

INDUSTRIAL ARCHAEOLOGICAL SECTION of the DEVONSHIRE ASSOCIATION

IASDA talks programme 2017/8

Cost for all talks will be DA members £3, non-DA £5
with the exception of 8th November 2017 which will be £4/£6.

BOOKING NOT REQUIRED

3rd October 2017

11:00am Sourton Village Hall, Okehampton EX20 4HN

‘ELDAD RE-IMAGINED, BRUNEL’S GRAND RAILWAY TERMINUS FOR PLYMOUTH’

Alan Barclay

In 1843 the South Devon Railway started building a terminus for its new railway from Exeter on a site close to the point where the towns of Plymouth, Devonport and East Stonehouse meet. This site near the former Royal Naval Hospital at the top of Eldad Hill survives to this day and by using the records of the time, by looking at the clues on the ground and by looking at other stations built at that time Alan Barclay has ‘reimagined’ the station. The presentation will look at what survives and what might have been. It is intended to have a visit to the site as part of our 2018 field trips programme.

Contact: Pat Milton - patricia.milton@blueyonder.co.uk

Lunch suggestion: The Highwayman Inn.

Afternoon option: short, easy walk offered from Meldon Quarry to Meldon Viaduct (former Plymouth - London line)

8th November 2017

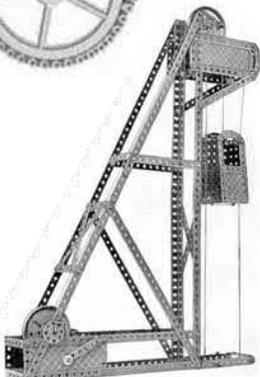
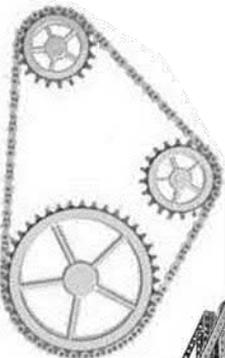
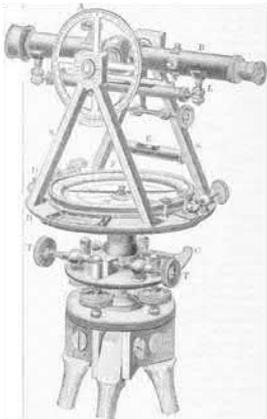
11:00am Bridestowe Village Hall, Pool Hill,
Okehampton. EX20 4EW

‘HARVEYS OF HAYLE’

Kingsley Rickard

In 1779 John Harvey, a blacksmith from nearby by Carnhell Green established a small foundry and engineering works. By 1800 the company employed more than 50 people and continued to grow. Harveys formed partnerships with many of the great engineers and entrepreneurs of the day including Richard Trevithick, William West and Arthur Woolf.

The firm of Harvey & Co certainly built some of the best beam engines ever built which were set to work in both Cornish Mines and in mines world-wide. They also produced a range of products, from hand tools to ocean-going ships including the Cornubia.



Contact: Pat Milton - patricia.milton@blueyonder.co.uk

Lunch suggestion: The Fox and Hounds Hotel, Lydford, Devon EX20 4HF.
Afternoon option: Stroll around Nodden Ball along part of the Rattlebrook railway.

5th December 2017

11:00am Victory Hall, Broadclyst, EX5 3EE (satnav EX5 3DX)

THE HISTORY OF THE EXETER CANAL

Jack Nott formerly Harbourmaster for Exeter City Council (for 24 years)

Jack will describe why the canal came about (in the context of local political problems), construction problems in the pre-Brunel period and the future of the canal.

Contact: Brendan Hurley - brendanhurley@fastmail.co.uk

Lunch suggestion: The Red Lion Inn

JANUARY MEETING

There have been some difficulties in arranging a meeting for January. Further information will follow once details have been finalised.

8th February 2018

10:30am Victory Hall, Broadclyst, EX5 3EE (satnav EX5 3DX)

'DEVON INDUSTRIES IN THE 1860s'

Mick Atkinson

Section Annual General Meeting

Mick Atkinson will present an overview of the industries which were active in Devon in the mid C19th.

Contact: Mick Atkinson - mickatkinson@live.co.uk

Lunch suggestion: The Red Lion Inn

14th March 2018

11:00am The Dolphin Hotel, 1A, Station Road, Bovey Tracey, TQ13 9AL

'DEVON'S MICACEOUS HAEMATITE MINES'

Tony Brooks

Micaceous haematite, known as 'shiny ore', is a flaky form of iron oxide. The ore has no value for the production of iron, but among other uses it was found to make very effective corrosion-resistant paint. Fuelled by the increased demand for protection of the new steel structures of the industrial age, some Devon micaceous haematite mines survived well into the twentieth century.

Tony Brooks (author of 'Great Rock, Devon's Last Metal Mine' and 'Kelly Mine and the Shiny Ore Mines of the Wray Valley') will outline the history and techniques of this industry with particular reference to those mines.

Contact: Mick Atkinson - mickatkinson@live.co.uk

Lunch suggestion: The Dolphin Hotel

Following a very successful and enjoyable IASDA visit to the Devonport Naval Heritage Centre a while ago, members may be interested in attending some of its forth-coming events:

Devonport Naval Heritage Centre

September 14th

Peter Holt

Operations Manager at MSubs Ltd,
maritime archaeology consultant and project director

“HMS AMETHYST (1811) LOST AND FOUND”

October 12th

Dr Tony Cumming

Historian

“AT WAR WITH DESTROYERS”

November 9th

Barbie Thompson

Independent researcher

**“INTRIGUE AND COLLUSION AT POW DEPOTS,
NAVAL DOCKYARDS AND IN HIGH PLACES”**

December 14th

Surgeon Commander (Rtd.) Peter Brinsden

“NELSON, HIS SURGEONS, AND SURGERY IN HIS NAVY”

SPECIAL CHARITY EVENT IN AID OF DARTMOOR RESCUE GROUP (PLYMOUTH)

(Booking and charge is required for this event only, made with John Herman,

Tel 01752 215 069 Email: john.herman@hotmail.co.uk)

Timings: Gates & Café Open from 6.15 pm. Presentation starts promptly at 7.00 pm. No late entry.
Talk duration not (usually) more than 1 hour followed by questions and Informal discussion option.

Location: Lecture Room adjacent to The Breakwater Café, Devonport Naval Heritage Centre, Vivid Approach, (off Granby Way), Plymouth, PL1 4RW.

Directions: From Granby Way, Devonport (PL1 4HG), follow Vivid Approach signs for 250m passing construction site (right) and HMS Vivid (left) to entrance on right.

Free, on-site, controlled access parking.

Admission: There is no formal admission charge, however it is customary for our guests to make a minimum donation of £3 on arrival. Hot/cold drink and biscuits are included.

Enquiries: Our talks have proved to be very popular with strong support from many ‘regulars’ and there have always been new faces at each meeting. However, excepting for the December talk, we have decided to discontinue taking prior bookings as, to date, we have always been able to accommodate all comers.

Enquiries may be addressed to devonportnavalheritage@gmail.com or 07917 751 082.

Report on an IASDA visit to Tavistock

June 8th. 2017

The IA section had an enjoyable, if rather damp, visit to Tavistock on June 8th. Member Peter Daniel led us on a tour of the town starting near the site of the old South Devon Railway station on the Plymouth to Launceston line. He informed us as to how the town grew from a country town with its tanneries, tucking and corn mills, to become a major centre for mining activity with its support industries under the control of the Bedford Estate.

After seeing the first group of houses built by the Estate, we passed the site of James and Henry Pearce's Tavy Ironworks (1852), who specialised in domestic items like fire grates and into Brook St. to see the sympathetically converted buildings of the Tavistock Iron Works, Proprietors Gill and Rundle (1800). Items made by this firm included steam engines for mining and the iron boats used on the canal. The site was converted in 1896 to become a wool-combing factory, ceasing production in 1965. Opposite this site are more houses constructed by the Duke of Bedford for mine workers. Some of these were built with pigsties, (real cottage economy!)

Our route took us along Parkwood Road, (once turnpike) into Brook Street past the Town mill, (corn, 1846 and originally water turbine powered), past the site of the Bedford Brewery and into the Pannier Market where a plan shows the layout of the old courts which were originally on the site. Our next stop was in Bedford Square, A mid 19c. redevelopment by the Duke who retained some features of the Abbey. He also included a Guildhall, Town Hall, Police Station and Courts. On the West side is St Eustace Church in the Perpendicular style built with money from the wool trade. From the north side of the Square a new road was built in 1890, Drake Street, to improve access to the new

railway station of the LSWR. Peter led us along this road, passing the Machine Bakery, and a printing works, then into Market St. past the Ordulph Arms which, now closed, had been a Temperance Hotel. We were now in the original Market Place at the centre of the mediaeval town. A few yards on and we passed the site of White and Co's brewery and malt house, which, according to Pevsner had a waterwheel which now appears to be gone.

Passing under the 1890 LSWR viaduct, we came into Taylor Square, named after John Taylor, a mining engineer who designed and built the Tavistock Canal. The fitness test came next as we had to climb to the old London & South Western Railway station. This was built in 1890 when the company acquired its own route from Lydford to Plymouth, (previously it had acquired running powers over the old South Devon route of the GWR Plymouth to Launceston line, (an unsatisfactory arrangement). This route was stupidly closed in 1968.

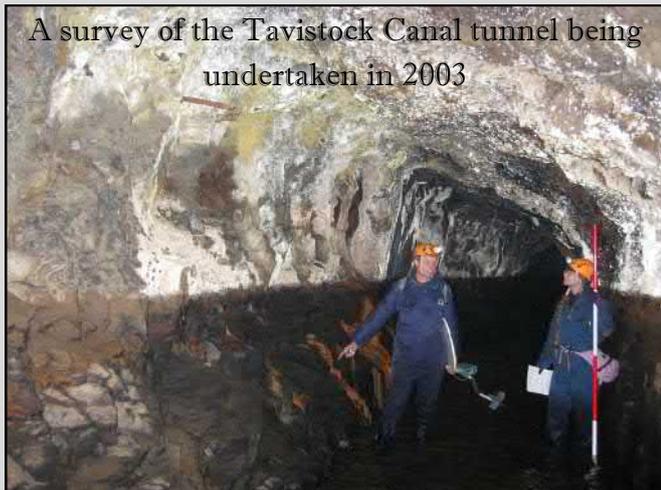
The view from the viaduct is well worth the climb, even in liquid sunshine, as the town layout is made clear. To the north, looking up the Fishlake valley (so called as the stream fed the Abbey ponds), in Bannawell Street can be seen a surviving building of the Bedford Foundry owned by Nicholas & Williams (1841), pictured below.



This foundry produced many steam engines and was the preferred foundry of the Bedford Estate. It later moved to the old

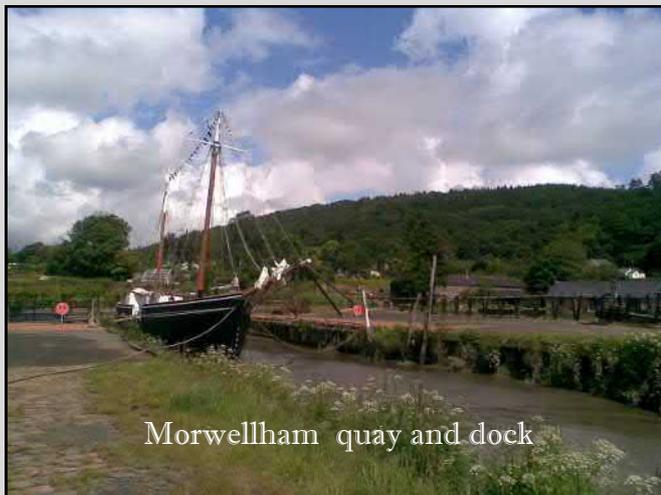
Tavistock Ironworks site when that was vacated. By 1905 the original buildings had become a coachworks beyond which could be seen the Workhouse of 1835.

We then descended and visited the Tavistock Canal Basin which was built between 1803 - 17. The long time being due to the construction of a 2400 yard tunnel through very hard rock which took the canal to Morwellham Quay on the Tamar.



A survey of the Tavistock Canal tunnel being undertaken in 2003

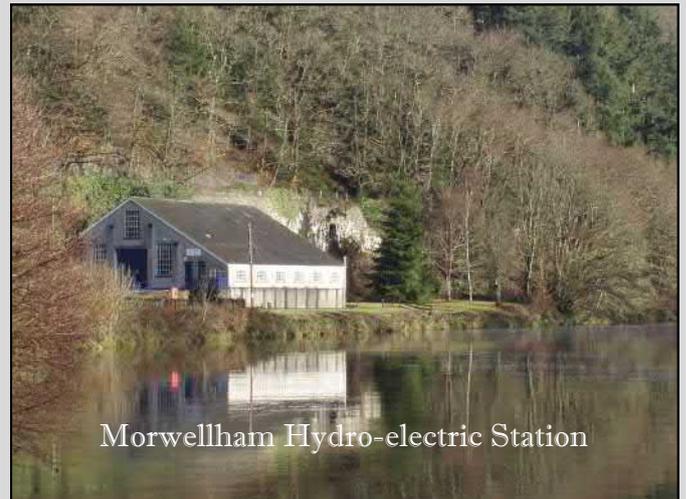
The Basin, whose buildings mostly survive, had grain and coal warehouses, 2 wharves, cranes and a tramway system which went over a lifting bridge. It also had limekilns with a waterwheel worked incline plane. There were also timber yards, workshops, stables, stores and offices, all enclosed in a perimeter wall.



Morwellham quay and dock

The canal is still in use today as a feeder to the Morwellham Hydro-electric Station. The intake from the River Tavy having an automatic

weed rake which starts up and runs automatically. This creates a lot of interest from passing pedestrians.



Morwellham Hydro-electric Station

The intention was to have had a visit to the Robey Trust after lunch, but sadly although Thursdays are working days for them; it was not convenient to host us on this occasion. A number of us therefore took the opportunity to visit the excellent small museum situated in Bedford Square. This has a fine mineral collection and items relating to the local mining, railways and local life furthermore, it is free entry.

Our thanks go to Peter for his efforts in guiding us on what was a most interesting town walk.

Report by Iain Miles

WATCHET PAPER MILL VISIT

On Tuesday 25th. April, a joint visit was arranged with the **Somerset Industrial Archaeological Society** to the closed Watchet Paper Mill in West Somerset. Around 50 people attended and after an introduction to the site by the Engineering Manager, Chris Northam, we were split into smaller groups and given a tour of the works led by Chris and three other ex-employees. Each was given a very different tour, depending on the leader's knowledge and interest.



Wansbrough Paper Mill, Watchet, closed in December 2015

Paper has been produced on the site for approximately 250 years and its sad closure at the end of 2015 came as a major blow to the town, putting 150 out of work. In 2016 a local group of people decided to record the Mill, its history and the memories of those who had worked there. **SIAS** was asked to help and a photographic survey was commenced. Over 3000 photos later, the work still hasn't finished!

Two machines still survive, out of six which were once in place. The number one has a large machine glaze cylinder, which in 1996 had to be removed for recoating. This could only be achieved by removal through the roof, not an easy task as it is on the second floor and in the centre of the building. The number five machine has two head-boxes so that two different layers could be combined into one sheet of paper. Latterly waste paper was pulped for use, but rags, wood pulp and spartina grass was used in the past, coming in via the harbour.

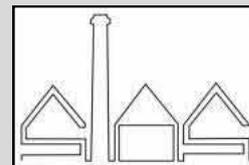
The site was originally powered by waterwheels supplied by a leat off the Washford River. Later steam engines were added, one by Timothy Hackworth, rebuilt by Stothert and Co, and reputed to be the first on site. There was also a Hercules turbine installed by Turnbull of Glasgow and a large tandem compound engine by Hick Hargreaves & Co. was erected in 1905, the brick plinth of which survives in an under- floor chamber. Also by 1900, electric lighting had been installed by Newtons of

Taunton. In 1898 it was reported that there were nine boilers on site, five of which were in one location and four under separate roofs.

Throughout the 19th and 20th centuries, the Mill was constantly modernised but no rail connection was put in until 1920. This is surprising because of the quantity of coal and raw materials required - presumably the company was happy to cart these requirements from Watchet Harbour. In 1965 a complete new power plant was installed comprising new boilers and an AEI steam turbine for electric supply and exhausting to the machines for heating and drying. The last major installation was two new massive Cochrane boilers fitted in 2014, the year before closure. These had made considerable energy savings, but sadly not enough for D S Smith to keep the plant open.

The outward appearance of the Mill in 2017 suggests buildings of mid 20th C. date with some brickwork from around 1900, but investigations by **SIAS** revealed some earlier brick walls hidden under metal cladding. At the time of writing, investigations are ongoing with a team of volunteers sorting the mass of archives and drawings, an amount of which relate to the sister Silverton Mill, and depositing them in the South West Heritage Centre at Taunton.

All on-site work will need to be completed by the end of September, but the task of making sense from everything will take much longer and hopefully will result in a number of publications being produced to ensure that the Mill will be well remembered. It must also be recorded that this project has only been made possible by the enthusiasm and interest of Chris' Northam in the site's history.



Please take note of

REGIONAL IA CONFERENCE. 2018

SWWRIAC 2018, (South Wales & West Regional Industrial Archaeology Conference)

hosted by **Somerset IAS**, will be held on

14th April, 2018

at the

Village Hall at West Coker, nr Yeovil.

Further details when available will be on SIAS website, www.sias.me.uk.

The committee of **IASDA** strives to keep its membership fully informed of events and items of interest and hopes that those reading this leaflet will find it useful.

Articles on any aspect of Industrial Archaeology, local or national, which members wish to share would be gratefully received especially if accompanied by images.

Should you have articles and images which you feel should be published then please contact

Adrian Wills

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Please note that IASDA may not be held responsible for any views or opinions expressed in its publications.