These two volumes are a much needed - if expensive - addition to the Sussex geological library. Much needed, as the previous Brighton memoir was published in 1924!

Industrial Archaeology must be located in its physical setting whether we are concerned with the building materials or the produce processed or produced. These volumes have a chapter on Economic Geology which deals with water supply, sand and gravel, chalk and cement, fullers earth, gypsum, oil and natural gas, lime brick clay, building stone and lignite. However there are many other references besides those in the Economic chapter, e.g. brickmaking has only three paragraphs in this chapter but 33 other entries in the index.

One of the main advantages of this pair of surveys is the meticulous referencing and researching which makes them a pleasure to use and non-geologists need not fear turgid volumes of 'Geology-Speak'! e.g. railway buffs may find an entry in the Lewes book of interest where under the heading - Natural Aggregates - can be found the following:- "old pits [5702 1901] in a hard sandstone in the Ashdown Beds near Little London are said locally to have provided a source of aggregate for the construction of the railway through Horam".

Molly Beswick's forthcoming 'Brick Gazetteer' has already benefited from information contained in these books - the local brickyard researcher being well impressed that his boyhood playground in St. Annes Well, Hove was a worked out brickfield!

GEOFFREY MEAD

INDUSTRIAL RAILWAYS IN PRINT

"INDUSTRIAL RAILWAYS OF THE SOUTH EAST" was compiled by members of the Chalk Pits Museum in 1984, at the time of the move of the Brockham collection to Amberley. It has been out of print for some time but has now been re-issued (at £7.95) by Middleton Press.

A number of other publications also include industrial lines and sidings and are available from Middleton Press, Easebourne Lane, Midhurst, West Sussex GU29 9AZ. Tel.073081 3169.

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PLEASE NOTE Latest acceptance date for copy for the July Newsletter is 15 June 1989

SUSSEX INDUSTRIAL ARCHAEOLOGY SOCIETY

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Price 10p to non-members APRIL 1989

CHIEF CONTENTS

DIARY DATES

Saturday, 22nd April. Mystery Tour of Mills. Meet Polegate Mill 1030 a.m. Map reference TQ 627209. Contact Frank Gregory 0273 505754.

Wednesday, 19th May. East Court, East Grinstead 8.00 p.m. Mr J. Franks, Principal, Polytechnic of the South Bank, "The Inland Waterways of Britain, Past, Present & Future". The East Grinstead Society. Non-members welcome 75p.

Saturday, 27th May. All day visit to Hampshire. As guests of Southampton University I.A. Group we shall tour sites in the Hampshire area. Meet at Twyford Pumping Station map reference SU 493248 at 10.30 a.m. Further details from Mike Palmer 0903 505626.

Saturday, 17th June. Visit to Chichester led by Ray Riley. Meet 2.30 p.m. at car park just north of roundabout. Map reference SU 856049. Contact A. Baxter 0903 201002.

Saturday/Sunday 1st & 2nd July. Amberley Chalk Pits Museum Railway Weekend. Full programme of demonstrations and special trains.

Saturday, 15th July 6.30 p.m. Members evening at the British Engineerium, off Neville Road, Hove for tour and talk. Normal entrance fee £2.00 (£1.00 OAPs) payable to cover expenses. Volunteers sought to give short informal talk on their I.A. interests. Map reference TQ 286066. Contact P. Holtham 0273 413790.

Sunday, 20th August. All day visits by Mills Group (open to all members of SIAS). Meet at 10.30 a.m. West Blatchington Windmill. Map reference TQ 279068, or at 2.00 p.m. at Jill Windmill TQ 303134. Contact D. Cox 0403 711137.

Saturday, 23rd September. All day visit to Hastings. Meet at 10.30 a.m. outside Crowhurst Church. Parking nearby. Map reference TQ 758123. Contact J. Blackwell 0273 557674.

Saturday, 25th November. Annual General Meeting followed by talk. Friends' Meeting House, Friary Walk, Lewes 2.30 p.m.

AREA SECRETARIES' REPORTS

WESTERN AREA

Coultershaw Pump

There was a splendid response to our appeal for volunteers for the working party on 5th March - no less than 15 members and friends. In fact we almost ran out of jobs, and got everything tidy and in working order. Thank you all very much for your help.

We were pleased to welcome about 20 SERIAC visitors on 12th March. Considering it meant postponing lunch after 3 hours at the Chalk Pits Museum on a damp chilly day, that represents pretty fair dedication to IA!

Thanks to Mike Pope we have established links with the Petworth Society. Four of their members have volunteered to help with stewarding on Open Days this year, and one of them, Steve Boakes, has already been helping with the maintenance programme.

We look forward to a successful season.

MICHAEL PALMER

NORTHERN AREA

At Ifield Mill we are re-aligning the pitwheel that had worked loose on its wedges and narrowly avoided causing serious damage to the teeth. New folding wedges have been made and this work should be completed by mid April. The supply of timber for a new larger main spur wheel is being pursued and it is anticipated that this will be undertaken during 1989. The larger spur will enable the use of the cast iron stone nut and mace originally donated by the owners of Castle Mill, Dorking.

Work is in hand to improve the layout of the ground floor and to provide additional showcases. The Crawley Council hopes to repaint the exterior during the year. The mill will be opening on National Mills Day, 14th May (2.30 p.m. - 5.00 p.m.) and subsequently on the last Sunday in each month until September.

The Lowfield Heath Windmill restoration is progressing steadily and Peter James (15 Sandringham Road, Broadfield, Crawley, Tel 0293 540705) will be pleased to hear from anyone wishing to help in the many tasks urgently to be completed in the next few months. Much painting, cleaning and similar work, suitable for all abilities is just waiting for YOU!

The final courses of brick have been laid on the roundhouse and restoration of all the main timbers of the buck are nearing completion in the nearby workshop. Erection of the body of the mill is planned for the spring/summer and the success of this phase will give great encouragement to all concerned with the project.

It is now 9 years since the S.I.A.S. first became involved in the negotiations on the fate of the mill and the success of this venture greatly enhances our Society so don't hesitate, ring Peter now!

E.W. HENBERY

AMBERLEY CHALK PITS MUSEUM

Tom Doig, previously Director of Cambridge Folk Life Museum, took up his post as Director of Amberley Chalk Pits Museum on Wednesday March 1st. On this very hectic day, a 100 ton crane was installing our new ladies' toilet block and moving the Smith steam crane to its new position in the timberyard. Contractors arrived to level the site for a staff car park and there was a constant flow of delivery vehicles. Fortunately Tom was undeterred by all this excitement. We wish him welcome and look forward to working him.

All our activities are now focussed on re-opening the Museum for Easter. There is a vast amount still to do from an over-ambitious winter programme.

Our new audio-visual presentation has a truly local flavour and features songs and narrative from Bob Copper and the superb photographs of the late George Garland. The show takes the form of a look back into the working past of our area and at the aims of this museum in that context.

Recent acquisitions have included a Barber-Greene tarmac layer, a potter's wheel from the Dicker pottery and the loan of some important commercial laundry equipment.

As ever, new volunteers are needed for all aspects of the Museum's operation. There is something for almost everyone whatever skills or time they can offer. The Museum Office would be pleased to give further details to anyone interested in joining our loyal and happy band.

MIKE WALL - Curator

THE ENTERPRISING EVERSHEDS AND CANDLE MAKING IN EAST GRINSTEAD

'The Eversheds', according to Mr G.E.F. Mead in Newsletter 61, p.11, 'had branches all over Sussex at Horsham, Arundel, Lewes, Seaford, Newhaven and Brighton, all involved in soap, candle and coal carrying trades to some degree'.

They also had a short-lived branch at East Grinstead.

Richard Evershed, tallow chandler, is listed there in the Universal British Directory of 1794 and appears as candle maker, coal merchant and beer retailer in Palmer's rhyming

directory of East Grinstead in 1799. In the draft census of 1811 (1) he appears as a candle maker, the head of a family of three males and four females occupying a house which, from its position in the list, seems to have been in Middle Row, in the centre of the High Street. (His workplace need not necessarily have been there also, of course.)

The marriage of Richard Evershed to Philadelphia Rye at East Grinstead on 5 October 1783 is the first reference so far traced to his family in the town. Five daughters were baptised between 1788 and 1799. In the 1824 Church rate book he is noted as poor, with no indication of occupation, and not rated for his house.(2)

In the same record Charles Sawyer, a grocer, draper, etc., is rated for the tallow house, rated at £2.10s and assessed at 1s.3d. Mr P.D. Wood tells me he identifies this with the 'little messuage' occupied by George Sawyer at an annual rent of £3 erected on part of the portland that went with the burgage house demolished to make way for the modern Portland Road, as listed in the schedule to an Act of Parliament for vesting in Trustees certain estates of the late Duke of Dorset in 1827.

By the late 1850s, as recalled by Edward Steer in 1899,(3) this work was being carried out behind the modern 30-32 High Street in 'a candle factory, where the then useful and almost only kind of candle, the rush and cotton tallow dips, were made, an old man named Weller being the candle maker, and it may be readily understood that when the fat was boiled, some of it being very "high", the stink was anything but pleasant, but people were not so particular then as now'.

Before Richard Evershed a number of candle makers in East Grinstead receive passing mention in a variety of records, viz

Thomas Piggot or Pigott, chaundler, 1641,(4) tallow chandler, 1659.(5)
William Holmwood, chandler, 1642.(6)
Michael Piggott, tallow chandler, 1709 dead by 1738.(7)
John Pryor, tallow chandler, 1723.(8)
Thomas Bennett, tallow chandler, 1757.(9)

Palmer's 1799 directory also mentions one Charlwood who 'keeps a chandler's shop' but the implication seems to be that he did not make candles since it is explicitly stated that Evershed, mentioned several lines earlier, 'candles makes'. The names listed above, however, suggest that there was a time when the town supported two candle makers simultaneously. Presumably the Eversheds took an opportunity to acquire an existing business and so extend their empire into the north east of the county.

Finally, it is somewhat surprising that Richard Evershed is the first coal merchant so far recorded in the town.

References:-

(1) W[est] S[ussex] R[ecord] O[ffice], PAR 348/26/2/6
(2) W.S.R.O., PAR 348/4/17
(3) Reminiscences serialised in the East Grinstead Observer, 1899
(4) S[ussex] R[ecord] S[ociety], vol.1, p.280
(5) East Sussex Record Office, Sussex Archaeological Trust Deeds FB 550
(6) S.R.S., vol.54, p.25
(7) Deeds of Swan Inn (Messrs Watney Mann)
(8) S.R.S., vol.6, p.243
(9) G. Ewing, History of Cowden (N.D.), p.29

M.J. LEPPARD

UCKFIELD & DISTRICT PRESERVATION SOCIETY - COMING OF AGE

The above Society will be 21 years old this year and we plan a Celebration on Saturday, 3rd June 1989 at 8pm for our members.

We wish to contact people who have been connected with the Society, in particular members who have moved away over the years.

Members would probably have helped in the early days of the restoration of Nutley Windmill, with the formation of the Society and with the early restoration work on Bridge Cottage Uckfield.

Further information is available from Mrs Anita Long, "The Mustard Pot", Fairwarp, Uckfield, East Sussex TN22 3BT.

WINCHELSEA BEACH & OLD WINCHELSEA

Memo by W.A.W. Fox M.A.(Oxon) F.R.I.N. A.F.R.Ae.S.

It is regrettable when, in the course of progress, objects of possible historic interest are destroyed, particularly if no record is available and the events pass out of the span of human memory. This note is a brief record; what it presents may have been fully recorded and written up elsewhere. If so, this would be of interest to the writer.

In the years 1930-1934 my family took an August holiday each year at Winchelsea Beach, in a bungalow on the second-line of beach, back from the sea-wall, roughly at the point marked X on the enlarged portion of the 3rd Revision of the 1" Ordnance Survey (Published 1921). [See below]

This second line of defence beach appears faintly as hachure, running away from the sea wall, which was then of earth construction, a few feet wide and perhaps 10 ft. high. The wedge between the sea-wall and the second beach-line was rough scrub grassland. It provided an emergency run-off for sea water, should the earth sea-wall be breached, down to Rye Harbour.

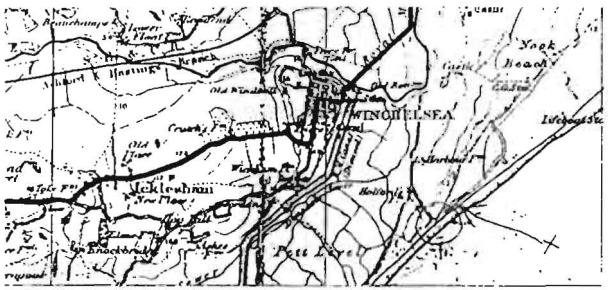
The track from the Winchelsea-to-Pett road ran down to the sea, at right angles to the coast-line, level with the top of the sea-wall. I recall that the lie-of-the-land bore some similarity to the dried up rectangle of land at or below sea level which is commonly identified with the old fishing harbour of Seaford, by the Buckle. There was a very slight protruberance or cape at the end of the east-fork road where it petered out at the sea. (Map reference 918 161)

In about 1932 (I cannot recall the exact year but the event was recorded, wildly exaggerated, in the national press) the sea-wall was breached under the pressure of high autumn spring tides and strong S.W. gales. One bungalow was destroyed and others damaged at the point where the second sea-wall joined the main wall and several beach huts were lost. Reports that 'Thousands of holiday-makers fled for their lives' were pure fiction. Overnight however the sea, pouring through the breach in the wall cut a lagoon with sheer walls some 8 ft. deep and perhaps 30 yds. long by 20 yds. wide in the flat meadow before running off towards Rye Harbour.

More significant from the historic viewpoint, the storm washed the earth from the mound at the end of the track revealing a jetty of ashlar (white cut stone). If memory serves, this had a trapesium shaped cross section and a rounded end like half a truncated cone. There was a date cut into one of the stones which I recall as 1610 (or thereabouts).

When I last visited the spot, quite recently after many years absence, the earthen sea-wall had been replaced by a straight modern concrete wall. I noticed, however, that one or two of the cut stones had been discarded at random on the landward side of the wall, in the grass, and I asked myself whether any historian had taken note of the jetty and its date, before destruction.

I have always assumed that, when old Winchelsea was washed away in the thirteenth century, the port area did not disappear completely. It was probably not discarded by local fishermen and may have remained up to the beginning of the seventeenth century. If so this would suggest that the exact site of old Winchelsea lay thereabouts. Such a surmise, if not already examined, might be worth investigation.



If anyone has recollections of the above subject would they kindly contact the author, who would be very interested, at The White Cottage, 10 New Town, Uckfield, East Sussex TN22 5DB.
Tel. Uckfield 3793

COPPERAS GAP - research project A Plea!

I am currently researching the area of Portslade parish on the coast, known until the late nineteenth century as Copperas - sometimes Coppards - Gap. The area was one of the string of landing places along the muddy creeks that developed into Shoreham Harbour, benefiting from being the nearest landing place to Brighton in the harbour. It boasted timber yards from at least 1804 and during the following century acquired tar distillation, petrol storage, chemical works and - across the canal - a large gas works. Copperas itself is iron pyrites nodules that were collected from the river mud at low tide and sent to London and Sunderland for processing to manufacture sulphuric acid. A similar trade took place in Chichester Harbour (Copperas Point), and on the Bognor foreshore where it was fishermen's winter work gathering it.

If members have any references however obscure or seemingly trivial on either the mineral, the area itself of the West Sussex locations I would like to hear from them, as it seems a singularly unrecorded locality! I hope to write this up for a future S.I.H. article so all assistance will be readily acknowledged.

GEOFFREY MEAD

A SPOT OF YORKSHIRE I.A.

Anyone interested in Industrial Archaeology fortunate enough to spend a holiday in Yorkshire can always find plenty to see. In September 1988 I visited Wortley Top Forge, near Barnsley.

Situated in a bend of the River Don between Thurgoland and Wortley, just off the B6088 at O.S. sheet 110 SK 295 998, the site is being restored by volunteers with the backing of the South Yorkshire Trades Historical Trust.

Although there are records of iron working on this site from 1379 the forge reached the height of its use between 1840 and 1912 when its main product was wrought iron railway axles.

There are two breast shot water wheels which operated belly-helve hammers, and a pitch-back wheel which originally drove the bellows. The forging shop is virtually intact, with hammers, furnace, tools and cranes.

There are many other exhibits including a blacksmith's shop, a reconstruction of a 19th century machine shop, workers' cottages and a book and gift shop where teas are served.

In a corner of the site a group are building a beam engine.

Wortley Top Forge is open on Sundays from 11a.m.-5p.m., entrance 50p. One hammer works on certain days, enquiries to Sheffield (0742) 887576.

PAT BRACHER

TALES OF THE HIGH SEAS

As part of a systematic survey of early county newspapers held on microfilm in Brighton Reference Library I have turned up several interesting sidelights into certain aspects of I.A. Just travelling in and around the county had its hazards for someone just going about their normal work:-

> "We hear from Brighthelmston that on Monday last at 11 o'clock came out of Newhaven Harbour the 'Thomas and Martha', Captain Arthur Williams, a brig laden with hops and sundry other commodities bound for Tenby in South Wales was taken by a French lugg-sailed privateer, and although being detained 15 hours was ransomed for 90 guineas, and on Thursday was spoken with by Captain John Ovat of Brighthelmston. The Frenchman behaved badly, stealing all the provisions and everything else - even to the lock of the cabin door."
>
> Sussex Weekly Advertiser Feb 5, 1759

Sea travel from Brighthelmston could be more comfortable and secure - at a price however:-

> "This is to acquaint the Public that Captain Killick - The Princess Carolina is now compleatly [sic] fitted for the reception of passengers and any kind of merchandize; she sails from Brighthelmston to Dieppe every Saturday, and from Dieppe to

Brighthelmston every Tuesday till further notice is given. The said Captain hopes to have the continuance of the favours of the public as no cost or pains have been spared by him to accommodate his passengers in the most genteel manner. Passengers a Guinea each.

N.B. If any party of gentlemen or ladies chuse [sic] to have the cabin to themselves the price is ten guineas."

Sussex Weekly Advertiser May 8 1769

Other boats sailing the same route that summer were "The Industry" - Tuesday, return on Friday; and "The Free Mason" schooner "one of the most compleat [sic] things of the kind ever built" sailing every Thursday, return every Monday.

Sussex Weekly Advertiser June 5 & July 24, 1769

Captain Henry Saunders "will sail when desired - the said Captain speaks French" (which must have been a comfort in a ferry captain!)

Sussex Weekly Advertiser Sept 10, 1764

Brighton lying as it does at the nearest point of the Channel to London was a link in the transport chain from London to Paris and the number of sailings to Dieppe eventually led to the construction of the Chain Pier as an aid to embarkation. This role as a transport 'interchange' was one factor in the establishment in Brighton of a number of inns and taverns to accommodate travellers. When Brighton was regrouping its commercial base into a leisure resort in the mid-eighteenth century, it was thus already known to the wealthy travellers between Paris and London and this must have been partly instrumental in its subsequent rise in fortune, certainly by June 26, 1769 the press could report:-

"the company flock to Brighthelmston at a great pace, there being, were are informed, but few lodgings to be had in the entire town"

GEOFFREY MEAD

THE SUSSEX MILLS GROUP

NEW 19thc. SWEEPS AT CLAYTON

Since the night of 15th/16th of October 1987 the sweeps at Clayton post mill have been removed for safety whilst repairs were carried out on the winding gear and machinery. This has also been an opportunity to add further shutters in order to increase the power available for grinding.

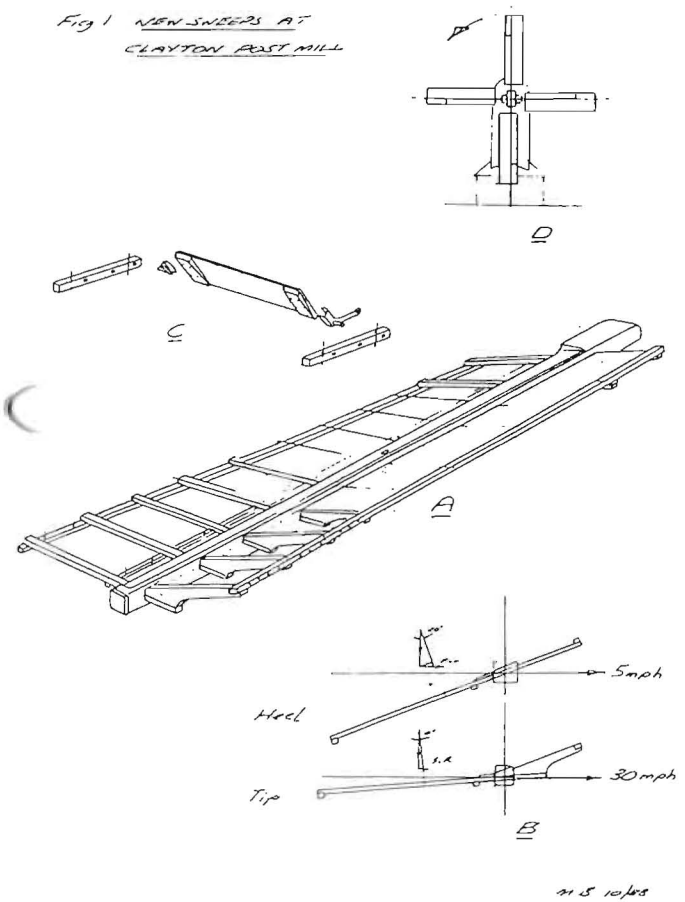
The sweeps were rebuilt in 1982 to a traditional pattern established by Samuel Medhurst when building patent sweeps during the early to middle nineteenth century. This pattern was still in use at Clayton, Cross-in-Hand and Polegate right up to the end of their working lives - 1969 in the case of Cross-in-Hand.

Here is a short appreciation of the design and working of these sweeps as fitted at Clayton.

The basic framework is of pitch pine. This is 25 feet long and 6'6" wide as shown in fig 1 'A'. This is supported by the whip. At 3ill the frame is divided into 10 bays. The trailing or driving side is fully shuttered from heel to tip. The leading edge, with fixed boards over seven bays, is partially shuttered. The two portions, representing 60% of the total driving area, form the variable part, as it were, and are controlled by the striking mechanism at the tail of the mill. The remaining portion i.e. the greater part of the leading edge, the face of the whip and the frame itself form the fixed 40% of the driving area and contribute significantly to the power developed even with the shutters fully open.

When viewed along the axis 'B' the frame is seen to be carefully angled and shaped to a crude aerfoil, varying from tip to heel. The leading edge is set up at a constant angle of 20° along the length of the sweep. The driving face varies subtly from 4° at the tip to 20° at the heel, and between the two the face of the whip and closing board have a winding face formed to give additional vectored force. Medhurst no doubt had variations as did all millwrights but these features are common to all good sweeps.

When mounted on the stocks and rotating at a working speed, the tip rotates at 30 m.p.h. and the heel at 5 m.p.h., the angle of weather or twist of the sweep giving a



compromise driving face. This presents an acceptable drag factor when rotating, and an even torque conversion 'B'. The jacked up leading edge serves also to gather the wind across the driving side.

As shown in 'C' the shutters are very simply constructed, 42" x 9" trailing and 19" x 9" leading. These are of deal and cut as feather edge board 2 from a 9" x 1¼" plank. Pine cleats are secured to each end with galvanised nails. The iron cranks and pins are let over the shutters and held with brass screws. Each sweep has a total of 31 trailing and 10 leading shutters. A simple bearing is provided for these in the form of drilled pine battens. As with the internal gearing of the mill, iron against timber was found to wear well and very cheap and easy to replace. Battens of this type at Cross-in-Hand had been in use for 12 years without replacement when work ceased.

The four sweeps when hung 'D' present a total driving area of 650 square feet divided into 380 square feet variable and 270 fixed. It is currently estimated that these generate approximately 10 horse power in a 15 m.p.h. wind and 25 h.p. in a 25 m.p.h. wind. In order to establish working figures a series of tests may be carried out, when the mill is running once more, thus rating Medhurst's workmanship by today's standards.

M. BRUNNARIUS

HANDLING HEAVY LOADS AT CLAYTON

A note is offered here with the benefit of hindsight and based on experience gained at Clayton during restoration work.

When large heavy baulks of timber or mill components have to be moved, the simpler the method and the least number of people involved, the better. A 5 cwt. sweep frame required at least eight people to carry it safely - four people and a car boot may be supplemented with care. Stocks at 7½ cwt. can be dragged over boards using rollers. However when lifting is required, complete control is essential.

Millwrights often used multiple pulley block and tackle with a great deal of rope. Care was always the order of the day. The main drawback being that the height of the

lift is always limited especially with Weston chain tackle. This requires intermediate staging whilst the tackle is re-positioned. The use of many hands and long ropes, whilst a simple answer, can be dangerous if not carefully monitored. Two main methods of lifting have been used at Clayton and found to suit the work very well.

The lorry-borne crane is invaluable when lifting very large or particularly awkward and heavy assemblies. A new breast beam weighing 6 cwt. was gently raised on a windless day and then pulled into a prepared slot at the side of the mill, a task that would otherwise have been very clumsy, requiring scaffolding and multiple lifting tackle. Likewise, more recently after storm damage to the tailpole, the fantackle and tailpole assemly at 2¼ tons was lifted clear of the mill and deposited safely on the bank at the rear. This could not have been contemplated by other means.

Lifting stones within the mill presents a unique problem if the job is to be done quickly and with safety. Chain gear, used in the past, would have had to be rigged many times to lift the 18 cwt. bedstone the 30 ft. required. Here a 32 cwt. Tirfor winch was rigged from a beam across the top rails and windshaft and the stone raised in one straight lift in three hours through the sack flaps. The winch relies on the alternate pull and release of collets on a steel lifting cable 40 ft. long and whilst possible slippage was a concern the machine has proved, in our experience, completely safe and in fact doggedly refuses to release the cable if this is not properly oiled,

Sweeps and stocks, always a candidate for slow lifting and complete control when turning, can be let down, hung or rotated on assembly using two men and a Tirfor including bringing these into position for lifting: a good ground anchor is of course absolutely essential. This was established early on in the work at Clayton. The mill also has to be anchored against the turning moment as the tackle is operated from one side. Hanging a sweep or stock takes approximately two hours in complete safety once the tackle has been properly set up. Sisal and polyproplene ropes, rated at 1½ tons working load, were used.

M. BRUNNARIUS

TRADES OF THE BLACK LANDS - NORFOLK SQUARE, BRIGHTON

The historic West Laine between Brighton Old Town and the parish of Hove is divided into 12 furlongs, that on the border next to the beach being called the West Field or Black Lands. At present this furlong contains as its major feature Norfolk Square and behind this charming 'urban field' a warren of tiny streets, alleys, yards and the huge demolished area known as Golden Lane: this site - 'ripe for development' - straddles the border between the two towns and is at present the subject of fierce planning battles. Depending on one's inclination this whole area can supply a range of wants, tiny pubs, smart restaurants, sleazy nightclubs ...! and the SIAS Secretary's office - a positive mecca of IA interest!

Physically the area lies on the dip-slope of the chalk, covered to a varying depth with spreads of drift geology; Coombe Deposits, Tertiary sands and clays, and Loessic brickearths. It was this latter soil that gave rise to the area's principal industry - brickmaking, and was to make it the centre of the area's brick production for possible 120 years. The location next to a flat, firm - but eroding - coastline meant supplies of coal for the clamps and kilns could be landed easily, more especially as the border site meant the coal landed in Hove parish was free of the Brighton coal tax. The supplies of furze used in some brick production were obtained from nearby Furze Hill north of the area in the Wick estate, though as early as 1776 furze was being brought in from Rottingdean and faggots from Offham.

The Stanmer House building accounts of Nicolas Dubois record the construction of brick clamps and kilns in 1722 in Brighton, though no exact location is given. Evidence from a variety of sources leads me to believe the brickfield to be in the Black Lands of West Laine.

Town growth during the late eighteenth century ensured a ready market for bricks and by the early nineteenth century there were three concentrations of brickmakers in the town. I must stress these are addresses of workers not brickyards, but at this period workers lived near their employment source. To the north of the Old Town, at the edge of North Laine along Church Street, 15 separate addresses appear between 1813-37; the

soil here is suitable for brick production and the area was expanding rapidly. The second main area was in the West Laine at the Old Town end around Russell Street where eight addresses appear, this section of town now is submerged under Churchill Square shopping precinct and its soil is similar to the North Laine site. The largest concentration is seen between Western Road, Preston Street, the coast and spills across the parish edge into Hove. This contained 32 addresses of brickmakers and the adjacent part of Hove six others for similar dates.

Unlike Hilly Laine and North Laine, the main manufacturing districts of sixteenth century Brighton, West Laine was largely a service zone with the brickyards being the major industry, mostly in the extractive phase. As has been noted elsewhere this exhausting and dirty work had a complementary clutch of breweries and beershops!

The attraction of this area - as in much of Brighton - is the juxtaposition of leisure and work, classic terrace and tenement, dingy alleys and sparkling seafront light. A walk from Ron Martin's office illustrates all of this, and standing outside No.2 Norfolk Square you first see the elegant wrought ironwork balconies and restored facade of Regency architecture. In the Square in 1862 were teachers, professors, surgeons, doctors and lodging houses but walk south towards the southern edge of the Square and you are in Cross Street, home in the 1830s of the brickmaking Clayton family who ran the Stanford Estate brickfield west of Palmeira Square. The Brighton Poor Rate of 1844 values houses here at £15 rental compared to £55 in parts of the Square. Cross Street runs east-west and part is in Hove, a fact which made comprehensive study of the area time consuming, difficult and with differing parish records, incomplete!

South into Western Street with the sea sparkling at its foot, here chic restaurants have displaced stables, warehouses and of course brickmakers tenements. At the demolished section of the street lay a large brewery in Golden Lane and a tenement of small dwellings valued at £10 each in 1844. This was Everton Place, the home of 12 of the area's 32 brickmaking families, the entire tenement being owned by Philip Walton of the Norfolk Hotel. In 1824 the Hotel was rated at £3.0s.8d while the brickfield and tenement were 2s.0d rental!

Many of the tenements have disappeared but this area has been targetted in January 1989 by Brighton Council as a major source of housing complaints, overcrowding etc. Indeed bits could still be from 1844 when stables, coalyards, fish curers, cowmen, slaughterhouses and greenhouses jostled amongst brickworks for work and living space. The greenhouse in Bedford Place, valued at £11, was owned by James Bartlett, a Hove market gardener and brickmaker whose land around George Street, Hove became the main production area in the 1860s.

After the railway construction in the 1840s, the brickearths away from the coast were developed as fuel could be moved in and product moved out, more easily. The coalyards and brickfield of the West Laine were developed in the building tide that swept along the coast forcing industrial sites north and west, coalyards moving to line-side locations, e.g. Sackville Road, Hove and the brickfields to George Street and later New Church Road and into Aldrington.

References:-

[I am indebted to Molly Beswick for much background information for this article]
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Stanmer House accounts 1722-1727
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History of Hove H.C. Porter 1897
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Folthorp's Directory 1862
Brighton Evening Argus 13 Jan 1989

GEOFFREY MEAD

SOME ASPECTS OF THE CHEMICAL INDUSTRY IN SUSSEX

The chemical industry is not one that springs immediately to mind when thinking of Sussex, rather Teeside or St. Helens, but Sussex can lay claim to many elements of the industry both in raw material supply and production, most of which have now been usurped by national and indeed international suppliers.

Bearing in mind this article is written by one who gave up chemistry at 13, all real chemists will have to forgive my presumption in a rather hazy knowledge of their science!

I was prompted by an advertisement placed in the Sussex Weekly Advertiser in 1761 which ran thus:-

> "To the gentlemen farmers in general, whereas I have fixed a pot ash office at Penny Bridge at Mayfield in Sussex, and can have a large demand for such goods, this is to inform any gentleman ... who can supply or provide 20 loads of straw or bean or peas hawm in a year and live handy for collecting wood ashes, that I will carry on the pot ash business upon their farms upon such conditions that they shall have the best of manure for upwards of 15 acres of meadow or arable land per year, at reasonable rates. Aaron Kendall
> N.B. if there is fern near, it will be better."(1)

Sussex farmers, in the Weald in particular, applied a wide range of those early 'agro-chemicals' to the often woefully poor sands, clays and silts they farmed, in particular the chalk pits at Amberley and similar Downland sites supplied raw chalk and burnt lime to sweeten the acidic Wealden fields; lime was also supplied from the Purbeck limestones around Dallington, on the estate of the Earl of Ashburnham, described by Arthur Young in 1813 as:- "the greatest limeburner in the kingdom".(2)

Although agriculture was the major user of chemicals in the past, many Sussex industries relied on local supplies of raw materials for some or all of their productive processes. Potash mentioned above, for instance was used in soap and candle manufacture and in the medieval glass industry which flourished from the 13th century around Kirdford and Wisborough Green. Before the import of barilla from the Mediterranean, the soda used in glass was obtained from amongst other sources, glasswort that grew along the tidal mudflats of the Adur in Shoreham Harbour. Arthur Young also mentions potash being manufactured at Brickshill Petworth "for the soapmasters of the town".(3)

The Wealden coppices which supplied charcoal to the iron industry provided this material to local chemical works, the gunpowder industry at Battle, Sedlescombe and Maresfield being major users. A nineteenth century gazetteer lists two county locations where similar operations took place:- "Fernhurst; there are chemical works and apparatus for charcoal burning which was formerly extensively carried on by government" and at nearby Northchapel:- "during the French war government works were established at Fisherstreet in this parish for making charcoal for gunpowder but were subsequently sold. There are also chemical works for making pyroligneous acid". The same source lists amongst others the provision of flints to Staffordshire potteries from Newhaven and the extraction of Fullers Earth at Tillington.(4)

I hope to write an article at a later date on the supply of copperas from Sussex, but briefly, these nodules of iron pyrites from London clay deposits were gathered at low tide in Chichester Harbour, at Bognor and along the banks of the Adur estuary giving the place name here to the coastal portion of Portslade - Copperas Gap. The nodules were sent for production of sulphuric acid to plants in London and Sunderland.(5)

The establishment of the gas works at Portslade, with its various derivatives of tars and bitumen saw a concentration of chemical based industries around dockside and railway; Ronuk polishes, Evershed's soaps and dry cleaning works all grew on this base of chemical import and production.

Present day production is small scale with gypsum and plaster-board from Mountfield, pharmaceuticals in Crawley and Worthing, and industrial limes from the few chalk quarries still operating.

G.E.F. MEAD

References:-

(1) Sussex Weekly Advertiser May 4, 1761

(2) Rev. A. Young General View of Agriculture in the County of Sussex 1813 (1970)
(3) J. Armstrong History of Sussex 1961 (1984)
(4) B. Austen et al. Sussex Industrial Archaeology: Field Guide 1985
G.E.F. Mead S.I.A.S. Newsletter No.59
- National Gazetteer of Great Britain and Ireland 1867(?)
(5) Sussex County Magazine vol.13 1938

NOTICE BOARD

The Chairman of the S.I.A.S. has 3" planks of Hornbeam air-drying if needed for fashioning into wheel teeth.

Late 19th or early 20th century sack barrow on spoked cast-iron wheels. Well used and repaired but serviceable and an authentic addition to any mill. £15 for SIAS funds. Nutley 2964.

WANTED to help in the restoration of Lowfield Heath Windmill:-
Circular saw table about 12" blade Whitworth taps and dies from ½" diameter.
Power planer.
Workmate or sturdy vice.
The loan or donation of any of the above would be very much appreciated.
Contact Peter James on Crawley 540705.

RAILWAY PHOTOGRAPHIC COMPETITION

A photographic competition - "WEST SUSSEX RAILWAYS IN THE 1980s" - is being organised to raise funds for the Chichester Body Scanner Appeal. Winning photographers will have their work published in a book of the same name, to be compiled by Vic Mitchell and Keith Smith and produced by Middleton Press. There will also be an attractive range of prizes and an opportunity to exhibit at a local Photographic and Model Exhibition next winter.

Write now for entry forms and full details to:

Chichester Health Authority (Scanner Appeal - Dept BB), Royal West Sussex Hospital, Broyle Road, Chichester, PO19 4AS.

These will be sent out by the end of June and entries close on 30 August 1989.

BOOK REVIEWS

Pam Moore, THE INDUSTRIAL HERITAGE OF HAMPSHIRE AND THE ISLE OF WIGHT. Phillimore 124pp. 100 ill. 7½" x 10" Hardback £9.95.

The author is well known to many of our members as Secretary of our neighbour society, SUIAG, and as a Council Member of the AIA. As was to be expected, this work is a scholarly, but eminently readable, review of the very considerable I/A remains to be found in Hampshire, and it is particularly pleasing that she has devoted much of her space to the Isle of Wight, often a neglected area. She has combined her own considerable research with the results of SUIAG's members' work of some 25 years, which she fully acknowledges, and proves that the area is not the industrial backwater it is often considered to be.

Mrs Moore has adopted an eclectic approach, and it is good to see so much attention paid to the remains of both agriculture and the defence industries, so important to the County. She has been liberal both in her references and in her bibliography - a feature often singularly lacking in such a book.

A useful work for both the serious student and for the casual visitor, it is a worthwhile companion to her earlier Guide to the I/A of Hants & the IOW [SUIAG 1984, still available]. The Guide adopts a more catalogued approach - Heritage puts meat on the bare bones.

MIKE TIGHE

B. Young and R.D. Lake British Geological Survey - Geology of the country around Brighton and Worthing HMSO 1988 £11.
R.D. Lake, B. Young, C.J. Wood & R.N. Mortimore Geology of the country around Lewes HMSO 1987 117pp £8.