



SOUTH WEST WALES INDUSTRIAL ARCHAEOLOGY SOCIETY

NEWSLETTER

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Newsletter 28, July 1981

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

Price to non-members: 15p

#### FORTHCOMING EVENTS

9 JULY

An evening visit to Penclawdd, to see the remains of the copperworks, tramroads and the basin of the Penclawdd Canal.

Leader: Mr R.O. Roberts

Meet outside the former railway station at 7.00 p.m.

25 JULY

A full-day visit to sites in the Cardiff and Newport area, including Melingriffith, Radyr, Caerphilly and Oxford House, Risca

Leader: Mr Ray Bowen

Please book your seats on the 'bus on the enclosed leaflet

12 SEPT.

Excursion to the ruins of Whitland Abbey and industrial sites in the neighbourhood.

Leader: Mr Terry James

Further details to be advised

Arrangements are now well in hand for the winter programme for 1981/82 and programme cards will be sent out to all paid-up members nearer the start of the new season.

#### SUBSCRIPTIONS

This is the last call for 1981 subscriptions. If a cross appears in the margin beside this paragraph, that indicates that according to our records your subscription is still outstanding. Please remit to the Hon. Treasurer (Paul Reynolds, address on the last page of this Newsletter) as soon as you can. If we do not hear from you, we shall regrettably have to assume that you no longer wish to remain a member. The rates are: £2-00 p.a. (standard rate); £1-00 p.a. (senior citizens and full-time students); £3-00 (family rate, to cover all members of a family living at one address).

#### TWO OFFERS

1. A run of Railway Magazine from 1965 to 1980 is offered at about £10. At well under £1 a year, this sounds good value, since each volume contains about 500 pages. Please contact Gerald Gabb, 88c Newton Road, Mumbles, who is acting on behalf of the owner, an old gentleman in Loughor.

2. Bob Roberts informs us that a book-dealer in north Wales has copies of George Grant Francis's Smelting of copper in the Swansea district (1881) for sale at about £15 each. The name is Tom Lloyd-Roberts, Old Court House, Caerwys, Mold, Clwyd CH7 5BB.

## SWANSEA CANAL SOCIETY

Following the success of the Neath & Tennant Canals Preservation Society, a society has recently been formed to preserve the remaining stretches of the Swansea Canal and to develop and manage it for the benefit of the community living in and alongside its banks, viz., people, animals and plants. Much of the canal has been destroyed by new roads and urban development, but there are still beautiful and remote stretches full of wild life, mainly in the Clydach and Pontardawe area. As well as the parts of the canal that are still used for recreations such as walking or fishing, there are listed monuments and associated structures of historical interest along the entire length.

A public meeting was held in October 1980 when it was agreed to form a steering group to look into the formation and proposed role of a Swansea Canal Society. The group has arranged various activities to introduce the idea of canal preservation to the general public. These have included an interesting little exhibition at The Cross Community Centre in Pontardawe last March which was opened by the Chairman of West Glamorgan County Council, and which focussed on the three main aspects of the Canal Society, recreation, preservation and conservation of wild life. During the course of this exhibition a number of events were held, including the official formation of the Swansea Canal Society at a public meeting on 24 March.

Since then there has been a fishing competition, a guided walk and a working party at Ynysmeudw locks. Members of the newly formed Canal Society and the already established Swansea Valley Historical Society have collaborated in the lifting of "Dorian", an 80-year old barge, and transporting it to Swansea Industrial and Maritime Museum. The SVHS originally dug the boat out of the side of the canal at Clydach in 1979, but due to lack of money, and to save it from deterioration and vandalism, they sank it again as a temporary expedient. It was finally raised for good on Sunday, 10 May when water was pumped out of the canal for the barge to be dug clear of the mud. There appear to have been some anxious moments in the course of lifting the barge by crane, but eventually it was secured to a lorry and taken to the museum. The 20-ton barge was built in about 1900 and used to carry coal from Ynystawe to the Mond works. It was later bought by the G.W.R., then owners of the canal, for use in canal maintenance. It was finally abandoned at the old wharf next to the sawmills at Clydach. It is in quite good condition and almost complete. Restoration work began as soon as it arrived at the museum with a view to putting it on permanent display.

Further developments might include the improvement of the navigation so as to allow access for canoes and small boats, as well as the possibility of incorporating the towpath into a proposed long-distance footpath from Swansea Bay to the Black Mountain. The preservation of the listed aqueducts and other structures is very important. Although the canal has been studied in depth there is a great deal more that could still be learnt. The Society will also try to ensure that the wildlife sanctuary that has developed over the years because of neglect and disuse is not disturbed by unsuitable developments and that proper measures for conservation and study are developed.

The Society also aims to develop close links with the local authorities, the Waterways Board and any group that could help in the preservation and development of the canal. The work of the Society could cover a very wide range of activities from the coordination of voluntary efforts to improve the less attractive sections of the canal through to developing the tourist potential.

Finally, what is most important, the new society is anxious to recruit further members, whether to take an active part or just to support the venture. Details are available from the hon. Secretary

Mr S. M. Williams,  
c/o The Cross,  
1 High Street,  
Pontardawe,  
Swansea SA8 4HU

## COAL MINING IN LLANSAMLET PARISH

By B. C. Fagg

Considerable information has been discovered on mining in Llansamlet parish in researching the background to Scott's Pit as part of the SWVIAS project. This has followed the well-known law of research that one will always find more on allied subjects than on the principal matter.

Swansea began to establish itself as a centre for the mining and export of coal in about 1700 and became the main exporter for the western end of the south Wales coalfield. For a short period before Cardiff and Barry took over, Swansea was the pre-eminent port. An important consequence of the presence of coal was the rise of the copper industry which in turn encouraged the industrialisation of the Lower Swansea Valley. This in itself stimulated further coalmining in the valley and the sub-region. Although the early records of coalmining are by no means comprehensive, and therefore difficult to assess, it would appear that the Llansamlet area made a significant contribution to this process.

Evidence on the ownership, operations and development of coal mining in the area supports three themes: firstly, an early attempt to mine coal systematically with established companies, collieries and sales; secondly, the close relationship between the growth of mining and other industries, with common ownership, aims and objectives; and finally, the change from working coal outcrops to deep mining with the application of new techniques and machinery in an area where coal was initially easy to work and did not require much effort to win.

### Mining on the Mansels' Estate

Little is known about mining in the area before the 18th century, although it is recorded as having taken place in the Manor of Kilvey, on the eastern bank of the River Tawe in the 14th century. There are also references in the 16th century in the accounts of the Duke of Beaufort (1). A law suit in the Court of Exchequer in 1616-17 mentions illegal working on the land of Hopkin Edwards and the presence of pits at Cefn Hengoed, Bonymaen and Windlass Fawr (2).

Sir Thomas Mansel, later Lord Mansel, whose family seat was at Margam, was a major landowner in the Manor of Kilvey. His boundary followed, and ran to the south of, Nant Ffendrod and the old parish road from Neath to what was later to become Morryston (see plan). His estate included land on the eastern side of the valley around the villages now known as Bonymaen, Cwm, Winchwen, Talygopa and Llansamlet itself. From 1701 to 1725 Thomas Mansel operated a coal "works" or colliery near the "Salt House". His coal was shipped from "New Key", White Rock, Upper Dock and Middle Bank. The Salthouse is shown on Emanuel Bowen's Map of South Wales of 1729, situated on the coast between Swansea Bar and Salthouse Point at what would now be known as Port Tennant. This was alongside the new harbour which is probably the "new key". The reference to the colliery as being near Salthouse must place it somewhere on the side of Kilvey Hill, such as Danygraig, the nearest known working. A considerable output of coal for export was achieved from this colliery, averaging 12,000 tons p.a., in addition to coal being sold locally as "land coal". After Thomas Mansel's death in 1723, his son Bussy Mansel took over the colliery, but did not achieve the same level of coal exports which rapidly declined after 1733 to a few hundred tons a year up to 1750, the year in which he died (3).

John Popkins, a local squire living at Knapcoch, which overlooked Middle Bank, was also working a colliery on that site between 1705 and 1724, but was unable to produce more than 200-300 weys p.a. (1000-1500 tons), and well below this in later years. Three coal pits are shown in the general area of Middle Bank on a map of 1729, the only ones east of the River Tawe (4). It was this Popkins to whom Robert Morris made an interesting reference, as follows: "the well being of the copperworks is

in great measure owing to this (new) colliery for now it is out of Mr. Popkins' power by any tricks or shifts to distress us" (5).

Table 1: Coal from the Mansels' Pits	
Year(s)	Wey's per year
1701	2500
1703/04-1708/09	3800
1709-1724	2500-3000
1725-1733	2500
1733-1744	1000
1745-1754	100-600

} Thomas Mansel (12,000 tons p.a.)

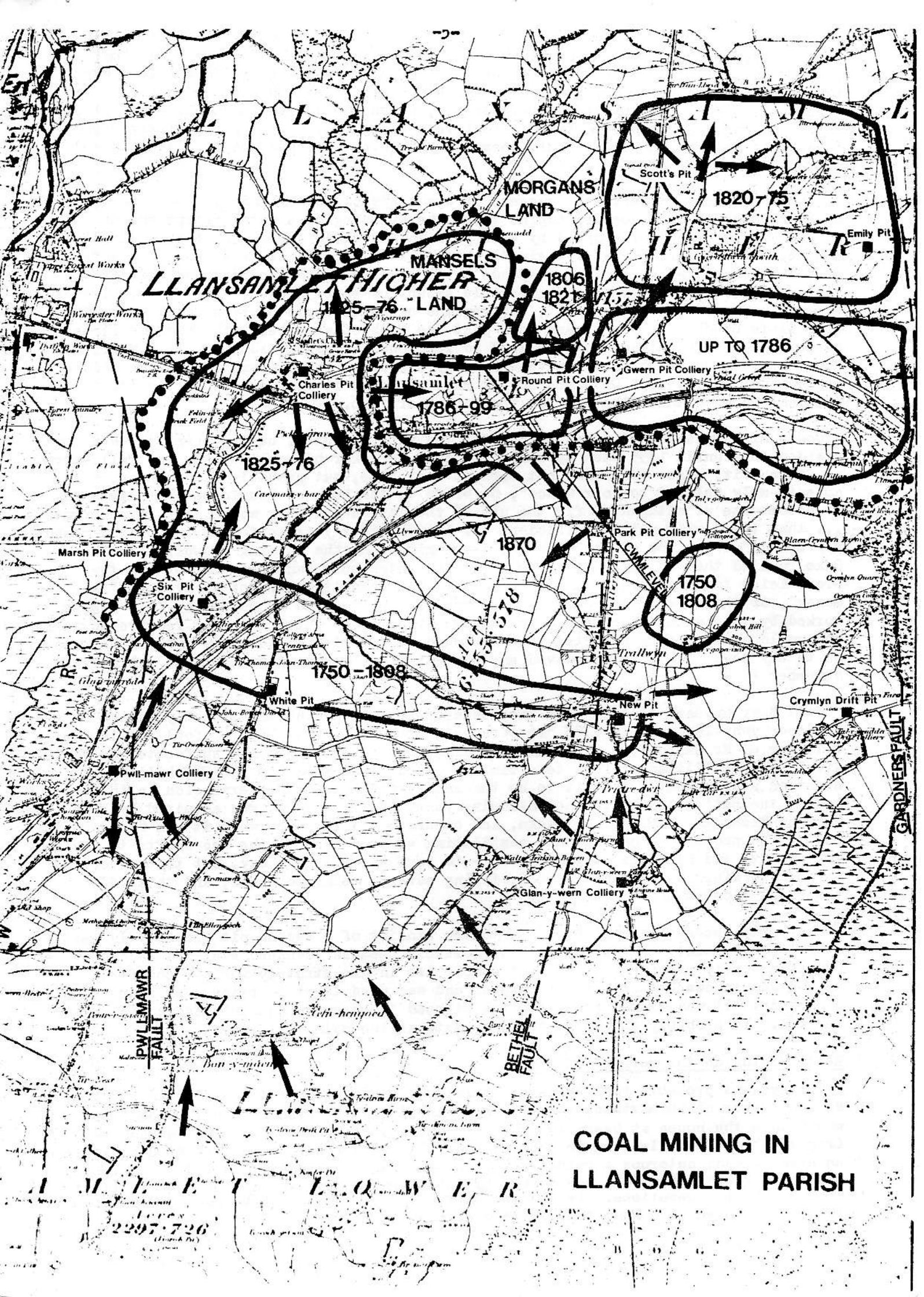
} Bussy Mansel

The Mansel family and others seized any opportunity to exploit the coal for export by-sea and for sale to local works. In 1736 Bussy Mansel leased land to Thomas Coster and partners for the **White Rock Copper Works**, situated on the eastern side of the River Tawe, although the first lease for the erection of the works may have been in 1730 (6). In 1754 another lease was granted to build a works, to Chauncey Townsend, and here the motive is clearly stated "that there are mines of coal under the estates in Glamorganshire belonging to the Mansell family, and it is of great advantage to encourage manufactures for the consumption of such coal, and therefore... grant a lease ... for the smelting, refining and making copper ore into copper" (7). In addition, Townsend was paid a sum of £600 towards making and erecting his works at Middle Bank. However, this was conditional on using only coal from the estate "now raised and worked by the said Chauncey Townsend".

Townsend had taken a lease from the Mansels in 1750 for the development of mining on the estate, which included all the land east of the river and south of Llansamlet village, and he combined coal mining with his investment in the copper and lead works, thus assisting the ordered growth of the two industries. Other rights were granted to Townsend to facilitate this including, in 1757, by the Duchess of Beaufort, the right to carry out drainage works on the Glais and Nant Bran streams "for the drainage of waters hurtful to any coal works" and for conveying them to the Middle Bank works (8).

At the same time as Townsend took his lease from Bussy Mansel, he was also granted a lease by Mary Morgan for the working of coal under the Morgan estate on the land north of Llansamlet village, thus clearly making himself the principal mining interest in the area. Townsend was a wealthy merchant, an Alderman of the City of London and M.P. for Westbury in Wiltshire who was, like many Englishmen before and after him, putting his wealth and energies into south Wales. This has been documented elsewhere in connection with his waggonway, and here it is more relevant to look at his work before turning to the mining activities of the Morgans (9).

The most important colliery in Llansamlet in the latter half of the 18th century was Pwll Mawr, the Great Pit. Sinking was started by Townsend in the late 1760s and completed after his death by his successors. It was finished by 1773 and named after the "Great" or Six Foot vein which it was to work. The sinking of this pit, just west of the Great Fault, was carried out in difficult conditions to a new depth of working and was a considerable achievement (10). It appears to have been the first colliery in the area on a scale akin to those being worked in the pioneering Northumberland coalfield. In 1772 James Townsend, the son of Chauncey, describes a fire engine using a 65 in. cylinder to pump water, with a second engine for raising coal from a separate shaft from a depth of 489 ft. According to later commentators, the coal was brought up the shaft in wicker baskets on the end of a hempen rope. There were no guides in the shaft, so the 6 - 8 cwt. load would swing from side to side as it was hauled to the top to be put into a tram and taken down the nearby waggonway to Foxhole or the works (11).



**COAL MINING IN  
LLANSAMLET PARISH**

2297-726  
(Grampian Drift)

According to the Rev. Joseph Townsend, the other son of Chauncey Townsend, "my father had spent thirty years searching for the (Six Foot) vein which was lost due to a fault. From before 1750 he had spent £30,000, and when he succeeded in reaching the coal, he invested a further £70,000 on the pit to raise the coal" (12). Although Townsend had proved the Six Foot vein elsewhere, he was particularly eager to work it west of the Great Fault where it had lain untouched due to the depth and difficulties of sinking.

Other references to Pwll Mawr suggest it was a sizable undertaking. The need to house a powerful beam pumping engine meant the building of a Cornish-type engine house, a solution later adopted by most pits in the valley, e.g. Scott's, Calland's, Pentre. It also had a "water engine", which was a large water wheel with two sets of buckets operated at different speeds or in reverse by the opening and closing of sluice gates. To supply the considerable amount of water needed, a network of feeder streams and reservoirs was built, the remains of which could be seen until recently. From Glais brook a stream flowed down past the back of what was later Midland Place, on past Llyncrwyn Cottage and parallel to Townsend's waggonway south to Pwll Mawr. The construction of the Swansea Vale Railway disturbed the system, but it can still be seen on the 1876 25" Ordnance Survey map, although it is shown closer to its original form on the Tithe Map for the parish of 1846.

Under his lease Townsend had to pay for the water he used, but he seems to have avoided this until 1755 when he wanted to take more for his collieries, not Pwll Mawr or Church Pit, since they were not open at that time, but probably Middle Bank. "I am extremely obliged to your Grace", he wrote to the Duke of Beaufort, "for agreeing to accomodate us with water fir the use of the intended copper works, but am concerned ... that there will not be sufficient ... but thankfully agree to the sum of ten pounds per annum for the use of the water to the engines for the raising of coal..." The Duke replied that he liked to accomodate his neighbours "when it is not greatly prejudicial to my interests", but added that he would like payment of overdue "land money", or the royalty on coal worked, "because the coal to be raised by this engine worked by this water is consumed in the copperworks for which I do not receive anything and would otherwise be exported then I should be entitled to 4d a wey" (13). He goes on to say that he has not received any payment since Townsend took on the colliery in November 1750.

Pwll Mawr appears to have been the scene of several accidents, probably caused by gas and poor ventilation. In 1788 "16 persons went to clean the bays of foul air in the colliery of Mr Smith & Co ... with 13 coming to their deaths being suffocated by foul air." Samlet Williams refers to a similar incident at this pit in 1787 killing nineteen people, but I take it to be the same event. A further explosion in 1827 led to the pit's closure in the following year, but in 1872 it was acquired by Evan Matthew Richards, M.P. for Cardigan, and others and after much work it was reopened in 1881. The process of hauling and ventilating was reversed in the two shafts to try and improve it, and Williams states that 8 - 10 tons was raised, a day, but that water in the old workings was struck in 1888, taking several weeks to clear, and this led to the final closure of the pit (14).

The early success of Pwll Mawr led to the sinking of a second pit immediately east of the Great Fault, called Double Pit, possibly because Townsend wanted a second success but more likely because this was pit number two in his strategy for the coalfield. It was worked in conjunction with Pwll Mawr and was used later to raise coal from the Six Foot vein. It was transferred from the pithead to barges on Smith's Canal via an incline. It probably closed at the same date as the main colliery.

#### Early Mining on the Morgans' Estate

The Morgans probably took an interest in coal mining soon after 1738 when Charles Morgan, Mayor of Carmarthen, married Mary, the daughter of squire Lewis Thomas, and moved into the house at Gwernllwynchwyth. The area they mined appears to have been from south of Gwernllwynchwyth House to the old Neath road, now called Frederick Place, an area of coal outcrops terminated in the west by Bethel Fault and in the east by Gardeners Fault. The coal was worked by the Morgan family up to 1750, but little is known of their operations. It is also difficult to distinguish Morgan workings from those of Townsend, to whom they granted a lease in 1750.

In the period up to about 1786 it appears that Townsend and his successors, in particular John Smith, continued to work the Four Foot seam on the Mansel estate. This evidence comes from a plan entitled Gwernllwynchwith Colliery Lands of November 10th 1808, the property of Benjamin Morgan under lease to Charles & Henry Smith. This plan was produced by Edward Martin and Daniel Davies, colliery surveyors. It gives a detailed view of the state of coal mining in the area and its development, and helps to fill some of the gaps in other sources. It shows clearly that the Mansel and Morgan lands were worked together around Llansamlet village. Immediately south of Gwernllwynchwyth House a water engine, or wheel, is shown at a pit which was used to drain the rest of the workings, which were also entered from East Pit and Engine Pit. The name of the latter suggests that a steam engine was used for winding from the Four Foot vein, 250-300 ft. below. A small quantity of coal was also worked from Heolddu Pit, but this was described as lime coal or culm, small coal of poor quality and therefore not worth working in view of the difficulty of transporting coal to the waggonway. The state of the parish roads often prevented coal from being moved at all in winter, so this was a serious factor.

An account of Llansamlet Colliery in 1771 by John Smith, one of Chauncey Townsend's heirs, also refers to the water engine, and to a level with all the coal having been worked out. It also mentions Oak Pit and Watch Pit, the pillars of which were expected to last for another two years (15). Unfortunately these two pits do not appear on any map, but this is not unusual as pits appear and disappear and change their names regularly. James Townsend, the son of Chauncey Townsend, in a similar account in 1772 also refers to Oak Pit and Watch Pit, and gives a detailed account of the expense of raising coal, which totaled £1 8s 4d per wey (16). He describes how, by exploiting a new part of the vein at a cost of £640 12s 8d by means of Engine Pit, and by using slant pumps, the remaining 120 yds can be worked. Ninety yards of Engine Pit is said to have been sunk so far with a further 16 yds still to go. There is an interesting reference to the distance of Engine Pit from Middle Bank, showing the continuing strong links between the colliery and the works. The form of these accounts suggests that the Llansamlet colliery undertaking had more than James Townsend, Law and Smith as the funding sources, and that properly presented accounts were used either to persuade other investors to continue to have confidence in the company, or as an appraisal to maintain their own involvement. In contrast to some other contemporary mining reports, their factual content and lack of exaggeration suggests the latter.

Gwern Pit appears also to have been sunk in this period, although there are few references to it. The 1808 map gives its depth as 108 ft. This was to be one of the more lasting pits used for exploiting the seams under the Mansel estate between the two faults, Bethel and Gardners, which limited working.

In 1784/86 Church Pit was sunk, probably by John Smith, just south-west of Llansamlet church. It abutted what is now the A48 road and Smith's Canal, which he had just completed to take the coal worked under both the Mansel and Morgan lands to the works at Middle Bank and White Rock and to Foxhole quay (17). This was an important step in the development of the coalfield because Church Pit became the main means of drainage and winding. John Smith installed a steam engine, probably in a Cornish beam engine house similar to that which can still be seen at Scott's Pit. It was used for pumping from a depth of 135 ft. An estate plan of c. 1787 from the Beaufort Papers shows the "New Engine Pit" together with what appears to be a sizable row of buildings, probably housing stables, a smithy, carpenters' workshops, office accommodation and a limekiln. At this stage it appears to have been a single shaft pit, but by 1808 it clearly had two.

The Llansamlet colliery undertaking now included the Church Pit, Round Pit and Cwm Pit in addition to Pwll Mawr and Six Pit. Round Pit was sunk in about 1806 by Charles Smith, the son of John Smith, to the Four Foot vein at 204 ft and had taken over Cwm Pit which lay nearby (18). A level had also been driven between the two pits for improved drainage, but the main outlet for water was via the pumping engine at Church Pit, half a mile away. This demonstrates the importance of Church Pit in draining workings on both the Morgans' and the Mansels' land, and it was the improvement of this system which was being considered in 1808.

From the evidence of the 1808 survey, it would appear that Smith and his successors were justified in their confidence in future coal prospects, judging by the large reserves which were described. The remainder of the Four Foot seam on Morgan's land was calculated as being able to produce 5,700 weys (28,500 tons). The royalty at 5s per wey would amount to £1,425. Under the Four Foot vein there was also the Five Foot, or Middle, vein, 360 ft below, and the Six Foot vein, 450 ft below that, giving a total depth of 945 ft at Church Pit. The surveyors had "little doubt that (there are) at least as many acres of coal as has been wrought in the Church (i.e. Four Foot) vein, and as many more acres may prove to lie under." By 1821 a large amount of the Four Foot seam had been worked from the Round Pit, as is shown on a plan of that date (19). Almost all the vein had been worked on Morgan's land up to about Smith's Canal in the north, to Bethel Fault in the east, and to Church Pit and other workings under Llansamlet village in the west, with which the Round Pit workings had linked up.

In the Llansamlet area the Five Foot, or Middle, vein was being extensively worked by 1808 and the New Pit, sunk by Chauncey Townsend, was probably one of the earliest collieries on it. This seam produced "strong burning, lasting coal of a caking quality and is preferred by the Copper works to any yet worked in Llansamlet, but is very inferior to Landore coal." (20) Subsequently John Smith exploited the seam to the east towards Crymlyn and these workings are clearly shown on later plans. But it was the systematic sinking of pits to the west, attributed to Smith, which is the most impressive. These included Garden Pit, Fourth Pit, Six Pit, Seven Pit, Eight Pit, all worked through the engine at Pwll Mawr (21). Eight Pit is shown on the 1876 6 in. O.S. map, although in 1808 it is described as "old pit, filled with water". It does not appear on subsequent O.S. maps. The absence of spoil heaps suggests that this pit, like many of the others, was only for pumping and ventilation, so as to allow the extension of the existing workings. A more important role was performed by Six Pit which had extensive tips and railway sidings, and is recorded as having worked the Five Foot seam, like Pwll Mawr and Church Pit. Despite the need to be wary of Samlet Williams' comments on events before his time, he does give insights into the colliery workings which seem plausible. He refers to Six Pit as not being very successful, but adds that it was important for the drainage of the area which it worked with Church Pit, and this greatly assisted in keeping the colliery open at the beginning of the 19th century when there were problems with Church Pit.

In describing mining at Llansamlet, it would be an omission not to mention Cwm Level, which is contemporary with Round Pit and Smith's Canal. It ran from Round Pit past Cwm Cottage, southeast under the old parish road at Parc Stadwen to Park Pit on Trallwyn Road, and on to the area called Talygopa. This is a distance of about half a mile. There are no details of its construction, but it was probably stone-lined and used to bring out both men and coal, as well as acting as a drain for the workings east of Trallwyn Road. The 1808 map clearly shows Cwm Level "through which the coal worked under Lord Vernon's land of about Talchopa isaf is brought to the canal... (It) does not drain any of the Gwernallwynchwith coal." This suggests that the level was opened in about 1785 to take coal direct to the canal, probably on a tramway, where it was then tipped into barges. Subsequent railway building over it has tended to hide it, but it can be seen on the 1876 25 in. O.S. map. This shows a finger of tailings from in front of Cwm Farm to the canal, and on the 1899 edition a mineral line appears from nowhere at this point, as if in current use. Cwm Farm here was part of the Round Pit and the owner once confirmed to me the position of the level, while at nearby Cwm Cottage there is a drainage outlet from the level into the canal and the Pwll Mawr water system.

The use of Cwm Level for hauling coal would have been necessary because of the absence of suitable roads from Talygopa to the quays at Foxhole. With the later sinking of New Pit, Eight and Six Pit, coal might have been taken underground in the Five Foot seam and out to the canal at Six Pit, but both New Pit and Park Pit had tramways to the Swansea Vale line in the 19th century.

The development of Glanywern Colliery, on the edge of the Crymlyn bog, was held back until the construction of its own canal enable coal to be moved easily and cheaply, although for a long time coal was taken by land to Foxhole.

(TO BE CONTINUED)

Notes

1. Duke of Beaufort v. Swansea Corporation (1848): evidence to the Exchequer Court of Pleas on the Duke's estates and interests. Notes taken by Mr W.C. Rogers to whom I am grateful for making them available to me. The figures given in this source for exports of coal are summarised in Table 1 and are considerably higher than those in A.H. John, 'Iron and coal on a Glamorgan estate 1700-1740', Econ. Hist.Rev., 13 (1943), 93-103.
2. W. Rees, Industry before the Industrial Revolution, (Cardiff, 1968), vol.1, p.94.
3. Duke of Beaufort v. Swansea Corporation (1848).
4. E. Bowen, A new and accurate map of south Wales, (London, 1729.)
5. Morris MSS quoted by R.P. Roberts, 'A history of coal mining in Gower from 1700 to 1832', unpublished M.A. thesis, University of Wales (Cardiff), 1953, a valuable source of information. See too R.J. Hilliar, 'Coalmining in Kilvey and Llansamlet', unpublished B.A. thesis, Middlesex Polytechnic, 1978.
6. G. Grant-Francis, The smelting of copper in the Swansea district, (London, 1881),
7. ibid., pp.118-9. pp. 115-6.
8. ibid., p.119.
9. P.R. Reynolds, 'Scott's tramroad, Llansamlet', Journal of the Railway & Canal Historical Society, 26 (1980), 85-95; 'Captain Scott's locomotive', Gower, 27 (1976), 47-52.
10. Evidence of Henry Smith in the Report from the Committee on the Petition of the Owners of Collieries in South Wales, H.C. 1810 (344) IV, 151. See also J.Jordan, 'Coal mining in the parish of Llansamlet', Colliery Official and Student, 1 (1915), no.12, which is an irritatingly short account by a local writer.
11. J. Townsend & T. Law, 'A statement of Lansamlet Colliery...1 Jany.1772', Proc. S. Wales Inst. Eng., 27 (1910-22), 250-3. See also J.Jordan, l.c.
12. W.S. Williams, Hanes a hynafiaethau Llansamlet, (Dolgellau, 1908), pp.194ff. This is the only full-length history of the parish and includes considerable descriptive detail. He draws on Joseph Townsend, The character of Moses established for veracity as an historian, (Bath, 1813).
13. Notes extracted from the Badminton Papers by Mr W.C. Rogers.
14. W.S. Williams, o.c., pp.200-13; J. Jordan, l.c.; The Cambrian, 13 May 1881.
15. J. Smith, 'A statement of Lansamlet Colliery taken...Sepr.1771', Proc.S.Wales Inst. Eng., 27 (1910-11), 248-50.
16. J. Townsend & T. Law, l.c. /the opening of Smith's Canal.
17. The 1808 map suggests this date for the sinking of Church Pit, which ties in with
18. W. Fairley, Practical observations on the south Wales coal field, (London, 1870), p.18. Contribution by P. Jones on Llansamlet which derives the date 1806 from the declaration of David Owen, Bonymaen.
19. 'A sketch of the workings in the Round Pit, Llansamlet' (1821). Plan deposited at the NCB Abandoned Mines Record Office, Ystrad Mynach.
20. J. Townsend & T. Law, l.c.
21. W.Fairley, o.c. states that Cwm Pit was sunk by Francis Dorsett, a Shropshire lawyer, early in the 18th century, but as this would not account for the shallow depth of 396 ft in 1808, I doubt it.

MORE ABOUT WEAVER'S MILL

The long-running saga of Weaver's mill shudders into brief and sporadic life now and again. The latest news came last February when Swansea's Planning Committee voted to apply to the Welsh Office to have the listed building status lifted. There is obviously no love for Weaver's in the committee where it was described as an "industrial tombstone", and the Director of Planning is said to have remarked that any development which included its demolition would be looked on favourably. The committee agreed to consider a planning application from the owners of the site, a consortium of local businessmen, for its redevelopment once the Secretary of State had given permission for the demolition of the building. Unlike previous proposals, the present scheme recognises the historical importance of the mill. One of its cantilever sections would probably be preserved, and pieces of the building material donated to the Building Research Establishment for examination. Conversion to an alternative use would seem to be ruled out by its tall, narrow silos. And there the issue rests again. The present ideas would seem to be the least objectionable compromise in what is certainly rather a tricky issue.

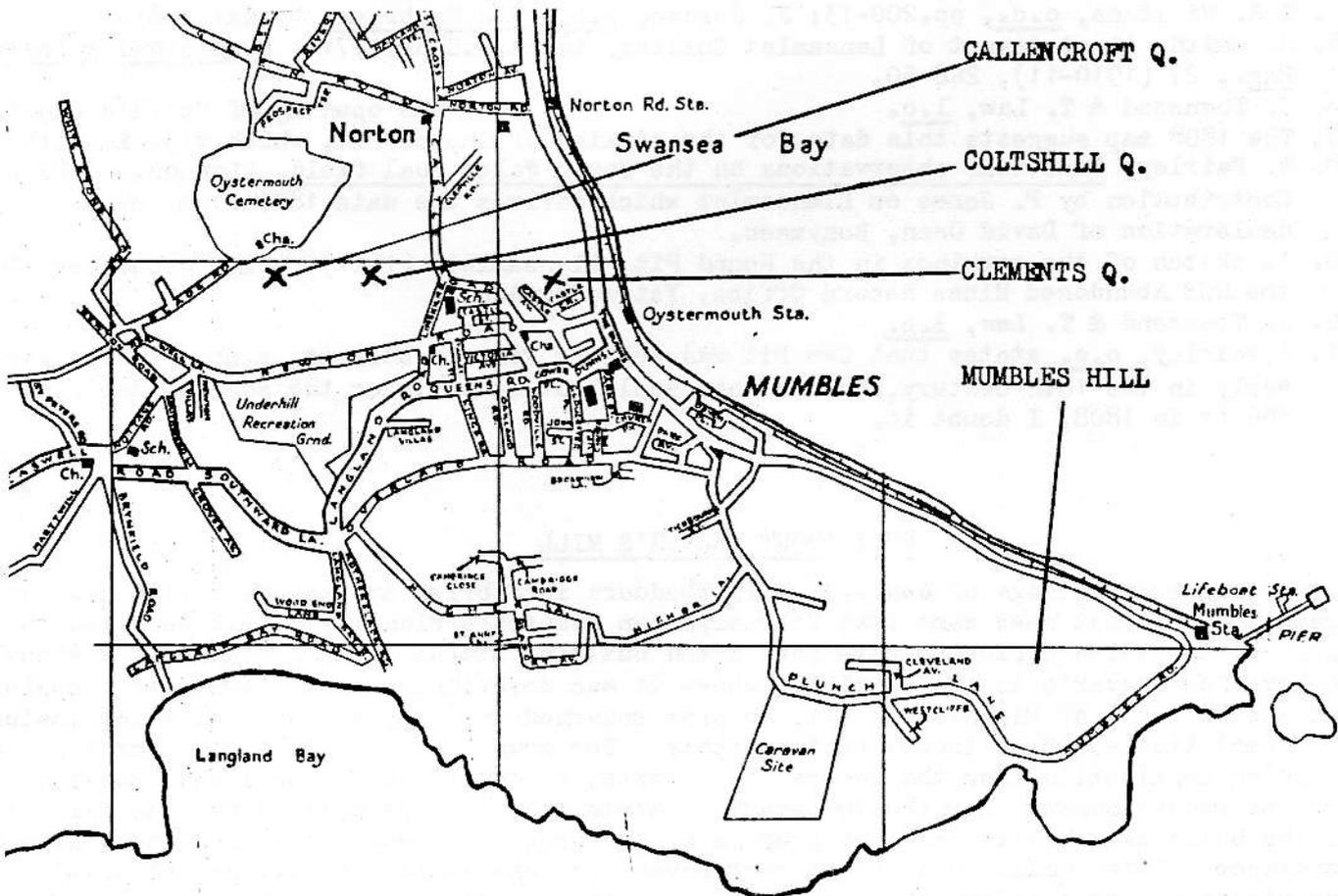
## QUARRYING AT MUMBLES

By G. F. Gabb

There can be little doubt that if Mumbles ever had an industrial base, quarrying of limestone was an important part of it. No connected history of this industry exists, although Norman Lewis Thomas has collected considerable information in Chapter 4 of his book The Mumbles - past and present.

1. Clement's Quarry now forms the car-park behind the Savoy Restaurant. It supplied black lias limestone. The original terminus of the Mumbles Railway was just short of this quarry, and the Oystermouth Railway Papers make it clear that in 1808 it had not been opened, though stone must have been taken from somewhere in this area when the castle was built in the 13th and 14th centuries. The Railway's ledgers record the carriage of hundreds of tons of limestone between 1812 and 1815 by Edward Martin, presumably as agent to the Duke of Beaufort. Clement's Quarry seems the most likely source.

2. Coltshill Quarry is the most substantial mark made by industry in the area; it lies behind Castle Road, with access from the village of Norton. The whole tract now covered but the cemetery also shows signs of quarrying, both behind Glen Road and on the Newton side. The 1878 O.S. map shows a tramway from the Norton Lime Works into a quarry behind Glen Road. It also shows limekilns near the present cemetery car-park which still stand, and are of an impressive size. This area is described as Callencroft Quarry on several maps - a guidebook of 1870 describes "the entrance of a lovely glen, whose picturesqueness quarrymen are doing their best to destroy." The outworkings of this concern probably stretched as far as the present Callencroft flats, and there is evidence also of workings between Southward Lane and Newton Villas.



3. Mumbles Hill and the Head seem to have been the main source of supply in the early 19th century, and the basis of the large scale sea-borne trade with Devon described by Nicholas Carlisle in his Topographical Dictionary of 1811 and by Walter Davies in 1814 and 1815 (see N.L. Thomas, o.c., pp.120-1). Thomas Baxter's 1818 print of Oystermouth from the Castle seems to show quarrying above what we would call Southend, and possibly some kilns on the hillside. (A copy of the print is in Swansea Museum.) In 1811 Carlisle mentions the recent erection of kilns by Yalden and Pemberton "near the Village of Mumbles", which then centred on Village Lane. Also in 1818, John Morris, junior, was accused of laying an extension of the railway across private ground in the Dunns to service "limestone quarries of which he was lessee." A lease of 1844 gave George Phillips extensive quarrying rights in this area on payment to the Duke of Beaufort of £100 per year and 1½d per ton over 12,000. An accompanying map showed existing workings from the Knab right around to Bracelet Bay. (Badminton Papers, 516.) The Cambrian of 25 May 1850 has a very full report of a Tidal Harbour Commission at which Phillips and his sub-tenants were accused of widening the roads between the islands, of quarrying below high water mark and fouling the anchorages with ballast and limestone detritus. (For a full account, see N.L. Thomas, o.c., pp122-4.) Phillips also leased the "Ship and Castle", now the Conservative Club, through which buildings a plan of 1858 shows a "passage to quarry" - passage and quarry can still be seen (Badminton Papers, 70.) By 1860 Phillips was dead, but work continued. The Guide to Mumbles and the adjacent Bays refers to the "quarries behind the Lighthouse", and to prices of between 1s 3d and 1s 6d per ton "being put on board for that sum". The Guide to Swansea and Gower of 1870 records how quarrymen still "lacerated" the rocks at the seaward end of the village.

By 1811 a limestone sawing and polishing mill had been set up at Norton (Carlisle), and references are often made to the fireplaces and tombstones made from Mumbles "marble". From what quarry did this particular type of stone come? What proportion of the limestone was burnt in Mumbles before "export"? How important were the other uses - "liming" of houses, use in the smelting processes, or building? (Brick is more apparent than stone in Mumbles, although there are some exceptions like the castellated mansion "Glyncoed" beside Newton Road, while stone garden and boundary walls are very common.) When exactly did the quarries operate? What was the scale of production? How were they worked? And what was life like for the quarry workers?

In 1828, one David Davies, an agent to the Duke of Beaufort, caught two Mumbles men quarrying from a forbidden area, John Davies and John Hullin. They pleaded with him, saying "he might as well send them to Gaol as stop them from quarrying..." (Badminto Papers, 879.)

#### ENCOURAGING NEWS FROM MERTHYR

Recently to hand is the 1980 Chairman's report of the Merthyr Tydfil Heritage Trust. The Trust was set up in 1979 and has its headquarters at 4 Chapel Row, the birthplace of the composer, Joseph Parry, which has recently been renovated by the Borough Council. The Glamorganshire Canal used to run past the Row, and part of it has been excavated by the Council. The Trust now has plans to set up an exhibition in the area, including two early 19th century trams from Dowlais, a section of Pontmorlais cast-iron bridge and the Rhydyicar bridge in its entirety. They have also arranged for the erection of a memorial to Adrian Stephens who invented the steam whistle in 1832 while working at Dowlais.

The main efforts of the Trust so far have been concentrated on the preservation of Dowlais stables, a fine Georgian building of great character and importance. The Trust proposes to acquire the stables, make them safe, and then launch an appeal for funds for their conversion to a suitable purpose such as a local history library, craft workshops and the inevitable industrial museum.

Future plans also include the restoration of the octagonal chapel-of-ease which adjoins Chapel Row and gives it its name; the re-erection of Watkin George's cast-iron bridge of 1800 on a site near Cuedraw flats; and work connected with the preservation of Pentrebach tramroad tunnel and Ynysfach furnace and engine-house.

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RECENT LITERATURE

D. Q. BOWEN. The Llanelli landscape: the geology and geomorphology of the country around Llanelli.

Geology may seem a far cry from local history, but Llanelli's development was so intimately bound up with its coal measures that an understanding of its geology has an important contribution to make to a proper appreciation of its development. In any case, the history of the rock formations and the evolution of the landscape is part of the history of a town - or rather, of its prehistory. David Bowen's work forms the second volume to be published in the Llanelli Public Library Local History Research Group Series, which was given such a good start by Malcolm Symons' history of Llanelli coal mining. Like the first volume, this one also calls forth well-deserved applause for the enlightened decision of the Borough Council to publish the series, and for the Borough Librarian, Mr H.A. Prescott, whose efforts have clearly played a large part in bringing the project to fruition. In this latest volume Dr Bowen traces the geological history of the Llanelli region with a good many maps, diagrams and photographs, and places it in its global geological setting. The first eight chapters form an historical description, and they are followed by a further eight chapters, each of which concentrates on a particular district, describing its geology and geomorphology and giving an itinerary which will enable one to identify the various features of significance. The book is case-bound and produced to the same high standard as its predecessor, and also sold at a similarly low price, which can hardly do more than cover its basic costs.

(Available from the Borough Librarian, Llanelli Borough Library, Vaughan Street, Llanelli. Price: £4-50, plus £1-35 postage for one copy, and 35p extra for each additional copy.)

G.F. GABB. 'The birth pangs of the Oystermouth Railway', Journal of the Railway and Canal Historical Society, 27 (1981), 1, 2-8.

It was in 1803 that the idea of improved communication between Swansea and Mumbles was first mooted in the form of a canal. It grew out of proposals made a few years earlier for extending the Cwm Tramroad from the terminal basin of the Swansea Canal to the wharves nearer the town centre. In 1804 The Cambrian started to be published and in its first few months carried a lively correspondence between proponents of the scheme and others who feared that their interests would be affected adversely. In the course of the Bill's passage through Parliament in 1804 a number of amendments were made, including the most important one of substituting a tramroad for the canal originally proposed.

INFORMATION REQUESTED

Information is sought on Dafydd Williams, Landore, the author of Llythyrau Cymro yn Mexico at ei Gyfeillion yn Nglandwr wrth Abertawy, published in Swansea by J.A. Williams in 1827. He was a native of Landore and is known to have been associated with Mynyddbach chapel, but otherwise little is known of him prior to 1825 when he was recruited by the Anglo-Mexican Mining Association. From 1825 to 1829 he worked in Mexico in the Guanajoto silver mines, but then returned to Swansea for a period. He finally emigrated to Pennsylvania in 1835 and died there in 1845. He is the subject of a brief entry in the Dictionary of Welsh Biography. Information is particularly welcome on Williams' activities in Swansea before 1825 and in the period 1829-1835. Please contact:

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