



SUSSEX INDUSTRIAL ARCHAEOLOGY SOCIETY

NEWSLETTER No. 3

June 1974.

SIAS NEWS

Open Air Museum. On Saturday afternoon, 27th April, 13 members and their friends visited the Open Air Museum, Singleton. During the four years since our last visit many new buildings have been erected, notably Bayleaf Farmhouse, Titchfield Market Hall and Hambrook Barn, the last containing an exceptionally fine exhibition of the various methods of construction used in old Wealden timber-framed buildings. The weather was fine and we had a very pleasant and satisfying visit. AJH.

Ashford Steam Centre. On Saturday 18th May, 1974, Mr. Wilfred Beswick and about a dozen members paid a visit to the South Eastern Steam Centre at Ashford, Kent. This was combined with a trip on the Hastings- Ashford Railway line, which is under threat of closure. The party assembled at Hastings to catch the 11.15 a.m. to Ashford, and items of interest were noted en route at Hastings, Ore, Doleham, Winchelsea, Rye and Warehorne.

Mr. Lewis Evans of the Steam Centre met our party at Ashford Station, and after luncheon, and before going on to the Steam Centre, a brief visit was paid to the old Ashford Pumping Station to look at two beautiful little Beam-engines, which have been carefully preserved. A most interesting next two hours was then spent at the Steam Centre looking at about a dozen locomotives dating from 1896 to 1953, and some equally interesting examples of coaches and other rolling stock of various dates and other railways besides the SECR & SR. The S.I.A.S. is most grateful to Mr. Lewis Evans for giving our members such an informative and enjoyable day.

For the benefit of those who could not go on this visit it is worth mentioning that 7 or 8 "Steam Up Days" are held at the Centre each year: those left for this year are on the following dates: 14th JULY; 11th AUGUST; 8th SEPTEMBER; and 13th OCTOBER - All Sundays. The Centre is well worth a visit, and full details may be obtained from Mr. P.J. Rogers, (Secretary) The South Eastern Steam Centre, Hunter Avenue, Willesborough, ASHFORD, Kent. HAG.

Arlington Reservoir. Wednesday, 19th June, saw 9 members and their friends assemble at Arlington Reservoir for a guided tour of the reservoir and water-treatments plant. Mr. Stanley Clark, the shift charge engineer on duty, made it a most enjoyable visit giving up some of his spare time to explaining everything in detail to our members. The tour included the weir, dam, valve house, pump house, treatment plant and control room. The whole plant, in addition to the normal local control, can be started up and shut down by push-button from the central control point at Eastbourne. We are very grateful to the Eastbourne Division of the Southern Water Authority for making our visit so enjoyable. The bulk of the party went on to visit Polegate Windmill where they were received and shown round by our members, David and Robin Jones who had stayed late to welcome them. AJH.

Publications. If only for the benefit of some future bibliographer or librarian, it may be useful to set down the various publications which have emanated from the Society in the first six and a half years of its existence. There may also be present members who want to complete their own collections.

The Sussex Industrial Archaeology Study Group was formed in October 1967, and in December 1972 changed its name to the Sussex Industrial Archaeology Society. The publications of the Study Group and of the Society are as follows:

Sussex Industrial Archaeology Study Group, Newsletter. Edited by Kim C. Leslie, BA, FRSA., and published by him, as Honorary Secretary, at Rustington. Quarto. Five Issues:

No. 1	April 1968	8 pages
No. 2	October 1968	8 pages
No. 3	April 1969	8 pages
No. 4	October 1969	8 pages
No. 5	April 1970	8 pages.

All issues are out of print.

Sussex Industrial History. Edited by John H. Farrant, MA., and published by Phillimore & Co. Ltd., at Chichester, for the Group (nos. 1 - 5) or the Society (no.6) Quarto. Six issues:

No. 1	winter 1970-71	43 pages.
No. 2	summer 1971	37 pages.
No. 3	winter 1971-72	32 pages.
No. 4	summer 1972	33 pages.
No. 5	winter 1972-73	33 pages.
No. 6	winter 1973-74	33 pages.

No. 1 is out of print, but one xerox copy is still available from the Society's General Secretary, price 55p. All other issues are available from Phillimore & Co. Ltd., Shopwyke Hall, Chichester, PO20 6BQ, price 40p. (no. 2) or 50p. each (nos. 3 - 6) or from the General Secretary.

Sussex Industrial Archaeology Society, Circular. Edited by A.J. Haselfoot, MA., C.Eng., F.I.E.E., and published by him, as General Secretary, at Hastings. Foolscap; mimeo. Four issues:

January 1973	2 pages
April 1973	2 pages
August 1973	4 pages
October 1973	3 pages

Available from the General Secretary, 10p. each.

Sussex Industrial Archaeology Society, Newsletter. Edited by A.J. Haselfoot, MA., C.Eng., F.I.E.E., and published by him, as General Secretary, at Hastings. Quarto. In progress; three issues to date:

No. 1	January 1974	8 pages
No. 2	April 1974	8 pages
No. 3	July 1974	6 pages

Available from the General Secretary, price 15p. each.

Sussex Directories 1784-1940: A First List, compiled by John Farrant. March 1969. Published by K.C. Leslie, Honorary Secretary, S.I.A.S.G., Rustington. Quarto; mimeo; 14 pages. Out of print.

Bibliography [i.e., of industrial archaeology], compiled by Hugh A. Gordon. Foolscap; various methods of reproduction. Undated, but 1969 - in progress. 18 parts, each one page. Available from the General Secretary, price 1p. per sheet, plus postage. JHF.

Railway Architecture. In connection with the article in S.I.H. 6 Mr. R.M. Robbines, the well-known railway historian, writes:

"I think you may be interested to have a note on Mr. John Hoare's 'Railway Architecture in Sussex'. I believe that the architect responsible for the highly characteristic stations listed by Mr. Hoare under 6, Cuckoo-Line Style, 1879-83, can be identified, and that he was T.H. Myres of Preston, Lancashire. The direct evidence is in F. McDermott, The Life and Work of Joseph Firbank (London: Longmans Green 1887): on page 116, apparently with reference to the East Grinstead and Lewes Line as well as to the Horsted Keynes/Haywards Heath Link, Myres is called "the architect of the East Grinstead and other stations on the line". It continues: "Mr. Myres chose the warm colouring and varied forms of what has, of late years, been termed the Queen Anne

school". For the Chichester-Midhurst Line, G. Biddle, Victorian Stations (1973), 180, cites The Builder as complimenting "Mr. Myres" on his "Old English style".

Pevsner's North Lancashire records T.H. Myres as the architect of several works, all but one churches, in that area. It is puzzling that he should have got this commission from the Brighton railway; I have asked Dr. J.N.L. Myres, president of the Society of Antiquaries, and he cannot suggest what connections his "Uncle Tom" could have had with Sussex.

I do not think this attribution has been published before - that is, since the strictly contemporary accounts."

R. Michael Robbins.

Donations. Our application to be registered as a charity at law has now been accepted by the Charity Commissioners and we have received a generous grant of £100 from the Strauss Charitable Trust to help the work of the Society.

SHORT NOTES

Sussex Canal Trust. We have received the Newsletter of the Sussex Canal Trust, which was formed a year ago to promote the restoration of the Portsmouth-Arundel Canal. They are an active body but are very much in need of more members, particularly working members. Any one interested in helping this work should get in touch with the Membership Secretary of the Trust - Richard Cossey, 4, Hawley Road, Rustington, West Sussex.

Southern Industrial History Centre. This organisation, which was formed about two years ago, and has now become a Trust, aims to establish a centre for the exhibition of machinery, vehicles and processes to the general public and also to offer facilities and some co-ordination to various groups of enthusiasts.

They are interested chiefly in the period commencing with the decline of the horse as motive power to the present day, although to illustrate some processes, i.e. brick-making or iron-working, the scope may be much wider.

Their chief activities at present are:

The recording and cataloguing of items potentially useful for exhibition.

A concentrated search for a suitable site for the centre.

Rescue operations, the dismantling of items and storing for re-assembly when the centre is established.

They mounted their second major rescue attempt on 27th and 28th April at Hurst Green Foundry.

The small complex is a virtually complete mid-nineteenth century foundry which must go, to make way for redevelopment. Many of the items weigh several tons and the operation involved cranes and low loaders. Our Society is actively co-operating with the Centre and assisted in the survey and recording of the various items at the Hurst Green Foundry which dates from 1863.

Street Furniture. It appears from enquiries that little work has been done in this field and it is suggested that the Society should undertake a survey in Sussex. This should be construed in its widest sense to cover anything from lamp posts to manhole covers. As most articles in this field are in towns the best plan would be for volunteers in each town to undertake a survey in their local district, and the General Secretary would be glad to hear from any members willing to do this; also from anyone willing to co-ordinate the work and record the results, thus saving him this task. All members could keep a look-out for articles of street furniture, e.g. post boxes and lamp posts, in the country and villages.

Balloon Factory. One of our members is anxious to know more about "Mr. Coxwell's Balloon Manufactory" which flourished at Seaford about 1870. Any one who has any information about this is asked to get in touch with J.A. Bagley, 18 Dollis Drive, Farnham, Surrey. GU9 9QD. Telephone Farnham 22140.

Sussex Archaeological Society. A Conference, "Aspects of Saxon S.E. England" will be held at Lewes on Saturday 19th October. A sheet giving details is enclosed.

All those river navigations and canals in Sussex for which reasonable records are known to exist have received fairly full treatment at the hands of historians.² To fill out the history of that aspect of transport improvement in the county, some description of the navigations (the Adur, the Baybridge, and the Lower Ouse) whose records have not come to light is needed. This brief study is concerned with the lower Ouse Navigation Trust (1791-1847) and its successors.³

Until the opening of the railway in 1847, barges on the lower Ouse were the main means of carriage between Lewes, the principal market centre for much of East Sussex, and Newhaven harbour. Through the latter passed imports of coal, Baltic timbers, groceries, manufactured goods etc., and exports of corn, oak and underwood products. The river also served as a drain, directly for the extensive levels (some 2,500 acres) bordering it and indirectly for the levels above Lewes and along Glynde Reach. But for most of the 18th century, the river was in a poor condition for such functions. Thus as late in the year (1767) as June, Smeeton found that the Brooks south of Lewes were in general under water. As to navigation a barge carrying 20 tons between Newhaven and Lewes was said in 1769 to take three days for a round trip, but sometimes could not load down and was obliged to wait two or three days extra because of insufficient water over the shallows; in 1783 the river was reckoned to be navigable for only six or seven days out of fourteen, that is, only during spring tides.³ A programme of minor improvements, involving a cut of some 350 yards at Piddinghoe and widening elsewhere, and undertaken by the commissioners of sewers in 1769-76, seems to have had no great effects.⁴ Such, then, was the river's condition when, in early July 1787, local traders met to discuss how to make the Ouse more easily navigable to Lewes. Within eight weeks, Thomas Pelham of Stanmer had invited the engineer William Jessop (then working in Rye harbour) to inspect the lower Ouse and Newhaven harbour, and had received Jessop's preliminary observations; the estimate for making the river navigable at Neap tides by barges drawing four feet was £2,420. A proposal for improving the river above Lewes surfaced in October, under the leadership of Lord Sheffield. It was his intention that the two projects should be one, and in August 1789 gave notice of intention to petition for an Act to improve the river's navigation from Newhaven to Cuckfield. But the two parties presented separate and conflicting petitions (as they both sought powers over the river between Lewes and Barcombe mill), and the lower Ouse petition made no mention of drainage because it followed the notice referring only to navigation, despite an agreement with the commissioners of sewers. The House of Commons committee decided in favour of the upper Ouse scheme, and the Upper Ouse Navigation Company was incorporated by Act of April 1790. A revised lower Ouse scheme was submitted in the next session, and an enabling Act was obtained in June 1791. It established a body of trustees - 124 individuals plus the Commissioners of Sewers for the Lewes and Laughton levels - who were empowered to borrow money at fixed interest and to repay it from scots, or rates, on the lands which would benefit from the improved drainage, and from tolls levied on goods carried on the river. The intention was that the scots should meet one third of annual expenditure (including interest and repayment of capital) and the tolls two thirds.⁵

Having received an up-to-date survey of the river by Thomas Budgen, Jessop was able to provide in January 1791, a scheme for draining the levels and improving the navigation. It was essentially unchanged from his observations of 1787, except that he included a second major cut at Southerham, in addition to one at Southease. He now reckoned that embanking would cost much more, and allowed £1,300 (as against £200) for land purchase. So the estimate now reached £6,472. In May 1792, the trustees invited tenders to widen, deepen, and make new cuts on, the lower Ouse, and accepted that of Francis Pinkerton, probably in partnership with his father Thomas and/or his brother James. In mid-June, a number of river-cutters were set to work on Pool bar. Jessop seems not to have assumed any responsibility for his scheme's execution, and the trustees appointed Cater Rand, schoolmaster and part-time surveyor of Lewes, as

(to use a modern term) resident engineer; he was paid one-half per cent of the value of work supervised. Tolls on barge traffic were introduced on 23 July, in accordance with the Act: 2d. per ton for beach and gravel, and other road-making materials, and for chalk, lime, dung, and other manures, and 4d. for other goods. In September 1793, 200 to 300 labourers were wanted for the works.⁶

The progress of work is indicated by the cumulative expenditure (which may or may not include interest payments) : to April 1794, £5,057; to February 1795, £8,498 (on an estimate of £13,528); to September 1796, £10,980; to September 1799, £19,299, with £2,100 needed to complete? Work seems to have halted in 1799 with completion of the two major cuts at Southerham and Southease, smaller cuts at Cliffe and Asheham, and embanking the whole length from Lewes to just north of Newhaven.

Clearly the river's improvement - still incomplete - had cost much more than expected. Part of the explanation was inflation, but unless there were exceptional local shortages of labour wage rates may have risen by only 20 per cent in the 1790's, and underestimating was probably the main cause of overspending. One consequence was that the tolls, whose maximum rates were set by the Act, could not cover two-thirds of annual expenditure, as intended. So in 1795, it was agreed that the scots should contribute an amount equal to the tolls rather than only a half, and in addition the provision that the scots should meet any deficit had to be invoked. Hence up to September 1799 the total receipts comprised: tolls £1,624, scots £5,390 (the scots also bore the cost, some £2,000, for new sluices, etc.), and mortgage loans at five per cent £15,850 (nearly twice the amount permitted by the Act). Although the trustees resolved in 1795 to petition for an amending Act, they did so only in 1800; the new Act doubled the tolls, confirmed the equal contribution of scots and tolls, and required the trustees within three years to remove eight named shallows and to make a horse towing path from Southerham Corner to Stock Ferry. In fact the trustees did not do as ordered, though some of the shallows may have been removed in 1803-5, and Quarter Sessions did not exercise its powers in event of such default.⁹

REFERENCES

1. D.F.Gibbs & J.H. Farrant, 'The Upper Ouse Navigation, 1790-1868', Sussex Industrial History, no. 1 (winter 1970-71), 23-40. P.A.L. Vine, London's Lost Route to the Sea, 3rd. ed. (Newton Abbot, 1973), and The Royal Military Canal (Newton Abbot, 1972).
2. The main sources are in East Sussex Record Office (abbreviated hereafter to E.S.R.O.): D187/3/25, miscellaneous working papers of John Ellman as expeditor of the trust and commission of sewers, mainly 1790's; RA/C/1, minutes of the Commission of Sewers for Lewes and Laughton Levels; RA/D/1, minutes of the Newhaven Harbour and Ouse Lower Navigation Trust, 1847-1952.
3. Mr. Smeaton's Report on Lewes Laughton Levels (Lewes, 1768), 3. Sussex Archaeological Trust muniments (abbreviated hereafter to S.A.T.), Misc. Box 21, Abraham Baley's notes. British Library, Add. MS. 5701, f.207.
4. J.H. Farrant, 'The Evolution of Newhaven Harbour and the Lower Ouse before 1800', Sussex Archaeological Collections, cx, (1972), 49-50, 56-9, for this and other 18th century works.
5. Sussex Weekly Advertiser (abbreviated hereafter to S.W.A.) 2 July, 22 Oct. 1787, 24 Aug. 1789, 22 Mar. 1790, S.A.T. Pp 4, Jessop to Pelham, 23 Aug. 1787, Journals of the House of Commons, xlv. (1790), 27, 43, 186; xvi (1790-1), 178, E.S.R.O., D187/3/25/3, 7. 30 Geo. III c.62. 31 Geo. III c.76.
6. S.A.T., Pp4, Jessop to ?Pelham, 31 Jan. 1791. S.W.A., 21 May, 25 June 1792, 9 Sept. 1793. J.H. Farrant, 'Civil Engineering in Sussex around 1800, and the Career of Cater Rand', Sussex Industrial History, no.6 (winter 1973-74), 8. E.S.R.O., D187/3/25/14.
7. E.S.R.O., D187/3/25/14.36, 40. S.A.T., Pp4, abstract of expenditure to Feb. 1795.
8. E.W. Gilboy, Wages in 18th Century England (Cambridge, Mass. 1934), 55, for Maidstone wage rates.
9. E.S.R.O., D187/3/25/36. 40 Geo. III c. liv.

The airship station at Polegate was established in July 1915, as the second in a chain of stations from which non-rigid airships of the Royal Navy (usually called "blimps") operated anti-submarine patrols around the British coasts during the first world war. There were two wooden airship sheds, each about 300 ft. long, about 500 yards south of the windmill; the rest of the camp buildings were alongside the Eastbourne road, just north of the "British Queen" public house.

The whole area of the airship station is now covered by housing, but one three-bay metal building survives at about TQ/584034, now occupied by an engineering company. This was probably originally built as the station workshops. There is also a wooden hut, probably of the same vintage, in the yard behind the factory.

Although I was always reasonably confident that this building was originally part of the airship station, I have now confirmed the fact by finding its twin in the former airship station at East Fortune in East Lothian. Here all the buildings except the airship sheds and the gas plant, have been preserved intact and are used as a geriatric hospital.

ADDENDA TO ADDRESS LIST The following alterations should be made to the address list sent out with the August 1973 Circular. A new list will be issued with the October Newsletter.

A. EAST SUSSEX.

Add: COOK, K.W. 66, Downs Road, Hastings. TN34 2DZ.

B. EASTBOURNE AREA.

Delete: MORGAN, P.D. Court Lodge, Lower Dicker, Hailsham. BN27 3PS.

C. N.E. SUSSEX.

Delete: BOWEN, R.D. Flat 2, 1 Park Road, Tunbridge Wells. TN4 9JN.

D. BRIGHTON AREA.

Add: KANER, S.C. 3, Surrenden Crescent, Brighton. BN1 6WE.
SEWART, R.A. 11, Whittinghame Gardens, Brighton.
WARBURTON, J.M. 5, Arundel Drive West, Saltdean, Brighton. BN2 8SJ.

E. WORTHING AREA.

Add: COVIELLO, M.J. 36, Pevensey Road, Worthing.

F. CENTRAL SUSSEX.

Add: HOLDEN, R.N. 4, Keymer End, Ashenground Road, Haywards Heath.
RH16 4PX.

Delete: WALDEN-JONES, Miss J.M. "Holroys", Barcombe, Lewes.

G. NORTH SUSSEX.

Add: WISE, B. 27, Juniper Road, Langley Green, Crawley, RH11 7NL.

Members Resident outside the County.

Add: BOWEN, R.D. Flat 8, 27, Priory Road, High Wycombe, Bucks.
NUNN, Mrs. C.M. 9 Rowan Drive, Cheadle Hulme, Cheadle, Cheshire.

OFFICERS

Chairman: W.R. Beswick, Turners House, Turners Green, Heathfield.
Vice-Chairman: P. Adorian, The Mill House, Gibbons Mill, Billingshurst.
Treasurer: G.P. Burstow, 6, Walpole Terrace, Brighton. BN2 2EB.
Gen. Secretary: A.J. Haselfoot, Albion House, Cobourg Place, Hastings. TN34 3HY.
W. Sussex Sec: E. Lewis, 4a, Guildhall Street, Chichester.
Programme Sec: H.A. Gordon, 34, Terminus Avenue, Bexhill-on-Sea. TN39 3LZ.