



## SUSSEX INDUSTRIAL ARCHAEOLOGY SOCIETY

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NEWSLETTER No. 35

JULY 1982

### CHIEF CONTENTS

The Brighton Electric Power Supply, 1882-1905 Part II

J.S.F. Blackwell

### CHIEF NOTES AND NEWS

Honours List The Society is very pleased to note that Mr Neil Cossons, Director of the Ironbridge Gorge Museum Trust, was awarded the O.B.E. in the recent Birthday Honours List and we congratulate him most heartily on this well-deserved Honour. We also appreciate fully the standing and encouragement which this gives to Industrial Archaeology throughout the country.

Bognor Regis Motor Gala, Sunday 25th July The Rotary Club of Bognor Regis is organising its fifth annual Motor Gala in West Park between 11.00 (when judging starts) and 18.00 on Sunday 25th July. As previously the central theme of the Rally will be an informal concours for Veteran, Vintage and Collectors' Vehicles, Stationary Engines and other relevant items supported by the usual side-shows, childrens amusements and a modern 'Motor Show'. Details may be obtained from Mr Clive Sayer, 1 Balmoral Close, Aldwick, Bognor Regis.

The Glynde Telpher Line Two Members, Mr R.F. Jones and Mr E.W. O'Shea, responded to the request, in Newsletter 34, for information about the Glynde Telpher Line, the former sending a copy of a relevant article by Mr E.F. Carter in 'Design and Components in Engineering' for October 6th, 1971.

It appears that a Dungeness man, Professor H. Fleeming-Jenkin first used electricity for operating such a telpher line and in 1883 an experimental line 700ft long was built near Baldock, Herts, followed by a similar installation at Millwall Docks in 1884. The first commercial installation, however, was that at Glynde opened in 1885 and which ran for over a mile from rail sidings at Glynde station to pits in the gault clay on the estate of Lord Hampden, then Speaker of the House of Commons. The skips ran at 5 m.p.h. on steel rods forming 'up' and 'down' tracks supported 18ft above ground on T-shaped structures at intervals of 66ft. Details of the electric drive and control arrangements are somewhat vague but it was possible to handle 300 tons of clay per week.

Mr O'Shea has a photostat copy of the programme for the opening ceremony, dated October 17th, 1885. This is a beautiful piece of Victoriana with 30 different type faces in 39 lines of print! Mr O'Shea has permission from Mrs Joyce Crow, the Hon. Librarian of Barbican House, Lewes, to make further copies which will be available to any interested members at cost (25p).

The Great Bush Railway One of our Members, Mr John de Havilland, is concerned with an industrial railway exhibit at Tinkers Park, Hadlow Down, near Uckfield.

PLEASE NOTE THAT THE LATEST DATE FOR THE ACCEPTANCE  
OF COPY FOR THE JANUARY NEWSLETTER IS *Oct*  
WEDNESDAY 15th ~~DECEMBER~~ *Sept*

The exhibit is not open to the public but, like ourselves, Mr de Havilland is badly in need of volunteers to assist in its development; anyone living in the area who would like to help should get in touch with Mr de Havilland (0732 356486) or Mr Claude Jessett, Brackenlands, Hadlow Down, near Uckfield, East Sussex (082585 307).

Membership Cards Cards are enclosed for those Members who paid their subscription by Bankers Order.

#### FORTHCOMING EVENTS

Chalk Pits Museum, Amberley For the working party on 18th September, at Amberley Chalk Pits Museum, there are jobs of all sorts for all types and grades of skills. There is some clearing around the De Wit Kiln, preparation of exhibits for display and some measuring and surveying to be done. There is also window cleaning, painting, general building work. In fact you name your skill and Ian Dean the Director will find you something to do. So all you 240 members, let's see you there. This is YOUR museum.

Other events are as stated on the card sent with Newsletter 34. D.H.C.

#### RECENT EVENTS

Instruction Day, 9th April 1982 On a sunny but cold Good Friday 16 Members came to learn the finer arts of recording industrial archaeology. Firstly John Upton showed us how he went about photographing I.A. sites and artifacts and then he went through the equipment that he uses. It was most informative to hear how the expert goes about taking photographs. We all learnt a lot.

Secondly John Cornell went through the basics of perspective drawing and by using his grid we all practiced our skill at sketching with varying degrees of success. If only we can practice this more I am sure we shall be able to produce better sketches.

Finally Ted O'Shea took us through the instruments and equipment used for surveying. This introduction followed by a practical exercise certainly broke the ice on this complex subject. A lot was learnt but more instruction and practical work is called for.

All in all, a very good enjoyable day. We could have done with some more members attending, but I think we shall try again next year with some different subjects.

D.H.C.

Working Party at Upper Plumpton Mill, 8th May 1982 Again a poor attendance of the faithful few but we set to and gave John and Jennie Muddle a boost to their struggle to restore their water mill. All good fun with plenty to do and a variety of tasks. We took the remains of the buckets off of the water wheel, cleaned and painted some of the machinery and cleaned up and removed some loose plaster from the stone floor room. A good day's work making a change from the normal type visit.

D.H.C.

#### CURRENT PROJECTS

Chalk Pits Museum, Amberley A number of new exhibits have been added and work is continuing on various developments including the industrial railway centre mentioned in the last Newsletter; a raffle with some unusual prizes is being held in aid of funds for the latter project. Books of 10 tickets

may be obtained for £1.00 (Draw on Oct. 10th) from Rhonda Smith, South Court, The Drive, Ifold (Loxwood 753017).

Members are reminded that the development of the Museum, which forms the basis of Industrial Archaeology in Sussex, is largely by voluntary labour and such help is urgently needed. If you are able to assist, particularly in helping to handle the public at weekends please contact Mr Ian Dean, the Director. (On Easter Monday there were 1700 visitors).

Coultershaw Water Pump (SU 972 196) Help is also needed at Coultershaw now that it is open to the public. Open Days are June 6, 20, July 4, 18, and August 10, 24. Time 10.30 - 16.00).

Restoration work is still being carried out, particularly on the new barn, and the workers are continually distracted by having to handle the public. Volunteers are therefore urgently desired to cope with the taking of money, setting up of museum exhibits and similar work. Lady helpers would, of course, be very welcome for these activities. Will any volunteers please telephone Mr. A.G. Allnutt (Chichester 786044).

### PUBLICATIONS

#### REVIEWS

Lewes Archaeological Group, Newsletter.

Restoration of a Tile Kiln at Piddinghoe by E.W. O'Shea  
(Sussex Industrial History 1982 No.12) pp. 2-24

Published by Sussex Industrial Archaeology Society, price 1.00 + 32p for p & p. from R. Martin, Hon. Sec., 42 Falmer Avenue, Saltdean, Brighton BN2 8PG.

This lucid account describes in great technical detail the construction and subsequent rebuilding of the Piddinghoe Tile Kiln. For the uninitiated it provides a valuable introduction to this unfortunately now rare type of kiln, and it is probably the first time that such a kiln has been examined in detail. The structural drawings in the report are a model of their kind, and demonstrate the complex construction of a seemingly simple building. Having recorded the kiln, which seems to have been on the verge of collapse, most groups would have stopped, but here we have the rare phenomenon of a group who were prepared to carry out the necessary research, raise the money and undertake the reconstruction work. Perhaps the most encouraging aspect of the whole project is the way in which Mr. O'Shea and his group of dedicated volunteers undertook a task which would not only defeat most amateur archaeological groups, but in the normal course of events would be outside the scope of the average building contractor. The sheer logistics of removing and individually recording some 8,000 bricks and the sympathetic reconstruction with the minimum of concessions to modern materials and building techniques (except where these were deemed to be necessary to ensure a reasonably permanent reconstruction) must owe much to Mr. O'Shea's lifetime of practical experience. Having visited the site myself on a none-too-clement day during the course of the works, one has nothing but admiration for the team whose enthusiasm clearly overcame adverse conditions.

It is gratifying also to see the report on this project published so promptly and encouraging to note how much funding a little enterprise can raise. It is altogether a splendid example of co-operation on all fronts and in these days of economic constraints, this represents the only way in which industrial monuments of less than national importance can now be preserved. One can only hope that this achievement will provide a model and inspiration for future work in this field.

All undertakings of this nature ultimately depend on the willingness of one person to shoulder most of the burdens, and while this was undoubtedly a splendid team effort, the thanks of all those interested in preserving our industrial heritage should go to Mr. O'Shea, who masterminded the project throughout, and notwithstanding an incapacitating period in hospital, brought it to a successful conclusion.

Peter G. Farmer.

### British Brick Society - Information Sheet

#### Piddinghoe Kiln

Mr. E.W. O'Shea, Sussex Industrial Archaeology Society, has kept our Society informed re the restoration of the Piddinghoe Kiln. Sussex Industrial History 1982 No.12 has a 24 page article on the full restoration of the kiln, which includes 7 photographs, a full page map, 4 full page drawings (the kiln, the flue chamber, the firing chamber and the details of the brick cone), a full page site plan and detailed references.

The article is most fascinating and informative and a fine example for any member wishing to embark on a similar project - the balance sheet of the expenses is also included.

Our congratulations to all concerned in the venture especially to Ted O'Shea, Sussex Industrial Archaeology Society and the Lewes Archaeology Group.

The same journal also includes a 3 page article on The Bakers, Brickmakers of Piddinghoe by B.E. Osborne and a 2½ page article, including a sketch map, on Recollections of Hillman's Brickyard, Partridge Green, by H.J. Paris.

This issue is of great value to BBS members and may be obtained from Mr. E.W. O'Shea, 14 Pelham Terrace, Lewes, East Sussex, BN7 2DR, for £1.00 plus 32p postage and packing. Cheques made payable to Sussex Industrial Archaeology Society.

#### Monograph      Sussex Archaeological Society

The Archaeology of Bullock Down.      £7.95

This monograph is the definitive account of 5 years' intensive study (1976-80) of the archaeology of a block of Downland just outside Eastbourne. The aim has been to identify all traces of man's activity in the landscape, from Palaeolithic hunter-gatherers to present-day mixed farming. This has involved extensive field survey and excavation; all aspects of the landscape were studied - not only the many settlement sites, but also associated field systems, trackways, enclosures, boundary earthworks, and, where located, burial sites. The author and contributors have thus been able to build up a picture of the developing landscape from the 4th millennium to the 20th century, and to see how the effects of each period of occupation (and especially its farming practices) have contributed to the modern landscape. The dominant theme, in contrast to many previously held ideas, is that settlement on the Downland was profoundly discontinuous, with many lengthy gaps between often relatively short-lived settlements. The extent to which modern agriculture is destroying the palimpsest of ancient landscapes on this block of Downland (and presumably on many others) also emerges with clarity.

This report is published by the Sussex Archaeological Society as the first in what is intended to be a series of monographs. Its format will be the same as that of the annual Collections (18.5 by 24 cm). It will contain 11 chapters,

on each period from the Palaeolithic to modern times, and there is a separate chapter on economy and environment, in which full consideration is given to the evidence provided by analysis of seeds, animal bone, land and marine molluscs and geological data. There will be c.210 pages, including 110 line drawings and 12 plates. Copies are offered to members of the Society at a substantial discount.

#### Victoria County History of Sussex

Following the publication of the last volume of the History, referred to in Newsletter No.30 (April 1981), Dr. Hudson is now working on the next volume (Vol. VI, Part 2) which will deal with Horsham, Cowfold, West Grinstead and nearby places.

The history of the Weald is very different from that of the more southerly parts of the County; settlements were generally much later, for instance Saxon churches were rare in the Weald and much of the area was reclaimed from forest or waste land in the Middle Ages. In writing the history of Horsham, Dr. Hudson has been able to use material not previously available and which amplifies considerably the published history of the town. Much new material was also discovered about the history of St. Leonards forest. Cowfold became a centre only after the establishment of most of the outlying farmsteads and grew because it stood at a crossroads, while in Shermanbury the main settlement was a piece of rural ribbon development early in this century.

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#### BRIGHTON'S ELECTRICAL POWER SUPPLY 1882-1905 (Part II)      J.S.F. Blackwell

Early electrical power development was bedevilled by poor legislation, the Electric Lighting Acts of 1882 and 1888. One result was a rather tedious battle between municipal and private enterprise. Brighton Corporation was no exception and after some vacillation set out, in 1890, to attempt to capture this lucrative new market by building their own power station in North Road, almost opposite Reed's Iron Foundry. Alarmed by this competitive threat, the Brighton and Hove Electric Light Company responded by notifying its customers that they must sign a 3 year contract for supply or be cut off. Although three quarters of the company's customers signed, the measure was only of temporary assistance as on the 2nd April 1894 in the face of increasing competition the company was taken over by the Corporation and paid £5000 for the good will of their business. Arthur Wright, the generating station manager and engineer, became the municipal concern's Station Superintendant.

The municipal power station opened in 1891 and inconveniently chose direct current which Wright had abandoned 3 years earlier. The original plant consisted of 3 coal-fired Lancashire boilers (7ft dia. X 27ft long) operating at 150 lb/in<sup>2</sup> and 4 Williams-Gooden generating sets. It must have been hard and thirsty work in the power station as a local publican was allowed in three times a day to take orders for beer, tobacco, fish and chips. By 1904, the generating station had considerably expanded taking in adjoining properties in North Road and Bread Street and having 6 Lancashire boilers, 10 Babcock and Wilcox boilers, 15 Williams and Robinsons engines direct coupled to 15 dynamos made by Electric Construction Company and Bruce Peebles, generating at 115, 230, 460 and 550 volts, feeding a network of 70 miles of street cables.

By 1899 it had become clear that in order to meet the anticipated demand which had increased from 867,494 units in 1895 to 4 million units by the end of 1899 a new station would have to be built and a 10 acre site on the eastern arm of Shoreham Harbour at Southwick was purchased. Arthur Wright was appointed Consulting Engineer and construction began in 1902. The station was officially opened on 16th June 1906 and allowed the North Road plant to be closed as a generating station in 1908; although it is still being used as a sub-station (if one climbs to the highest level of the multi-storey car park at the top of North Road the brick base of the boiler house chimney can still be seen).

Brighton Corporation was a large user of the electricity it produced. Until 1906 it ran one of the few municipal telephone systems in Great Britain (selling out in that year to the G.P.O. for £49,000). From 1901-1939 municipal trams were operated on a 3ft 6inch gauge and pioneer trolleybus experiments with a rather hefty 40 seater, which trundled along Preston Road, were carried out in the winter of 1913-14. The well-loved red and cream trolley buses taking over from the trams in 1939.

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#### MEMBERSHIP CHANGES

##### New Members

H.N. Crawshaw, A.R.P.S., 1 The Linkway, SUTTON, Surrey SM2 5SE  
(01-642-6953)  
Mrs. H.N. Crawshaw, Ditto  
P.H. Hunt, 25 Lorna Road, HOVE, Sussex. (Brighton 25762)  
I. McGrath, West Ashling Mill, Nr. CHICHESTER, Sussex (West Ashling 350).  
T.O. Povey, "Hergest Ridge" 14 Wickhurst Rise, PORTSLADE, BN4 2WB.  
A.J. Stanley, 5 Helston Drive, EMSWORTH, Hants. PO10 7TP (Emsworth 5028).

##### Resignation

R.S. Burley, Apple Tree Cottage, North Chailey.

##### Change of Address

M.J. d'A. Carr, "Madron" Ostlings Lane, Bathford, Bath, BA1 7RW.  
J.A. Hunt and Mrs. J.L.M. Hunt, 1 Connaught Road, Hove, Sussex, BN3 3WB.  
(Brighton 776875).  
C.A. Sayer, 1 Balmoral Close, Aldwick, Bognor Regis, PO21 4PP.

##### Corrections to March 1982 List of Members

R. Harris, 35 Chalcot Square, London, N.W.1. (01-586-3177).  
W.R. Beswick and Mrs. M. Beswick (Telephone: Rushlake Green 830350).