

SOUTH WEST WALES INDUSTRIAL ARCHAEOLOGY SOCIETY

NEWSLETTER

CYLCHLYTHYR

CYMDEITHAS ARCHAEOLEG DIWYDIANNOL DE ORLLEWIN CYMRU

No. 6: February 1974

Editorial Committee: F. G. Cowley, P. R. Reynolds.

SOCIETY NOTES

We are very sorry to report the resignation of our Secretary, Dr. Susan Frank, at the end of last year as a result of her appointment to a post in Sheffield University Library. She took an active part in the society since its inception and was Secretary since November 1972. She always managed the affairs of the society conscientiously as well as attending to her various responsibilities as hall tutor and assistant librarian in the University College. The methodical minutes carefully entered up in a proper minutes book will not be the least reminder of her to future secretaries. We send her all good wishes in her new post and hope that the local IA society in Sheffield will soon be feeling the benefit of her membership. Meanwhile the Committee have appointed a much-valued founder member of the Society as the new Hon. Secretary:

Mr. W. Idris Roberts
Grove Cottage
Gloucester Place
Mumbles
Swansea

Mr. Roberts has never missed an opportunity of taking an active part in the affairs of the Society and we are most grateful to him for accepting nomination. It is of course up to the Society to ratify this appointment at the next AGM.

SUBSCRIPTIONS

As the New Year comes around, once again subscriptions to the Society become due. Some members have already remitted and we are most grateful to them. May I ask other members to send their subscriptions in now, £1 for ordinary membership, 50 p. for students and OAPs. A suitable form is included with this newsletter.

FUTURE MEETINGS

At the time these notes are being compiled the power dispute makes it touch and go whether we will be able to continue with our normal programme of monthly lectures. We have already been obliged to cancel the January meeting, and it may prove impossible to hold meetings this month and in March. However, provisional arrangements have been made for the following meetings, both to be held in the Royal Institution at 7.00 p.m.

February 21. Canceled.

March 21. R. G. Keen: Canals.

More definite information will be made available as soon as circumstances permit.

IA COURSES AND CONFERENCES

Details have been received of the South-West Regional IA Conference to be held in Exeter on Saturday March 30th. Some members of the Society attended this

event last year when it was held at Risca and found it a worthwhile occasion. The Conference this year is to be held in the University of Exeter, and arrangements can be made for overnight accommodation in one of the Halls of Residence if required.

We have also received enrolment forms for a one-week residential course in IA, also to be held at Exeter University from September 20th to 27th. Further information on either of these events may be obtained from the editor of this newsletter.

INFORMATION REQUIRED

Does anyone know any manuscript sources of information on David Thomas (1794-1882) who was employed at the Neath Abbey Ironworks, 1812-17, and at Ynisedwyn Ironworks, 1817-39, and who in 1839 introduced to the United States the technique of smelting iron with anthracite? The enquiry comes from an American researcher, Darwin H. Stapleton, Hagley Fellow in the University of Delaware. Please contact Mr. R. O. Roberts, Economics Dept., University College of Swansea in the first instance.

CWM-NANT-LLWYD COLLIERY AND TRANROAD

Following up items in previous issues about the branch canal near Ynismudwy that the Society visited on June 30th, 1973, members may be interested to know that the plans deposited in 1855 in connection with the extension of the Swansea Vale Railway, show this canal and also COKE OVENS beside the basin at its terminus beside the river. It would therefore seem that coal was brought down from Cwm-Nant-Llwyd and Maun-y-Coed collieries by the well-preserved inclined plane that may be easily traced on the eastern side of the river, over the bridge whose abutments are still visible, and was turned into coke before being sent down to Swansea by canal. How long this arrangement lasted has still to be determined.

BRUNEL IN WEST WALES

Following his interesting lecture on November 15th last, Mr. Roger Worsley has written with further information on Brunel's abandoned railway through Pembrokeshire.

In the "Evening Post" a few weeks ago there was an account of an exhibition of railway history at Haverfordwest. This report concluded by mentioning some pipes now forming a culvert under a road at Mathry (between St. Davids and Fishguard) which it suggested might be pipes originally intended for an atmospheric railway. Mr. Worsley writes that this is not the case: the pipes at Mathry are the wrong diameter, but there is another lot of pipes in a different place which could prove to be for an atmospheric railway. He has not yet had the opportunity of examining them.

Mr. Worsley also says that he has recently discovered quite considerable evidence of earthworking at Aber Mawr Bay, levels and trial cuttings which seem hard to explain away merely as quarrying, and which make it seem more and more certain that Brunel intended this to be the western terminus of his line before the Irish famine caused it to be abandoned.

Also in the field of Bruneliana is an interesting recent discovery at an old mineral-water factory at Johnston beside the Haverfordwest to Milford Haven railway line. Brunel, as is generally known, not only employed a wider gauge for his railways than other engineers, but also used an idiosyncratic method of securing

the rails by mounting them on longitudinal sleepers with tie-bars between at regular intervals. Mr. Worsley and his colleagues found a number of very large timbers holding up a shed at the mineral-water works which showed unmistakable marks of bridge rails running along their length - unquestionably broad gauge sleepers to go with the broad gauge rails that survive in a fence at Neyland.

Mr. Worsley has written up his findings to date in connection with Brunel's activities in Pembrokeshire, and especially Treffgarne Gorge, in "The Journal of the Friends of the Pembrokeshire County Museum" No. 4. At the time of writing, this issue is not yet on sale, but it should be available soon from Pembrokeshire County Museum, The Castle, Haverfordwest. Price: 25p. plus postage.

THE PENTRE PIT TRAMROAD

The following description of a tramroad running from the Pentre Pit, Landore, down to the Swansea Canal is reprinted from The Cambrian for 5 June 1830. As well as the detailed description of the rails and the method of operation a number of topographical references are given which should enable the course of the tramroad to be determined with a fair degree of certainty.

Can any of our members familiar with Landore do this?

This was not the first tramroad to serve the Pentre Pit. The Morris Letters refer to cast iron tramplates being ordered in 1776 from Darbys of Coalbrookdale for the colliery, and by 1788 it is recorded that 240 tons of tramplates had been installed underground giving a total length of 3 3/4 miles. A surface tramroad would very likely have been in operation at this time to take the coal down to the river, and there was certainly one by 1804 when it is mentioned in the letters of the Rev. J. Evans, who also describes the famous Boulton & Watt pumping engine installed in 1800. The 1830 tramroad therefore represents a reconstruction or a realignment of an existing tramroad rather than a completely new one. The article in The Cambrian runs as follows:

"IMPROVEMENTS IN RAIL-ROADS. It is with pleasure we notice that the improvements introduced by the march of mechanical intellect in the North of England are rapidly extending themselves in this part of the country. Last week an improved railway and self-acting inclined plane, of nearly half a mile in length, were opened in the immediate neighbourhood of Swansea, which appear to merit the inspection of the scientific and curious in these matters. The plane is much flatter than anything before seen in this part of the country, being at an inclination of only about two inches in a yard; it is remarkable for having in its length two curves, somewhat in the shape of a letter S, which the engineer thought necessary to adopt to avoid a deep ravine on one side and a hill on the other. The rails are of cast iron, on their edge, are dove-tailed at each end, and wedged into cast iron pedestals, which are again secured by bars of iron transversely across the road, forming, in fact, at each interval two pedestals in one casting, which serve to connect the two parallel rails, and to keep the road always in gauge - a most desirable object; these pedestals are secured in the usual manner to large solid blocks of stone. The inclined plane connects the Pentre Colliery, the property of the Landore Colliery Company, with the Swansea Canal, and has been formed at considerable expense, the embankment being in some parts above twenty feet high. It is perfectly astonishing to see with what rapidity and precision it does its work, ten tons of coal being passed at a time over the space of nearly half a mile in two minutes, being at a rate of 15 miles per hour. Thus this simple arrangement would enable the proprietors, if their demand required it, allowing an interval of three minutes each time for casting off and re-connecting the empty and full waggons, to send down 120 tons of coal in an hour. In this rich mineral district it would seem due advantage has not yet been taken of descending levels from many of our most valuable mines."

AN ABANDONED RAILWAY NORTH OF SWANSEA

In 1911 and 1912 the Great Western Railway obtained powers by Acts of Parliament for an ambitious programme of railway construction to the north of Swansea in order to open up new areas of the anthracite coalfield and to provide better links with their markets for existing pits. The principal line was to start at Gwaun-cae-Gurwen, leaving the recently-opened branch from Garnant and then to run south through Cwmgors, Pontardawe and Clydach to join the Swansea District Line, then under construction, at Felin Fran. Additionally a number of smaller lines were planned to increase the potential hinterland from which the new railway could draw its traffic. These were at Garnant, linking the old Brynamman line to the G-c-G branch; at Clydach to give a connection with the colliery tramway in the Lower Clydach valley; and a branch from Rhydyfro to open up a completely virgin coalfield in the Egel valley. Work was never started on these latter three lines.

A similar plan to the GWR's had been proposed at an earlier date by the Neath, Pontardawe and Brynamman Railway, except that south of Pontardawe the railway was to run via Bryncoch to Neath. They were given powers to construct this line by Parliament in 1895, but no action was taken, and powers finally lapsed in 1912.

Of the lines proposed by the GWR only parts were built. In the south the line was opened from Felin Fran only as far as the Daren Colliery at Trebanos in 1915. After that the effects of World War I placed a moratorium on any further construction. In the north the line opened from Gwaun-cae-Gurwen as far as the Duke Colliery at Cwmgors in 1923. However a considerable amount of preparatory work was carried out on the rest of the line before it was abandoned: earthworks were raised, bridges and stations were built and a tunnel bored at Pontardawe. The formation can still be followed for most of the route and enables one to form a clear impression of the grand scale that the railway was intended to be built on. Had economic factors not prevented its completion after World War I a very fine outlet for the anthracite coalfield would have been secured. For the IA enthusiast there is the added interest that here are remains, not of a flourishing concern that went into decline, but of a great might-have-been that was only partly completed and which never saw the use for which it was designed. In some parts one feels that nothing can have been changed since the workmen went away nearly 60 years ago.

The state of the remains at present is as follows:

Gwaun-cae-Gurwen (SM 701121). The line started here, leaving the 1907 branch from Garnant by triangular junctions. The western branch, built in a cutting, is still in use, but the eastern branch was never opened, and the very fine, 4-span viaduct built to carry it is used solely as a footpath and has never known any other function. The standard of construction is excellent and it seems to be in very good condition still. It can best be approached from the level-crossing in the village and is well worth inspecting. Also at G-c-G may be seen the remains of a much earlier line long since deserted. The Llanelly Railway opened a branch to the village in 1841 which followed the floor of the valley all the way from Garnant and terminated in an inclined plane at 1 in 4.9 up to the village. This branch was replaced by the 1907 line. The incline is still clearly recognisable and may be reached by descending to the level of the stream under the viaduct and passing under that along a footpath on the bank.

Gwaun-cae-Gurwen Station (SM 700118) The station was completely built with a view to a passenger service operating on the line. It was never used as a

passenger station, but parcels were handled until 1965. Platforms composed of brick edged with concrete slabs are to be found on either side of the line. The main station building was on the eastern platform. It was built of bright red brick with an awning stretching to the edge of the platform. At present it seems to be occupied as a private house and is in fairly good repair. On the other platform there was originally a small shelter, but this has now been reduced to a pile of bricks.

Continuing south the formation is built to double-track width, but only a single track is laid. The next feature one reaches is -

Cwmgors Station (SN 703107). This station was never completed: the buildings were erected, but the platforms have never been more than incomplete earth banks. The main building on the eastern platform has only recently been destroyed to make room for the new Cwmgors Press and Fabrication Works, but on the western side a smaller building in poor repair remains. Like C-c-C station it is built of red brick and originally had an awning. At present the floor has caved in, the roof partially collapsed and the supports of the awning are broken. The best preserved feature is the 'gents' at the south end.

The original terminus of the line was the old Duke Colliery near the present Abernant Colliery, which seems to have closed in about 1933. After that the line was only in use as far as Cwmgors Colliery (SN 705110) until Abernant Colliery was opened in 1961. The line was then relaid and is now used by several coal trains a day. Continuing south, there is a stretch of about 3 miles where no work was undertaken at all, but north of Pontardawe one is again able to pick up the course of the line.

Pontardawe Tunnel (SN 710040). The headings of a short tunnel, about 120 yds. long were completed to the height of about 15-20 feet. There is no brick facing to the mouths or sides, but it remains perfectly sound and shows no sign of any collapse having occurred or being likely to occur. It is approached by cuttings at both north and south ends, and whilst the cuttings are damp and overgrown it is still possible to walk through the tunnel without any great difficulty, although the northern mouth is partially blocked. To reach the northern end, go up Glanrhyd Road by the old Post Office in Pontardawe, pass a small church and then climb the wooded bank on the left to reach the top of the cutting. Alternatively, one may continue up the road a little further, noting the GMP boundary posts on the left, until one reaches the spot where the railway would have crossed the road by a level-crossing. The southern end of the tunnel may be reached, again by going up Glanrhyd Road, but this time taking the first turning on the left, and then left again along a rough footpath which leads to the cutting. Of the two, the southern end is probably the easier to reach.

Continuing south from Pontardawe, the formation is nearly complete all the way and runs on a terrace on the west side of the Swansea Valley, a little above the main road. At the southern end of the cutting may be noticed the abutments of a bridge over a track leading to a quarry. A little further on, a neat single arch brick and stone bridge crosses a side-road at Trebanos (SN 714032). Shortly after this bridge one comes to the shell of a solid late 19th-century house directly in the line of the railway. It must have stood derelict like this since the GMP compulsorily purchased it 60 years ago.

At Trebanos one reaches the most northerly point to which the railway was opened. The Daren Colliery here (SN 709031) closed in 1965, and the railway was lifted soon after. A few traces of the colliery may be seen high up under the cliffs in an eerie solitude, and there are some signs of the tramway running down to the railway, but nothing of any great significance.

Clydach. The goods station (SN 694018) closed in 1965 has now been cleared and the site is used by the County Council for storing road materials. The entrance gates and drive on Park Road are still to be seen. Until recently between this point and the Mond Nickel Works an impressive viaduct and embankment spanned Vardre Road and High Street. The viaduct was in the same style as the G-c-G viaduct, and at one point the embankment widened out for what was intended to be Clydach station. Where the viaducts crossed the roads the arches were demolished soon after the railway closed, and the rest of the viaducts and embankments were demolished in 1971 to make way for redevelopment of the area.

South of Clydach the line is still in use for traffic to the Mond, but only one train a day is allowed for in the timetables. It runs more or less due south to Felin Fran East (SN 691987) where further triangular junctions were planned to give access to the Swansea District Line, and so to Swansea Docks via either Morryston or Jersey Marine. Of these, only the junction facing east was built, but earthworks and the abutments of a bridge beside Ynys Allan Road for the west-facing junction were built. Until recently both abutments could be seen, but with the building of the M4 the southern abutments were destroyed. A further effect of the building of the motorway was the realignment of the junction at Felin Fran. It was moved about 400 yds. west and the Clydach line now leaves the District Line at a much sharper curvature before rejoining the original alignment north of the motorway.

These notes are not intended to be a history of the Gwynon scheme, but only notes on the present condition of the extant remains. The best historical account is the article by C. L. Mowat, 'Railways at Gwaun-cae-Curwen' (Railway Magazine, 103 (12) 1957, pp. 825-8). Xerox copies of this article can be supplied by the Editor of this Newsletter at 8½ p. including postage.

P.R.R.

NEW AND FORTHCOMING BOOKS

Mr. Bryn Thomas, a member of this society, has recently published a little book with the title THE GOOD OLD DAYS: NOTES AND JOTTINGS ON LLANDYBIE, LLANDEILO AND THE AMMAN VALLEY. It comprises a selection of historical notes on the area concerned mainly, but not exclusively, in the last two centuries, and is based on articles that Mr. Thomas originally published in the 'South Wales Guardian' during 1972. For anyone interested in the history of this area it is a useful little work which brings to light a number of unusual episodes of local history. Copies may be obtained from the author at 53 Blaenau Road, Llandybïe, Ammanford, at 35 p. each plus postage.

A major work on the history of Neath is in the press, covering the history of the town from the days of Roman Nidum to the 20th century. As one might expect, industrial history features prominently. As yet the date of publication has still to be fixed, but it is understood to be in the not too distant future. In the meantime copies of a descriptive brochure may be obtained from the editor of the work, Mr. Elis Jenkins, 15 Hawthorn Avenue, Neath.

RECENT PUBLICATIONS

I doubt if many members need to be told that the latest issues of two old favourites have recently been published, viz., the Gower Society's journal "GOWER" Vol. 24; and "GLAMORGAN HISTORIAN" Vol. 9. Both contain material on the industrial history of this area.

Dr. F. G. Cowley has an article in Gower, pp. 80-82, THE VIVIAN COLLIERIES IN 1868. A description of four collieries belonging to Vivian & Sons was written by Arthur Pendarves Vivian when he visited them in 1868. Dr. Cowley has transcribed these notes and supplied an introduction giving the historical background. The four pits concerned are Mynydd Newydd, Cwm Level, Pentre and Callands.

Among the good things in Vol. 9 of Glamorgan Historian two articles in particular call for notice. PEASANT CULTURE IN THE SWANSEA VALLEY (pp. 105-122) is the text of a lecture given by Professor T. J. Morgan to the British Association in 1971, and describes the cultural life of an industrial peasantry in the 19th century. THE GRENFELLS OF KILVEY (pp. 123-142) by Dr. M. E. Chamberlain traces the history of this great Swansea copper family who owned the Middle and Upper Bank works. One of the points Dr. Chamberlain brings out is the strong social conscience of many members of the family which led them to continue living at Kilvey when many of their peers had moved to the more fashionable Swansea West. She describes some of the social and humanitarian work done by the Grenfells as well as outlining the history of the copper concern.

The tinsplate trade is of course one of the major industries of our region, and a good deal of information is available on the manufacture of tinsplate, but a side of the industry that has not received much attention is tinsplate printing; that is, printing designs on tinsplate to produce decorative tea-caddies, biscuit boxes and so on. An interesting article on this subject has recently appeared in the Journal of the Printing Historical Society, No. 8, 1972, pp. 53-64 under the title TOWARDS A HISTORY OF TIN-PRINTING by Alec Davis. He describes the three methods used, and includes a number of references to the Tin Plate Decorating Co. of Neath, one of the earliest firms in the business.

P.R.R.