obtained from the General Secretary. Applications have to be in by 30th JUNE or accommodation cannot be guaranteed.

R. G. Martin.

#### EVENTS.

##### Biskupin: Poland's Iron Age Lake Village.

The fortified settlement of Biskupin in Poland must be one of the most dramatic archaeological sites in Europe. It soon became clear, after its discovery 50 years ago that the entire intricate foundation system and lower parts of the walls had been preserved in the marshy ground, and these with the 6,000,000 objects since found, give an extraordinarily complete picture of life at that time. A comprehensive exhibition about the site including 177 artefacts, models, graphic illustrations of life in Biskupin, photographs of the excavations and of the reconstructed houses and fortifications, as well as details of the preservation work being carried out, is being loaned courtesy of Warsaw State Museum. It will be at the Weald & Downland Open Air Museum, Singleton, W. Sussex (Tel: Singleton 348) May 3 - July 29, (party rates are available by arrangement), and will then go on tour to Runcorn (August), Durham (September), Edinburgh (October), Cambridge (November), and Nottingham (December - January).

This is a unique opportunity to study finds and details of a site difficult of access for many people.

Margaret Challen of the Weald and Downland Museum.

Day Conference on 'Sussex Church History' by the West Sussex Archives Society, c/o County Hall, Chichester, West Sussex, on Saturday, 12th May at 10.30 a.m. This Conference is being held at Dunford House near Midhurst at the cost of £5.75p which includes coffee, lunch and tea. The speakers are: Dr. Eric Kemp, Bishop of Chichester, Brigadier John Spiller and Ian Mason. Please apply for tickets by 21st APRIL.

Also the above Society will be having a walk around the delightful Sussex hamlet of Duncton led by Dr. Peter Brandon on Saturday 2nd June at 2 p.m.

Amberley Chalk Pits Museum is once again (its sixth season) open to the public. Last year (1983) over 50,000 visitors went to the Museum, and the indications are that the Trustees will be correct in their confidence in 1984 being even better.

Among the new exhibits to be seen are the Carpentry and Woodturning Workshop, Circular Sawbench driven by a Blackstone paraffin engine, radio amateur's "Shack" of the 1930's, part of the existing Wireless and Communications Exhibition.

The passenger carrying narrow gauge industrial railway should be open for the whole line from 10th June. For further information contact: Ian Dean (Director), Tel: 079 881 370 (day) or Littlehampton 24868 (evening).

East Kent Mills Group will be having the following events.

Tuesday, 15th May, at 7.30 p.m. in the Village Hall, Woodchurch, when Paul Jarvis will be talking on operating of windmills.

Saturday, 9th June at 2 p.m. there will be a Lydd walkabout. Assemble outside Church gate. Tea will be arranged. Please advise if attending.

Saturday, July 7th a mills tour will be arranged.

30th June - 27th July there will be a Wind and Watermills Exhibition on display at Strood Public Library.

Visitors are welcome to all these events, further information can be obtained from: Hon. Sec. Bernard D. Barber, 'Three Wents', Wingham Green, Canterbury, CT3 1NJ Tel: 0227 72 358

Events of railway interest are planned by the East Grinstead Town Museum throughout April, May and June. The Museum Society will be having a guided tour of local railway sites on 4th July and will be staging an exhibition in the town inspired by the centenary of the Oxted line 30th July - 4th August.

M. J. Leppard

##### H.M.S. CAVALIER AT BRIGHTON MARINA

H.M.S. Cavalier, launched in 1944, is the only surviving destroyer to have seen active service in World War II, and the last representative of a long line of 'classic' destroyers which originated with H.M.S. Havlock in 1893.

After 28 years' service with the Fleet, she was placed in reserve until, in 1977, she was bought by the H.M.S. Cavalier Trust to prevent her going to the scrapyard. In August 1982, the Trust opened her to public viewing in an alongside berth in Southampton Docks.

Preserved with all her weapons, radars, sonar radios and control arrangements intact, she offers a unique opportunity to see for oneself how the sailor lived and fought in these famous small ships, which did so much to keep open the sea lanes on which Britain then as now depends.

She was moved from Southampton to Brighton in November, 1983, and is now berthed at the Marina at Black Rock, and is open to the public daily from 10.30 a.m.

Newsletter No. 41. January 1984. page 5:

The brickmakers on whom I supplied some information were not at Ashurst (a parish in West Sussex, and also a parish just over the border in Kent) but at Ashurst Wood, a hamlet of East Grinstead.

M. J. Leppard

## RECENT VISITS

### Brighton Locomotive Works

On Sunday, 18th March, 1984, nearly forty members and friends came to see and hear about the work of this group of enthusiasts devoting their time and energies to preserving our railway heritage. Their objectives are to develop the former Pullman Car Company Depot at Preston Park, Brighton, to form a major facility for the Storage, Restoration, Repair and Exhibition of Steam Railway Locomotives with Brighton and Southern Railway associations. Members of the Group have the opportunity to work on a range of activities in railway civil engineering, mechanical engineering and historical areas. The ultimate objective is to create a major centre for LBSCR, S.R. and B.R. exhibits embracing the days of steam and third rail electric traction. Also to be a major feature will be items relating to the considerable 'Pullman' history.

Originally a group of steam enthusiasts who were concerned to find that even though Brighton is a famous railway town, there were no relics nor any museum devoted to its very worthy history. They took on the task of trying to create a steam centre in Brighton and in 1982 concluded an agreement with British Rail which allowed them to occupy and develop the former Pullman Car Depot at Preston Park, home of the famous 'Brighton Belle', as an historic centre. The Group have been working very hard on the repair and overhaul of the building and depot as a whole during the initial years but has acquired two historic parcels wagons, an oil tank wagon and two coaches from the old 'Brighton Belle' train and a diesel shunting locomotive. Restoration work on all these vehicles is in hand and they are beginning to regain some of their former splendour. A recent agreement with another group of enthusiasts will mean that there will be more Pullman coaches at the Depot in the near future. The site is a difficult one with no road access - everything that cannot be carried down the steep stairs into the site must be brought in by rail.

D. H. Cox.

### MOTORWAY BUILT BY STEAM

When Wolverhampton is linked directly to the M6 motorway shortly by a new dual carriageway to be called the Black Country Route, it will be thanks to a pair of elderly Fowler BB1 steam ploughing engines that were called in earlier this year to scoop the saturated peaty silt from an extensive area of riverside swamp on the alignment of the new road. Because of the depth of the swamp and the proximity of low slung 132kV power cables, the West Midlands County Council opted for the obsolete technique of dragline dredging in preference to more modern diesel plant.

A pair of Fowler ploughing engines built 65 years ago and named Tiny Tim and Old Jumbo were hired from Sussex enthusiast Vic Mitchell and operated more than 600 feet apart on existing roads dragging a 4 ton scoop back and forth through the 15ft deep swamp on a dragline rigged between the horizontal drums slung under their boilers. The soft silt was removed down to the level of the underlying glacial clay and these powerful and almost silent engines consumed only about £5 worth of coal per hour, whilst working 12 hours at a time.

Engines of this type have long been preferred where soft ground is to be tilled or drained without the requirement of compressing it by the repeated passage of a heavy towing vehicle across it. The success of the two old BB1's in getting a capacious dragline bucket across a swamp where few modern excavator drivers would have ventured is a reminder that steam ploughing engines made an important contribution to the improvement of tillage and land drainage. The advent of the Ferguson and other 'lightweight' tractors late in the 1930's reduced the incidence of soils compressed by excessively heavy plant; but even today it would be difficult to find a pair of winches that can handle a 4 ton dragline bucket and more than ¼ mile of wire cable with as little fuss as these reliable old Fowlers.

Extract from AIA Bulletin, Spring 1984

## PUBLICATIONS

'A Guide to the Industrial Archaeology of Hampshire and the Isle of Wight'  
edited by Pamela Moore, B.A.

The gazetteer contains nearly six hundred entries, giving details of a wide range of sites of interest to be found in Hampshire and on the Isle of Wight. Fully illustrated, it is available from many local bookshops or by post from: Southampton University Industrial Archaeology Group, Mrs. P. Moore, B.A., c/o Department of Adult Education, University of Southampton, Hants. SO9 5NH  
Price £2.75p (Postage 50p extra)

19th Century Railway Drawings. By Alan Prior. David & Charles £10

This very impressive display of the draughtsman's art is of considerable merit in its own right. Carefully researched drawings of a wide range of railway equipment are presented, ranging from ancient wagons of about 1800 and locomotives of about 1820 to the relatively modern-looking vehicles of the 1890's, many of which would have survived nationalisation. Standard and Broad Gauge vehicles are included, with a selection of permanent way, signalling and building items for good measure, drawn from virtually all areas of the British Isles, although there is only one item from South of the Thames. Unlike some books, of which the contents are disappointing when compared with their titles, this book contains a high proportion of drawings from the less-well documented first half of the 19th century. There are drawings of about 30 locomotives, 30 coaches, 45 wagons, 5 sets of pointwork, 4 water cranes, 4 turntables and 3 sets of building details.

The excellent quality drawings, generally plan and two elevations at least for each item are easy to follow for modelling purposes, with a bar scale on each page. However, more explanation of some of the details would be helpful, it is unfortunate that there is no suggested life-span for any of the vehicles, and that the subject of livery and lettering is so complex that lack of space has prevented any reference to these topics.

At first sight it could appear that the wide area and period covered by the book might deter specialist modelling enthusiasts, but closer examination reveals that there is more than enough material to enable decent sized passenger or goods trains of typical vehicles to be constructed for any period from about 1840 in most cases, to run anywhere between Broad Gauge Great Western of the West Coast on the "Premier Line" to the Scottish border, or across England to East Anglia via the Great Northern and Great Eastern. Had the drawings related to a more specific area and time the appeal could have been diminished.

It is to be hoped that Mr. Prior's initiative will be rewarded by the response of enthusiasts and modellers, so that he will be encouraged to continue what must have been extensive and fascinating research and publish further selections, including vehicles from South of the Thames if these can be found, and outline livery details where these are not too complex.

A. G. Hosking.

Mr. Prior is a member of SIAS

### BACK NUMBERS OF SUSSEX INDUSTRIAL HISTORY

There is a steady trickle of requests for back numbers of Sussex Industrial History. To avoid disappointment would you please note that the availability is as follows:

Sussex Industrial History Nos. 2, 3 & 5 @ 30p per copy plus postage  
Sussex Industrial History Nos. 7, 8, 9, 11, 12 & 13 @ £1 per copy plus postage  
Quantities of Nos. 7, 8 & 11 are severely limited.

Photo-copies of whole issues or individual articles can be supplied at 7p per page plus 30p postage. Please apply to the General Secretary for any requirements.

Melledgen Press has announced its forthcoming publication of "A Gazetteer of the Railway Contractors & Engineers of the West Country 1830-1914" 44pp plus 8 maps and illustrations. Price £2.85 incl. p+p Published June 1984 ISBN 0 906637 03 1

Gives comprehensive new details concerning the builders of all the various railways which were brought into use in the West Country (i.e. South West of the Bristol/Gloucester-Poole axis) before 1914 together with each component link's opening date for public passenger traffic (plus relevant source data). In a number of cases also, full details are given similarly of the various successful and unsuccessful tenders made by these little known Victorian entrepreneurs, thus giving greater depth to the whole.

In the same series: "A Gazetteer of the Railway Contractors & Engineers of East Anglia 1840-1914" 44pp plus 4 maps and illustrations. ISBN 0 906637 05 8. £2.95p

This fourth gazetteer looks in details at the many routes worked up by contractors in rural East Anglia. Significantly indeed it was to be here especially that the lines of particularly the leading entrepreneurs - and notably those of a devious Peto and an adventuring Brassey - came to be at amongst their most potent in the 1840's and 1850's across country; and later, in the 1860's, when multiples of their often related unnecessary shorter links were aimed into or teased directly the few existing ports and fabricated resorts.

"A Gazetteer of the Railway Contractors and Engineers of South East England 1830-1914", 44pp plus 3 maps and illustrations. Price £2.95 ISBN 0 906637 04 X.

The South East of England comes under careful scrutiny to illustrate, comprehensively and in sequence, which firms and which engineers were at work and indeed, who were highly active, especially during this region's great expansionary phases of railway building. Additionally a detailed coverage is given to the South Eastern Railway in the 1840's and 1850's and secondly to the London, Chatham & Dover Railway (the contractor's line par excellence) in the 1860's - the latter struggling, not only to compete but eventually to survive in the face of attacks from its stronger and more firmly entrenched rival.

These books may be obtained from Melledgen Press, 30 Trent Way, Ferndown, Dorset. BH22 8UZ

#### A SKILLS MUSEUM

The Summer 1983 edition of Yesteryear Heritage asks the question 'How about a Skills Museum?' Industrial Archaeologists and Historians study many aspects of Industries and Crafts and try to preserve much of what remains, but only fragmentary efforts are being made to record and maintain the skills of the people who made or processed the products they study.

The article goes on to ask 'Would it not be a good thing if a co-ordinated training scheme could be set up to ensure that there are a number of people who can demonstrate a particular craft of skill. These skills are wider than the discipline of the archaeologist and the local historian, farming or craft museum. For just as a central bank of vegetable seed is planned could we not co-ordinate the preservation of traditional craft and industrial skills before they become extinct'.

Then the challenge is issued 'Who should do this without unduly increasing the load on the already overburdened volunteers?' Such a challenge should not go unheeded and it has therefore been decided that the AIA should attempt to gather information which could form the basis of a reference for consultation by any one interested in seeking particular skills. Initially, we must establish how much information is already documented. It is known that there are registers and directories but the extent and scope of these is problematical. The next step is to collect the names of individual craftsmen who are not covered by any published list. We should then be in a position to establish an information bank and maybe in the longer term be able to provide practical assistance.

You can be of assistance by passing on the names of publications and individuals and their particular skills to: Harry Smith, 20 Georgewood Road, Hemel Hempstead, Herts. HP3 3AL. Tel: 0442 64510

#### CURRENT PROJECTS.

##### Jack and Jill Windmills

On November 5th the final sweep was hung and once again Jill sports a full set of sweeps. Two new sail frames were made by Hole and Son the Burgess Hill millwrights, with steel stocks and these and the two usable original sails were equipped with a half set of shutters each, by Preservation Society members.

The fan tail tackle which is a replica of that at Cross-in-Hand was craned into place during March.

The mill is open on most Sunday afternoons from the end of April.

J.S.F. Blackwell

##### Coultershaw Water Pump

Work has proceeded throughout the winter on finishing off the building, overhauling the pump and improving the graphical and hardware displays on rural water supply. As anticipated in last October's Newsletter, a new sluice-gate has been made and temporary repairs are in hand on the other two.

It is intended to open the site and building to the public on the 1st and 3rd Sundays in each month between April and September inclusive from 11a.m. to 4p.m.

Working parties also function on these days and we badly need more helpers for a variety of jobs, including maintenance of the machinery, the building and surroundings and attending to the visitors. So if you fancy yourself as a decorator, landscape gardener, public relations person or just want to see what's on offer, come along! We also need an old office desk or table with drawer, about 4ft. by 2ft., as a sales table for pamphlets and other literature. Any offers would be very welcome; please contact Alan Allnutt (Chichester 786044) or Michael Palmer (Worthing 505626).

#### RECORDING OF INDUSTRIAL ARCHAEOLOGY SITES IN SUSSEX

One of the objects of the Society as stated in our Constitution is "... to record the physical remains of economic and industrial activity, especially since 1750, in the Counties of East and West Sussex, ...". Apart from a good start in the late 1960's and early 1970's this has not been done and the Committee feels that this task is long overdue.

We need your help to carry out this operation. What is required is for individual or groups of members to investigate and record all the I.A. sites within their own specific local area. The degree of detail incorporated in this preliminary investigation will depend on the time available and the expertise of the member. Please do not be put off if you feel that you lack the necessary knowledge. The essential object of the operation is to ensure that every site, whether existing or recently destroyed and of which information is still available, shall be recorded describing the precise location and physical remains. Any subsequent survey and investigation can be done later, if necessary, by more knowledgeable members. Volunteers will be sent full details as well as notes on completing Record Sheets for each site.

Enclosed with this Newsletter is a questionnaire and I would be grateful if you will complete this if you feel you can assist in this very valuable piece of research. On the proforma there is also a space for you to state specific knowledge and skills. It is appreciated that some of this information is also incorporated on the application form for membership but much of this data is now, possibly, out of date and it is hoped to set up teams who would be willing and able to carry out more extensive surveys of sites and to participate in emergency surveys where imminent development may destroy an unrecorded site.

Peter Holtham and I are collating the Record Sheets and I would be grateful if you will return the questionnaires to me as soon as possible.

R.G.Martin. Gen. Sec.