



SOUTH WEST WALES INDUSTRIAL ARCHAEOLOGY SOCIETY

NEWSLETTER

CYLCHLYTHYR

CYMRITHAS ARCHAEOLEG DIWDIANNOL DE ORLLEWIN CYMRU

No. 14: November 1976

Editorial Committee: F.G. Cowley, P.R. Reynolds, W.I. Roberts

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FORTHCOMING EVENTS

Thursday 11 November 1976, 7.00 p.m.

Royal Institution of South Wales

Professor F. Llewellyn Jones: "South Wales railways. Their development & influence" (Professor Llewellyn Jones is President of the SWWIAS and an authority on railway history. The meeting is held in conjunction with the Extra-Mural Studies Department of Swansea University College.)

Saturday 20 November 1976, 9.30 a.m.

Scott's Pit

Investigation of this site will continue under the leadership of Barry Fagg. A report on the previous day's work is contained in this newsletter. Please arrive prepared for work as early as you can manage it. Further information from Barry Fagg, c/o The Guildhall, Swansea (Telephone 50821 ext. 2714.)

Thursday 2 December 1976, 7.30 p.m.

Glynn Vivian Art Gallery

Mr Ken. Holloway: "Chain making at Pontypridd"

(Mr Holloway is Manager of Brown Lennox & Co. Lifting Gear Section, and has personal experience of all the processes involved.)

PLEASE NOTE THAT FOR THIS MEETING THE TIME AND VENUE ARE NOT THE SAME AS USUAL

NOTES AND NEWS

G.W.R. Roll of Honour, 1914-1918. Bob Roberts reports that, while waiting for a train recently at Exeter (St David's) station, he noticed a memorial erected by the Great Western Railway in honour of their employees who served in World War I. 25,479, or 33%, of the total work-force served, and of these 2,524 lost their lives. The men who died were listed by station, and among the stations named were Swansea, Landore, Morriston, Ystalyfera, Ammanford, Bridgend, Briton Ferry, Llangennech, Llandilo, Llanelly, Pont Lliw, Pontardulais, Port Talbot, Kidwelly, Neath and Glyn Neath.

The inclusion of Ystalyfera is interesting. G.W.R. metals never reached that place: it was served by the Midland Railway's Swansea Vale section. However, the G.W.R. were owners of the Swansea Canal at this time which they operated in competition with the M.R. The employee from Ystalyfera on the Roll of Honour must have worked on the canal, not on the railways. Similarly Pont Lliw calls for comment. The passenger station there was not opened until 1923, but perhaps a goods station had been established there before the outbreak of war: does anyone know whether this was the case?

An early smelting works in Swansea. Archaeologists working on a site at Little Wind Street during the summer have discovered the remains of a medieval iron smelting works. It is a stone building which appears to have been in use in the late 13th century, and is thus the earliest industrial site in Swansea for which there is any evidence. The excavations were being carried out by the Glamorgan Gwent Archaeological Trust as part of their programme of excavations on the site of the oldest part of the city.

Neath General Station. Demolition of the old station at Neath finally started at the end of August, although some preliminary work was done earlier in the month when the station forecourt was ripped up for the water mains to be re-routed. The cost of the new station is now expected to be £300,000 and the contractors are R.M. Douglas Ltd. of Swansea. A dealer from Williamstown in the Rhondda, Mr Tom Stuart, bought parts of the station fittings for sale to collectors of railwayana.

Museum of the Woollen Industry. July 17th last saw the opening of the Museum of the Welsh Woollen Industry in the Cambrian Mill at Drefach-Felindre in the Teifi Valley. Between 1870 and 1920 the woollen industry flourished in the villages of West Wales, and especially in the area around Llandyssul. The proximity of the densely populated industrial areas of the coal field ensured a ready market and the new railways gave easy access for the finished goods. However, after World War I the demand for woollens collapsed, prices dropped dramatically, and many of the smaller mills went out of business. Mill-owners faced bankruptcy, weavers were dismissed, and the buildings abandoned to decay. A few mills survived and are still in production, but on nothing like the pre-1920 scale.

The new museum is run as part of the Welsh Folk Museum and occupies accommodation in a mill which is still working. Every textile process - spinning, carding, weaving, finishing - is represented, and the aim has been to preserve the atmosphere of a working mill. Outside the museum there is evidence of all the processes in the textile industry from fulling mills to weavers' cottages within a radius of a mile, and it is hoped to provide a trail to take them all in.

VISIT TO CWMAFAN, 28 AUGUST 1976

While the rest of the country was agonizing over the drought, members of the SWVIAS assembled at College House confident that the crisis would soon pass. The intention was to visit Cwmafan, Pontrhydyfen and the Miners' Museum at the Afan Argoed Country Park, and even as we waited for our 'bus we could see the clouds gathering. We picked up our guide, Mr Arthur Rees, at Baglan and proceeded to Port Talbot where the tour began.

On the edge of Port Talbot we noticed a handsome four-arched bridge built to carry the Rhondda & Swansea Bay Railway in the early 1880s. A little further on, at Blackwells, stone sleeper blocks from an earlier tramroad which was superseded by the RSBR had been used as coping stones on the roadside wall. Also worthy of note were copper slag blocks of a most unusual shape serving to top a chapel grave-yard wall.

On arrival at Cwmafan our first stop was the old Copper Miners' Tinplate Works. Although it went out of production in 1942 most of the buildings are still intact and used for other purposes. A feature of particular interest was the Pelton wheel installed in 1903 to drive the mills, although only the turbine-house can now be seen. Nearby are the crumbling remains of the short-lived Express Steelworks, built in 1884 and later acquired by the Copper Miners' Tinplate Co.

A short 'bus ride took us to an area of new housing that now marks the site of the iron and copper works of the English Copper Company. The E.C.C. went into liquidation in 1876 and the works gradually ran down: the ironworks closed in 1891, the steel mills in 1902 and the copperworks in 1906. The site has now been completely cleared. The fumes from the copper furnaces were carried up the hillside by a culvert to a stack at the top of the hill. The stack was demolished in 1941, and most of the culvert has caved in, but a few sections remain, and the more energetic members of the party climbed up to take a look at them.

Rain was beginning to fall as we returned to the village to look at a most interesting exhibition of maps and photographs put on for us in the branch library by West Glamorgan library service. These gave us some idea of what the valley must have been like in the last century, and were a valuable means of increasing our appreciation of what we saw on the ground.

Outside the library the scanty remains of the RSBR station platforms can be seen, and, a short distance beyond that, the Ynysafan tramroad bridge built in 1841 for coal from Bryn to the works at Cwmafan. Also in the same area some very interesting terraces of housing were built by the E.C.C. with door and window surrounds and string courses of copper slag. They have all been condemned and are in the process of demolition.

Since by now we were well behind schedule we drove straight to Afan Argoed, contenting ourselves with a passing glimpse of Pontrhydyfen and its viaducts. At Afan Argoed we were shown round the Miners' Museum and all the exhibits were explained in great detail by one of the staff. Although only small, the Museum has succeeded in assembling a lot of materials to illustrate conditions in the coal mining industry. It is hoped that it will be appreciated by visitors to the Gountry Park.

We are most grateful to Arthur Rees for making such careful arrangements for our visit, for leading the tour, and for preparing a useful set of notes. We are also indebted to the staff of Cwmafan branch library and of the Miners' Museum for their contributions to a most interesting afternoon.

P.R.R.

VISIT TO LLANELLI, 16 OCTOBER 1976

About 15 members assembled at the North Dock at Llanelli on a blustery autumn afternoon to take part in what was to prove a most instructive tour of the remains of the town's docks and coal-mines. Our guides were Dr Malcolm Symons of UWIST and Mr Harold Prescott, Borough Librarian.

The first site to be visited was the North Dock itself. It owes its origins to a scouring reservoir built in 1859-61 on the recommendation of the great Brunel which was converted into a dock under powers granted by Act of Parliament in 1896. The choice of this location for a dock was a mistake, since access was by a winding channel that needed constant dredging to keep it open. The dock closed for trade in 1951, but there are said to be plans for converting it into a yachting marina. It is now partially silted up.

Nearby is the Carmarthenshire Dock, Llanelli's first dock. Alexander Raby established a shipping place on the site in 1799 for the coal trade, and this was enlarged in 1806 by the Carmarthenshire Railroad Co. In 1843 the Harbour Commissioners diverted the River Lliedi through the head of the dock so as to scour the main channel into the harbour. Because it was only a tidal dock it subsequently declined in importance and would probably have been filled in long ago had it not been for the fact that the river flows through it.

The third dock to be seen was the New Dock, now completely filled in, although the approach channel is still in water. This was built by the Llanelli Railway & Dock Co. to ship coal mined by the Llangennech Coal Co. who started operations in 1827. The dock was opened in 1834, the first public floating dock in Wales. For a time it prospered and railways were built to it from other collieries, but from about 1850 onwards it went into decline and closed after World War II.

After visiting the docks we drove to the edge of the town to the site of Penllwyngwyn Pit. This and the nearby St David's Colliery and Penprys Pit formed part of a major winning of the Swansea 4' Seam planned by the Llangennech Coal Co. It was from St David's Colliery that the Llanelli Railway & Dock Co.'s line ran to the New Dock, and the tramway from Penllwyngwyn Pit still survives as a footpath. The engine-house of St David's Pit is still in existence and can be seen from Penllwyngwyn, but time prevented our inspecting it more closely.

Another short drive and a walk along the abandoned railway leading to the Admiralty Stores brought us to the site of Llangennech Quay. Once an important shipping place, the quay walls have deteriorated, sedimentation of the dock basin has concealed its profile, and it is now not even marked on O.S. maps. What remain to be seen are two low banks to the jetties for high-water shipping and an intriguing alignment of stone sleeper blocks curving across the river bed to what might have been a low-water quay. It is first referred to in 1772 and was abandoned after the New Dock opened in 1834.

Our final stop was the impressive engine-house of Genwen Colliery at Bynea. Chauncy Townsend, the London capitalist who was active in the coal mines of Llansamlet, also had a considerable interest in the Llanelli coal trade. After he died in 1770 his heirs concentrated on the Llansamlet side of the undertaking at the expense of Llanelli, and in 1802 the mines there were assigned to Colonel George Wade. In 1806 he replaced Townsend's engine-house with the one that is still standing today. The pit itself closed in 1908 after an explosion the previous year had set fire to the seam.

Our thanks are due to Mr Prescott and Dr Symons for this very interesting visit. P.R.R.

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FURTHER INVESTIGATIONS AT SCOTT'S PIT: AN INTERIM REPORT

This impressive, stone-built Cornish pumping engine house at Heol Las, Swansea (SS 697984) is scheduled as an ancient monument because it is the only remaining example of its kind in the area. Sisters' and Birchgrove Pits in the same locality were of a similar type, but their engine-houses have now been demolished. They were both sunk much later than Scott's Pit and continued to work up to 1930. There appears to be very little written evidence on Scott's Pit, probably because it was abandoned at an early date as a result of a number of difficulties. Although its impact on the overall development of its area was slight, what is known about the pit suggests that it had an interesting history and that it would be satisfying to provide a more complete picture. The outstanding questions about Scott's Pit relate to problems associated with the sinking and operation of the pit, and to the reasons for its abandonment.

The origins of the pit are uncertain, but there is some evidence to indicate that sinking might have started in about 1770. The first definite reference to it, under its original name of Church Pit, occurs in 1787. It was worked by the Smith family of Gwernllwynchwyth, but on the death of Charles Smith in 1813, leaving his son, Charles Henry, still a minor, Scott's Pit along with others in the same district was leased to a Charles Tahoudin, who in turn made over his interest to John Scott in 1815. Scott and his partners remained in occupation until 1828 when it reverted to Charles Henry Smith. It ceased to be worked in about 1838. Because of the adverse geological conditions and poor drainage it was sometimes also known as Venture Pit. (1)

The exact date of construction of the engine-house is uncertain, but it has been suggested that the way the masonry is laid in horizontal layers, and the type of brick used, point to a date in the first quarter rather than in the second half of the 19th century. If so, this would perhaps indicate that it was built by Scott in the period 1815-1820 as part of an attempt to drain the pit properly. Scott also built a railway to Foxhole at this time and seems to have had ambitious plans for the pit and high expectations, which, as it turned out, never materialised. The fact that it is now known as Scott's Pit rather than by its old name of Church Pit shows that he must have made a marked impact on it.

It was a wet pit, and therefore working conditions were poor, fatal accidents occurred, roof maintenance was difficult and earnings not enough to compensate for these drawbacks, even though the coal was of good quality. New pits were being sunk nearby, and this probably drained off labour, creating a further factor in the preventing of the necessary expansion of the pit and leading to its final closure. The field in which it is situated is referred to as "tips" in the 1846 Tithe Map of Llansamlet.

The coal was taken by Scott's Railway down to the wharf at Foxhole on the River Tawe. Its route is marked on the 1" O.S. map of 1830. It has been suggested that limestone was brought back on the return journey and fired in a lime kiln said to have been in the colliery yard. (2) The coal workings are shown to have been extensive on a map of c.1914 although difficult to distinguish from those of other pits. (3)

Site investigation was prompted by the need to obtain further information on the pit's history. Here the Society was fortunate in being advised by Mr Douglas Hague, RCAHM, who provided detailed guidance and encouragement. An exploratory dig was held on 14 September 1976, when a group of members and "fringe" members did a hard day's work in sunny weather. The work carried out on that occasion, and proposed for the future, is as follows. Reference to the sketch plan will make it clearer to follow.

Engine-house exterior. With the help of a Land Rover and a lot of effort the ivy was removed (with the exception of that on the brick chimney) to prevent further damage in this way. Intrepid Robin Cole who scaled the ivy reports that the top of the building is structurally very sound.

Engine-house interior. The engine platform and basement need clearing in order to determine the arrangement of the interior. Evidence should also be sought for a vertical winding-engine, the existence of which has been suggested by Dr E.G. Meyrick. (4)

Scott's Railway. No evidence of this railway built in 1816 was discovered, almost certainly because we were digging in the wrong place, having been misled by the Tithe Map of 1846. Remains of the railway can be seen prominently to the south of the M4 motorway, and Mr J.M. Davies has been able to confirm from the 1854 deposited plans of the Swansea Vale Railway that Scott's Railway ran directly to the pit. This is confirmed by enlargements made from aerial photographs. (5) The approximate place to dig has now been determined, and it is unlikely to have been disturbed by the many changes that have

Cultivated field

Brick-built chamber?

Ventilation tunnel

Likely site of boiler house

Winding engine platform

Lean-to shelter

Chimney stack

Fill

Former access track

Shaft

Possible wall of old building

Old stables

Old cow shed

Tip material

Rough field previously ploughed

Site of barn

Disturbed, raised land

Probable course of Scott's Railway

SCOTT'S PIT

Heol Las, Swansea

Cornish pumping engine house

Airshaft shown on 1875 O.S. map



NOT TO SCALE

taken place in the area and by subsequent agricultural use. We might even be fortunate enough to find a series of stone sleeper blocks with the distinctive holes in them.

Ventilation shaft. This 30' tunnel is stone-lined, about 4'6" high and probably ventilated the pit to which it ran prior to being blocked in the 1930s by the farmer, Mr D.G.Young, to prevent accidents. A lot of effort was spent clearing the end nearest the shaft, and the next stage is to investigate the other end for a brick-built chamber, the existence of which has been suggested by Dr Meyrick. More information is needed on how the ventilation system worked, and whether a second tunnel existed to provide an up/down draft. On the 1875 O.S. 6" map an air shaft is shown in the field and this coincides with underground workings, but it has yet to be located on the ground.

Associated buildings. The 25" O.S. map of 1875 shows no buildings on the site other than the engine-house, but an edition dated the following year shows what might be the boiler house. The 1949 edition of the same map shows a number of buildings which Mr Young confirms were all erected by him. He cannot recall seeing any evidence of former buildings with the exception of a wall to the west of the shaft. The recent dig revealed the base of the cow-shed erected by Mr Young. In future the likely site of the boiler-house needs to be explored.

Winding-engine platform. Douglas Hague suggests that this platform with its stout bolts lying to the east of the shaft represents the winding-engine platform.

On the recent dig a 7'8" rod incorporating an open hook was found. This appears to have supported an axle for the winding gear. The present farmer, Mr Griffith, had previously unearthed a heavy cast-iron winding wheel which is now being cleaned up.

It is hoped that further support will be forthcoming from members and friends on future digs, the next one being on Saturday 20 November, starting at 9.30 a.m.

B.C.Fagg

Notes.

1. The best historical account is derived from R.P. Roberts: History of coalmining in Gower from 1700 to 1832. (M.A.Thesis, University College, Cardiff, 1953.)
2. Gregory, H. Article in South Wales Evening Post, 15/2/1966.
3. 25" O.S. map with additions from an uncertain source in the City Estate Agent's Department, Guildhall, Swansea.
4. SWVIAS Newsletter no.12, March 1976.
5. Mr Hayden Holloway skilfully produced photographs from originals kindly supplied by the Ordnance Survey. Unnecessary work on the ground can now be avoided.

RECENT PUBLICATIONS

G.HUMPHRYS. Excursion notes: Swansea Bay City. Excursion notes: the western central valleys.

These two leaflets were prepared primarily for the benefit of students in the Geography Department of Swansea University College. They each contain a general outline of the economic history of the districts in question, and route notes which give more detailed information on individual villages and sites. Both have a generous number of maps and manage to get a good deal of information into 8 or 10 pages. Swansea Bay City is the coastal strip from Swansea to Port Talbot, and the western central valleys is the area between Port Talbot, Maesteg, Bridgend and the sea.

(Cartography Office, Geography Department, University College, Swansea SA2 8PP. 10p the pair.)

J.D.H.THOMAS. The industrialization of a Glamorgan parish, II. (National Library of Wales Journal, 19,3,1976, pp.227-242.)

In the second part of his account of the development of industry in the parish of Llan-giwg, Hugh Thomas looks mainly at the growth of population in the 19th century. The expansion of the iron industry, and consequently of coal-mining and other industries, led to a growth in the population from 829 in 1801 to 8,312 in 1871. Mr Thomas is also concerned with the places of origin of the newcomers to the parish and with their occupations. His information is drawn mainly from census returns of 1841, 1851 and 1861.

Published for the South West Wales Industrial Archaeology Society by P.R.Reynolds, 12 Beaconsfield Way, Sketty, Swansea SA2 9JR.