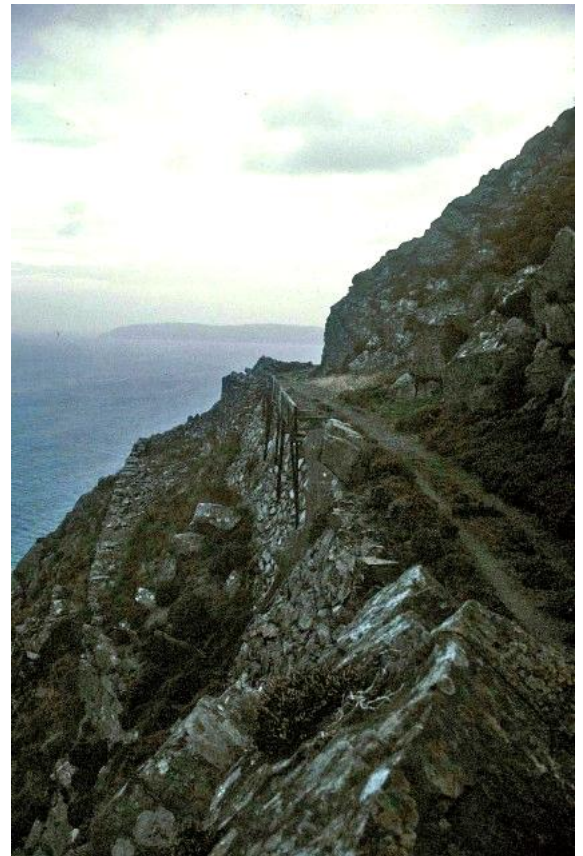
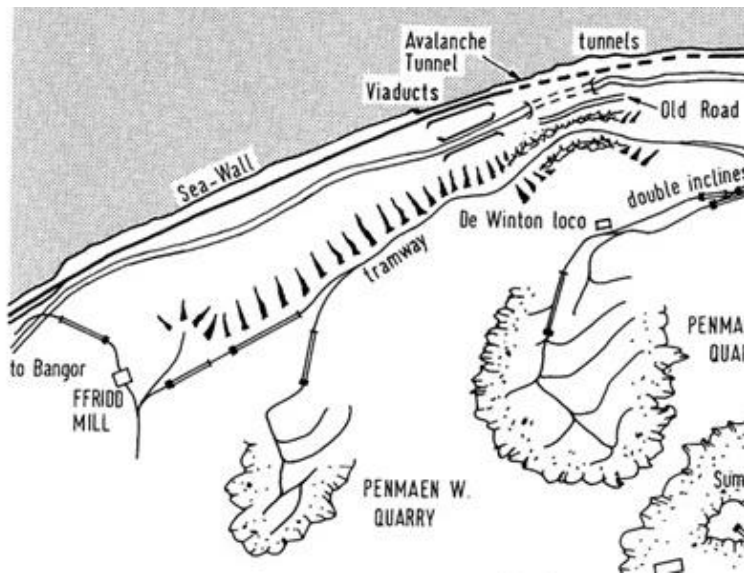


9) To Llandegai via the coast road

Beyond Penmaenmawr, road and rail once again tunnel through a projecting headland, this time part of the mountain upon which the Penmaen Granite Quarry operates. An unusual feature of the railway tunnel is the avalanche shelter built onto it at the west end to guard against boulders that frequently become dislodged from the sheer cliff-face. Pen-y-Clip viaduct and the enormous sea wall beyond, towards Llanfairfechan, are built of dressed Penmaenmawr granite, and replaced a timber trestle and wrought iron girder construction that was unsuited both to the weight of modern traffic and the weather conditions hereabouts. A granite tablet inset into the sea wall bears the date of reconstruction, 1893. The main coast road pierces Penmaen head in two short tunnels, these also being followed by a large viaduct, high above the railway one, and best viewed from beneath to appreciate the problems of road building in such terrain. Completed in 1935, the viaduct and tunnels replaced an older road around the face of the cliff, which remains partly negotiable on foot.



Higher up the mountain, the tramway route linking the various granite quarries which we have followed as far as the Penmaen workings (see previous section; the relevant area of our plan is repeated above for reference), continues westwards, and itself negotiates the headland on a narrow and windswept ledge partly cut into the rock and partly built out on a structure of timber and old rails. The route is now largely devoid of track, but may be followed easily on a calm day, giving a grandstand view of activities on the main road and railway far below. On the west side of the mountain, a series of inclines ascends to further granite workings, whilst the main route descends the hillside via two other inclines to reach the former Ffridd quarry, farthest outpost of the Penmaenmawr and Welsh Granite Company's empire.

This site may be easily approached from the main road near Llanfairfechan, to whose level the tramway has now almost descended. The derelict stone buildings of Ffridd Granite Mill (693757) remain buried in undergrowth and waste rock. A further tramway incline carried dressed or crushed material down from the mill, under the iron footbridge, thence across the road



on the level to an exchange siding by the workmen's platform, which is still used in connection with maintenance work on the sea wall.

The main part of the Penmaen Quarry, still in operation at the summit of the mountain, described in the previous section, may also be easily reached from Llanfairfechan, after a steady climb from the village along a footpath commencing at (689755) and ascending around the south or landward side.

Unlike Penmaenmawr, Llanfairfechan has remained a small residential village, unaffected by the presence of a single industry such as the granite quarries. It too has achieved some significance as a holiday resort, and contains the usual distinctive row of sea-front guest houses, isolated both in style and location from the village proper which is situated mainly on the inland side of the coast road. There is little of interest to the industrial archaeologist, but the village smithy (George Roberts) still operates in Mill Road, and the railway station remains open for passengers. The goods sidings have gone, their traffic long since lost to the roads, and the staff is reduced to one man, living in the adjacent railway company cottage. What was once the centre of commercial activities in the village has thus become a tranquil backwater: though even the London trains still stop, they rarely entertain more than one or two passengers. In a garden adjacent to the station approach road are two very old wooden-panelled L&NWR carriage bodies, in use as store sheds.



The main area works and offices of the North Wales Gas-Light and Coke Company were situated at Madryn (664736), from about 1860 up to the years preceding the Second World War. Workmen's houses, offices and various other buildings have been incorporated into the farm presently found on the original works, their purpose no doubt being to prevent undesirable visual intrusion onto the predominantly rural scene.

The fairly bleak stretch of coastal plain between Llanfairfechan and Bangor is interrupted only by the small village of Aber, now dominated by the University College farm premises. It too once had its railway station, until 1965, but only the derelict building remains (615732) together with the signal box and crossover facilities retained for emergency use during track renewal operations. Nearby, the large warehouse was once served by a rail connection from the main line. Latterly operating as the Aberfalls margarine factory (though some three miles from the famous falls), the site has at various times been a woollen factory and slate mill, and it is now occupied by a wholesale wine and spirit merchant. Aber Corn Mill (658725), prominent in the village itself, has been converted into a private dwelling, with no visible machinery remaining.

What was the last tollhouse on the road into Bangor is situated at Tan Lon (619711), where the Telford Road (present A55) diverges from the old turnpike continuing virtually straight ahead. From here, several routes for the main road into the city were proposed in the period 1770-1810, including some following the coast more closely than that finally built, which is more or less the same as at present.

There is, however, a little known and curious bridge across the mouth of the River Ogwen, on the line of the route of the earlier proposals, but not actually built until 1824. It now carries merely an old approach drive up to Penrhyn Castle from Talybont, but the style of construction is more suited to a contemporary main road route: perhaps Lord Penrhyn insisted that the builders provide the driveway and bridge in return for the use of estate land for



the main highway. Lying on the course of a 1777 proposal for a road from Talycafn Ferry to Bangor it is just possible that the bridge was intended for public use, but in view of the opening of Telford's road in 1826 it would have been a belated extravagance. It is constructed of three fifty foot iron spans but is only eight foot six inches wide and appears to be in largely original condition, unlike the similar but larger and much rebuilt Waterloo Bridge at Betws-y-Coed. The cast iron spans bear the date and name of



a famous company in the prominent inscription "Cast At Penydarran Iron Works, Glamorganshire MDCCCXXIV" along their full length. The bridge may best be observed by taking the minor road down to the coast by Capel Ogwen (613721) and walking along the beach towards the mouth of the river: it is not however accessible from here since it lies entirely within the high walls of Penrhyn Castle park. To actually cross over it and examine the structure more closely thus requires that permission be sought from the estate office.

Below the bridge may be found possible traces of a quay used for shipment of slate brought down from the quarries around Llanllechid before 1700. Such traffic, later dealt with at Abercegin (which was to become Port Penrhyn), was the early manifestation of the mighty slate quarrying empire of the Penrhyn family which prospered from circa 1800 up until very recent times. The Penrhyn Estate, of which the Castle and Park forms the principal domestic residence, is to figure prominently in the following sections as it presided over most of the land to the east and south of Bangor, including Bethesda, the extensive quarries and numerous small villages.

A distinctive style of architecture embodying slate in a wide variety of shapes and forms will be noticed in the mainly Victorian farms and cottages on the land owned by the family. The hamlet of Tre'r Felin, below the main road opposite Mrs Dawkins Pennant's drinking fountain (601719) was built by Lord Penrhyn as estate worker's accommodation, and is an excellent example of early industrial housing. The council depot nearby was formerly the estate sawmill, with two waterwheels inside the building fed by a system of leats taken off the Ogwen above the railway viaduct. This river also powered the corn mill



at the opposite end of the hamlet, reached by walking past the houses and under the new concrete railway arch. Penrhyn Mill then lies straight ahead in the trees, but its tandem 18-foot diameter overshot waterwheels are now very derelict, and little of the structure survives.

There is a further corn mill, in far better repair, higher up the river beyond Talybont village. Cochwillan Mill (601699; picture below) is now partly used as dwellings, but the mill section remains intact with all its machinery, and has an almost workable 15-foot diameter breast-shot iron waterwheel. The site was originally a fulling mill and the present structure dates from 1795, but Lord Penrhyn objected to the pollution of the salmon streams by detergent, and it became a flour mill - allowing closure of those at Llandegai and Aber - circa 1870. This early example of centralisation was in operation for twenty-four hours a day, six days a week, in the first years after conversion. A rare feature of the present equipment is a full size French burr fashioned from a single piece of stone.



At the point where the main coast road from Conwy joins the inland Holyhead Road (A5), are situated Lord Penrhyn's delightful model village and church of Llandegai, also the prominent Grand Lodge, the main entrance to Penrhyn Castle and its park (picture right). In the church there is a marble monument of 1846 to Lord and Lady Penrhyn, featuring quarryman with their tools and a girl weeping. Four medallions record the progress of the estate under the benevolence of the departed landlord.



The Afon Ogwen passes through the Penrhyn Park on its way from Talybont to the sea by Aberogwen Bridge (see above). Just within the high wall and close to the Grand Lodge is situated the old pump house, whose hydraulic rams once pumped water from the river up to vast slate cisterns, for the use of the household. The castle itself (right & below) was handed to the National Trust as part-payment of estate duties resulting from the death of Hugh Napier Douglas Pennant, fourth Baron Penrhyn in 1948, and is now open to the public during the summer months.



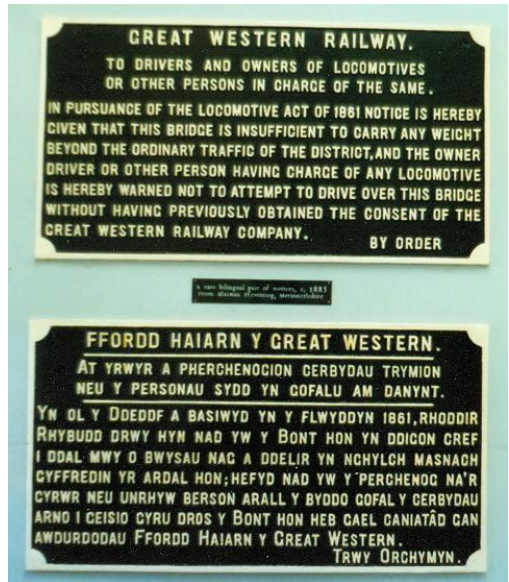
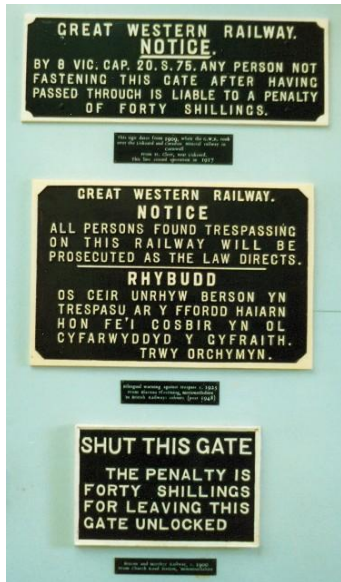
A small but representative industrial museum has been established in the former stables, coach house and colonnade, containing a number of items of local interest as well as nine full-size industrial railway locomotives from various parts of the country.

Penrhyn Railway "main line" locomotive "Charles" (Hunslet Engine Co. 0-4-0 Saddle tank of 1882) is exhibited together with his lordship's contemporary private saloon carriage, which still carries its original paintwork. "Charles" shows the form in which these engines once ran, in contrast to the much modified condition of his sisters "Linda" and "Blanche" now to be seen operating on the Festiniog Railway. "Charles" was not in fact even fitted with a back to its cab when originally built, and the later additions are still conspicuous. The engine is painted in the later style used by Penrhyn, whereas the museum's representative of the quarry locomotives, "Hugh Napier" of 1904, is being restored in its earlier guise, as built, with ornate lining out. Also from Penrhyn Quarry are a number of different designs of wagons for the carriage of slate slab, finished slates, coal, "fullersite", rails etc, all constructed to a gauge of 1 ft 10 3/4 in, some with double-flanged wheels for working over roughly laid quarry tramways.

The pride of the collection, originating not from Penrhyn but from its nearby rival, Dinorwic Quarries, is undoubtedly the Padarn Railway's famous first steam locomotive, "Fire Queen" of 1848, now restored to its former glory after being shut away at the workshops near Llanberis for 79 years. Also from this concern is the ornate officials' saloon carriage built 1896, two of the workmen's "velocipedes" (one each of the hand and foot-pedal operated varieties) and the unique Chief Engineer's rail cycle, all of 4 ft gauge.

Another locomotive "Watkin", as yet un-restored, represents not only the granite quarrying industry, but also the famous vertical-boilered machines of De Winton and Co., Carnarvon, which found widespread local use. Dating from 1877 and working at Penmaenmawr until 1944, it is one of very few of the type to survive in a complete and potentially workable condition.

Amongst the smaller museum exhibits there is a display of slate dressing tools, a series of steel engravings depicting the construction of the Britannia Tubular Bridge over the Menai Straits, and a colourful collection of old railway notices which places particular emphasis on the rarer bilingual examples once found all along the lines in rural Wales.....



Admission to the museum is inclusive with that of the Castle and its grounds, which are open on most mornings and all afternoons April to October (see local advertising).

Keith A. Jagers November 1978

Updates – November 2011

The **avalanche shelter** at the west end of Pen-y-Clip railway tunnel is now roofless, but the stone walls survive; the need presumably now diminished following rock stabilisation work in connection with the Expressway road. The two short **road tunnels** dated 1935 are now on the eastbound carriageway of the road, the westbound route being further inland in a new, much longer tunnel. Both the road and rail **viaducts** survive, being best appreciated from the foreshore, at or around low tide. The **old road route** around the headland is now available for pedestrians and cyclists, here being further inland and at a higher level than the 1935 works which superseded it.

Higher up again, the granite quarries **tramway route** also still exists; for notes regarding possible access to this area, see previous section 8 updates. There are remains of three incline winding houses, at the top of the branch into Penmaen West Quarry, and two on the downhill route to Ffridd. The area at the foot of these is now heavily wooded, but the foundations of **Ffridd crushing mill** survive, just above the recreation area behind Pendalar Road. The bottom section of the incline down to the beach is now covered by housing and the Expressway road, but a solitary roofless stone building survives on the shore side of the main railway lines. This looks like it was once a small locomotive shed, and indeed the old OS maps show a standard-gauge track leading into it.

The former Llanfairfechan village **smithy** on Mill Road (next door to the Virginia Inn) continues to function. The whole of the old **railway station** area was demolished in connection with the Expressway road works, and a new basic station constructed on the same site; the footbridge however is a fine L&NWR specimen.

Some older buildings remain in the Madryn Farm **gas works** complex, together with the distinctive castellated boundary wall, at the point where the Expressway route rejoins the old road. The gas plant itself, at the rear, north side of the site has however all gone.

The L&NWR **station house** at Aber survives as a private residence; the signalbox (which was on the north side of the line) has long gone. The warehouse on the east side of the station yard, the former **margarine factory**, is in commercial use. Up in the village, the **Aber corn mill** building is now a community club, café and information centre, “Yr Hen Felin”.

Tan Lon tollhouse survives as a private residence beside the old road, at the point where slip roads now interchange with the Expressway.

The cast-iron **Penrhyn Estate bridge** at the mouth of the River Ogwen is now better known as a result of a car park and the “Spinneys” nature reserve area nearby. The **Tre’r Felin houses** remain in residential use, and are all listed structure. The former **sawmill** is mixed commercial and council premises; the waterwheels probably no longer survive? The **corn mill** under the railway arch is now largely ruinous and the site has recently undergone some clearance work, but as this appears to be a listed structure, it may yet be rebuilt.

Cochwillan Mill is another listed building, currently undergoing extensive and meticulous restoration. Visitors can be accommodated by appointment – see the dedicated website for details and pictures.

The present status of the **hydraulic ram** formerly pumping water from the Ogwen up to Penrhyn Castle is unknown; its exact location is 601(9)713(8) in the wooded area east of the Penrhyn Castle drive, just south of the southern tip of the main car park area.

The “**Hugh Napier**” **locomotive** is currently away from the Industrial Railway Museum, Penrhyn Castle, undergoing completion of its full restoration to working order, including an all-new boiler. When finished, it will visit other narrow-gauge railways up and down the country as a “roving ambassador” for the National Trust. Otherwise, the collection as described has undergone extensive conservation and much-improved displays over the years.

Added October 2012:

In May 2012 we celebrated the return to steam of the *Hugh Napier* almost 40 years to the day since we started the restoration at Penrhyn Castle.....



The locomotive was also working at the Festiniog-Welsh Highland "Quarry Power" weekend in September.....

