19) <u>The Vaynol Estate, Port Dinorwic and the Padarn Railway</u>

The lane leading down to the mainland side of the Britannia Bridge passes beneath the now-defunct Bangor and Caernarfon branch railway by a very low and narrow bridge that was the cause of severe access problems for the fire appliances on the night of the fire. A short distance up the line to the south, where fine views were to be had from the trains, lies Treborth Station, a stopping place which was to be "provided and continually manned" by the railway company, and which thus needed an Act of Parliament to close it. This occurred in 1952, long after it had ceased to be of much use to the local populace. Beyond, the twin bores of Vaynol tunnel burrow beneath a corner of Vaynol Park, whose long, high boundary wall is also a prominent feature along the main road to Caernarfon. This was the country seat of the Assheton-Smith family, who owned much land to the south and west of Bangor including Snowdon itself, the Dinorwic Slate Quarries and the village of Port Dinorwic. The park contains much of architectural interest; the Elizabethan Old Hall (1604) and its Georgian successor, both occupied; two chapels and the Home Farm with its fine great barn (1605) surmounted by a Victorian clock tower. Our pictures show, below left, the magnificent entrance gates to the main driveway from the Bangor - Caernarvon Road (photo: DVM) and (right) the Old Hall......



Here is the newer Hall, and the Great Barn.....



The general aura of self-sufficiency is completed by the Dairy, Forge, servant's barracks, stables and carriage house, kennels for greyhounds, acres of excellent deer park and numerous coverts where the local gentry indulged in frequent foxhunts. Animal cages and "runs" behind the Estate Office and a bear pit in front of the Old Hall remain to remind us of the eccentricities of Sir Charles Garden Assheton Smith (1851-1904). His Grand National winning racehorses which gave their names to several of the small Dinorwic steam locomotives were favoured with luxuriously appointed stables, still maintained in excellent condition. This estate, as yet unspoilt by public opening, is a well-preserved example of how the Victorian landed gentry provided for themselves, and has altered little over the decades. A scheme for the establishment of a safari park and tourist railway complex in 1972 was not proceeded with, but the park is occasionally open for public inspection when events such as charity garden parties are held.

We have already seen the benevolence that enlightened landowners could extend towards their tenants and workmen in the farms and cottages of the Penrhyn Estate; likewise those of Vaynol with their own distinctive architecture may still be noted over a large area of the Caernarfon hinterland.

The principal intermediate station on the Bangor & Carnarvon Railway was in the village of Port Dinorwic. Immediately behind the Halfway House Inn stands the first station building, open only from 1852 to 1875 and now a private dwelling house. The large yellow-brick structure



which replaced it was more centrally situated (528677) and since the closure of the line has been used as a builders merchant's office. Both stations are now threatened by road improvement schemes that are gradually swallowing up the remnants of the old railway route, closed in 1970 but used for a period during 1972 in connection with the repairs to the Britannia Bridge. The only other building of interest in the village itself is the old-established foundry and ironmongery known as "Arvonia", a name still prominently borne by most of the Victorian cast iron lavatory cisterns in the houses of Port Dinorwic.

The principal importance of the village was however established some time before the coming of the railway, as the seaward outlet for the products of the Dinorwic Slate Quarries until their demise in 1969.

The workings of this giant concern are situated on the slopes of Elidir Fawr (595605) beside Llvn Peris at Llanberis. seven miles inland, and were commenced on an organized At this time basis in 1789. slates were brought down to the ships in carts operated by contractors. A special new road was laid out in 1809 and thereafter maintained by the company, in response to complaints growing about damage caused to the public highway. For the most part this formed the basis of the later B4547, straight and direct. A horse tramway similarly worked by contractors was built in 1824. This was, however, short lived, being replaced by the 4 ft-gauge Padarn Railway only nineteen years later. Our map shows both the tramway and the railway. with their kev features.....



The Port was also served by a siding from the standard gauge Bangor & Carnarvon Railway from construction in c1857 until 1961, the year in which transport of slates by the Padarn Railway ceased. When the slate company passed into liquidation the quays, which had been laid out in 1793 and considerably enlarged by Thomas Assheton-Smith in 1828, were redeveloped as a yachting and holiday home complex; even so there is much to remind of their former use.

The quarry concern, as its parent estate, was noted for its self-sufficiency: the workshops with adjacent dry dock (527679) not only maintained its own fleet of steamships but also undertook outside contract work: complete vessels such as the 825 ton "Ordovic" of 1877 were constructed at the Port. Included in this group of buildings are the foundry, boilermakers shop and locomotive shed for the quay shunting engines; all are now somewhat woebegone. Our pictures show, left, a general view of the workshops and steel gate of the dry dock, circa 1955 by Victor Mills, son of the former dock manager, courtesy of David Mills, and (right) a commercial postcard view of the workshops interior, circa 1905.....



A large Smith steam crane, last worked in the early sixties, still stands beside the dry dock which it helped to construct circa 1880 (photo right, DVM). Gas lamps bearing the monogram "DQ" may be seen on the way round to further extensive slate quays on the seaward side, where are also the buildings of the old Vaynol Estate Yard and the remains of Dinorwic Gasworks. largely demolished. Port "Plas Dinorwic", pleasantly set in trees and now the offices of the development company, had the same role under the old regime. Our picture below right shows the fine motor yacht "Cordelia" moored on the north side of the quays, with Plas Dinorwig off to the left, behind the trees, and below are two further images by Victor Mills on the slate quays, the first being one of the slate barrows used to load ships (upturned here)....





The 1824 horse tramway to the quarries left the port along the north side of the river bank, and one portal of the tunnel which carried it under the main road by the church (533683) may still be entered (photo right).....

A hundred yards back towards the village the L&NWR standard gauge siding passed beneath the same road: its "Cross Bridge" is unusual in that it consists of five separate narrow arches, staggered to achieve the necessary skew angle, and it is thus best viewed from underneath. The third railway access to the port was via a tunnel under the road near the



old station, the portal of which lies behind the former checker's office on the quay (now the chandlery shop, with distinctive patterned slate roof), the 4 photos below taken by Victor Mills at various dates in the 1950s and 1960s, courtesy of David Mills.....



Inside the tunnel, as seen here the dual 2 ft gauge line started to rise on a 1 in 4 inclined plane, later crossing the Caernarfon railway on its way up the hillside.

The 4 ft-gauge Padarn Railway proper terminated at Penscoins (531678), at the head of the incline, where the narrow-gauge quarry trucks were unloaded from transporter wagons for the last part of the journey down to the quay. The derelict winding drum house (picture right, looking towards the incline) is surrounded by workmen's



cottages; one of these "Clock Cottage" once carried a large dial which could be observed from within the trans-shipment shed by means of the curious spy-hole bored right through its 2 ft thick wall."Coach House" was converted from what was formerly the shed for the opulent officials' saloon carriage of 1896 which is now on display at Penrhyn Castle.

Around the corner further up the line is another shed for the locomotive and four workmen's carriages, with water tank and coal stage outside (picture right; the former main railway route is on the left).

From here Vaynol Hall is clearly visible in the trees about two miles distant, and a special train could be summoned by its occupants by the hoisting of a flag. When the train was ready, another flag was deployed on the pole which used to be situated atop the coal stage structure; a very unusual feature for a locomotive depot.



The Dinorwic Quarries Railway (often, but erroneously, referred to as the Padarn Railway) was a smartly run concern, with the track fenced off and properly signed; a collection of typical notices is shown below and several examples are now on display in the Penrhyn Castle museum....



The Dinorwic workmen's train ran from 1896 to 1947. Carriages were attached and detached at each main station, where they were then manhandled into a storage shed by the workmen.

At Pontrhythallt (548637) note the long platform and shed to house nine carriages, this being the principal intermediate stopping place. A further quarter of a mile up the line towards Llanberis, the former railway office and cottages survive as a reminder that this was the halfway point of the route, where horses were changed in the short period prior to the introduction of locomotive working (1843-49).



Derelict buildings at Crawia (536643) were school-slate mills with waterwheels powered by the adjacent river. They were served by sidings from both the Padarn Railway and the adjoining L&NWR Llanberis branch as well as having their own internal 2ft gauge rail system.

Relics of the original 1843 railway track system can be found along the route at various places, with stone-block sleepers often re-used for walling. One very complete survival is this length of double-head rail

in chairs, attached to stone blocks, serving as a rudimentary stream bridge handrail about ¹/₄ mile west of Penllyn Bridge (photo right).....

The last stopping place for the workmen's train before the quarries was at Penllyn where the short platform has been severed by the new road. Just beyond, the old road still crosses the line on Penllyn Bridge, whose girders carry the familiar legend "De Winton and Co. Carnarvon 1870" (picture below).





The last two miles of the Padarn Railway run along a slate causeway beside Llyn Padarn, as seen here in 1970.....



Just east of this bridge, the railway crossed the minor Fachwen road on the level, with the characteristic crossing gates and keeper's hut remaining......



Shortly afterwards the present narrow gauge Rheilffordd Llyn Llanberis (Llanberis Lake Railway) tracks were laid along here, firstly to Cei Llydan station, then later extended to Penllyn crossing. A noticeable detour is apparent where the Padarn Railway route ventures out into the lake on tipped slate waste east of Cei Llydan station. Before 1915 the line here curved inland following the original shore, and may still be easily traced. At (577613) an incline ascended to serve the workings of Vaynol quarry, a late Victorian satellite of Dinorwic. 200 yards further east, the extensive

buildings by the Afon Wen stream used to be a woollen mill, with a large waterwheel.

The present railway enters the environs of the Dinorwic Quarry proper under a high slate archway which once gave access to a lakeside waste tip. In the transhipment yard (now the main passenger station) narrow-gauge wagons were loaded four at a time onto 4 ft gauge main line transporter trucks for conveyance down to the Port; the present booking office housed the official who checked the loads. The only known surviving Dinorwic transporter wagon is in the Narrow Gauge Railway Museum at Towyn, Merioneth (photo right).....



The small engine shed nearby (beside the old tunnel portal) has had an interesting history. Built around 1870 to house the first narrow-gauge quarry steam locomotives, it became redundant in the 1880's and was then established as the company museum, which lasted until the demise of the quarry in 1969. The principal exhibit was the first Padarn Railway steam locomotive, the "Fire Queen" of 1848, which was installed in 1890, but is now on view at the Penrhyn Castle Museum. In the early 1970's the shed reverted to its original use for the maintenance of narrow-gauge locomotives owned by Messrs Hills & Bailey Ltd, but recent CEGB operations have forced the removal of most of these elsewhere.



Three of the R.L.L. locomotives operating along the lakeside in summer originally worked in the quarries; Hunslet of Leeds built 0-4-0 saddle tanks "Dolbadarn", "Wild Aster" and "Elidir" are derivatives of the original 1870 design and are kept in the former quarry engineering workshops (586603). Our picture shows the last steam locomotive to work in the quarries, "Holy War" under repair in the workshop in early 1969.....

This loco shed and repair shop forms part of a vast complex built in 1870 in the style of a Canadian Frontier Fort, to



cater for all the varied needs of the quarry and its workmen. The buildings with much of their original equipment were rescued from certain oblivion by the county council in 1970 and are now open as a splendid museum of the North Wales slate quarrying industry. These six pictures are by David Mills, the third showing, to the left hand side, the former Port Dinorwic steam crane mentioned above.....



The foundry, pattern shop, machine shops and saw mill derived power from a massive 50 ft 5 in diameter De Winton Waterwheel erected in 1870 but superseded by a Pelton high-pressure turbine in 1925. The old wheel has however survived and may soon be restored to working order. It is of notable design having an outside ring gear to transmit the drive to the line shafting. This was once a fairly common arrangement in works such as these where the driven load could be extremely variable, since the thrust on the main axle was considerably reduced from that in the usual direct-drive layout found in corn mills. The workshop equipment consisting of large lathes, milling machines etc can still be driven from the Pelton wheel, and is occasionally demonstrated in the summer months.

Also now housed in the museum are displays relating to slate sawing, splitting, dressing and marketing, incorporating equipment brought in from the main quarry and elsewhere. An especially interesting exhibition is that of some of the gruesome equipment used in the quarry hospital.

The old hospital building itself is situated in the trees overlooking the lake (picture right), behind and to the west of the main workshop complex. Here the injuries of the quarry's one-time 3,000 employees were treated, a facility necessitated by such hazardous work as hand drilling and preparation for blasting with gunpowder upon sheer rock faces.

What is now the "Glan-y-Bala" guest house, situated in the midst of the quarries, was formerly the manager's residence, and the railway tunnel previously

noted provided access without the inconvenience of smoke from the engines spoiling his grand view. In 1896 a diversionary line was built on reclaimed land on the lake shore, alongside the present road, and the tunnel has lain disused ever since.

With the former quarry works site now transformed by the Lake Railway and the Quarrying Museum, here is a reminder of what the yard looked like in 1966, at the point where the diversion line from the main quarry passes by the workshop entrance (off to the left). The lake railway station is now straight ahead, in the background......







And lastly, left, are a door and side panel from one of the 4' gauge workmen's carriages, retained by workshop staff like many other long-discarded items in the hope they would one day be of some use, in this case perhaps as toilet doors up in the quarries!

Keith A. Jaggers

November 1978

Updates – February 2012

Treborth station house survives as a private residence, but most of the route of the L&NWR Caernarfon branch line from here to the outskirts of Port Dinorwic has been obliterated. The twin **Vaynol tunnels** no doubt still exist, but the approach cuttings are choked with trees and undergrowth and appear totally inaccessible.

After the death of Sir Michael Duff Assheton-Smith in 1980, the **Vaynol estate** was sold to a development company, and is occasionally open for special events, most notably Bryn Terfel's popular annual open-air music festival, but not yet to the general public. It is a well-preserved example of how the Victorian landed gentry provided for themselves, and has altered little over the decades, but sadly the Old Hall is in need of extensive repair and renovation. There are over 30 listed buildings and structures within the park. The Great Barn area is accessible from the public road leading down to Faenol beach (National Trust) car park.

Port Dinorwic (old) **railway station** house survives as a private residence. The "new" station (picture below left, in 2007) is a listed structure, now fully renovated and once more cared for in commercial use. The "**Arvonia**" ironmongers shop is also listed and renovated, but still awaits new tenants after several years (right; both pictures by DVM).....



The former L&NW railway route from just north of Port Dinorwic is now a good footpath and bridleway, running past both stations and joining up with the **Lon Las Menai** cycle etc greenway south of the village. This latter continues along the former railway line as far as the northern outskirts of Caernarfon.

On the former slate quays, the **foundry and workshop area** has been cleared and landscaped; the **Dry Dock** has lost its gates and is now used for general mooring; it is a listed structure. Elsewhere on the site, most of the water frontage is now regrettably private to the many new apartments and houses. On the north side, the old Plas Dinorwig building is now incorporated into a hotel, much altered and modernised

The old Dinorwic Tramway **tunnel** under the main road by the church has been completely filled in. The standard-gauge "**Cross Bridge**" survives, and a narrow road now drops down to the former rail level on the south side, following its route for a short distance before turning sharp right to pass under the main railway route, the small wooden overbridge here now carrying the footpath only.

The tunnel mouth on the **incline** down from Penscoins has been blocked off at the quay end, and the adjacent **checker's office** despite being listed appears to have been so much rebuilt and altered as to be completely unrecognisable nowadays. The old pedestrian steps access down from the main road to the quay hereabouts is still in use. An access road now runs up the site of the incline, beyond the former tunnel, for a short distance and communicating with the footpath on the L&NW railway route.

The winding house, saloon coach shed and cottages at the **incline top** were obliterated by the Port Dinorwic by-pass road constructed in the 1980s. The former **locomotive and workmen's train shed** however survives, complete with its coaling stage, as a listed structure, as do the railwaymen's cottages and adjacent little road bridge at Penscoins. The long **Pontrhythallt carriage shed** structure is also still standing, latterly in agricultural use but now woefully derelict. The lane running past it leads to the isolated community of Craig y Dinas, which is virtually unchanged over the last forty years.

The former **Crawia corn mill** and slate works site is now in commercial use, with some original buildings.

The **Llanberis Lake Railway** continues to thrive, and has extended its line beyond the quarry museum station for approx ¹/₄ mile to terminate near the main Llanberis village car parks. The **Cei Llydan** intermediate stop is popular, with a pleasant lakeside picnic site and a network of woodland footpaths exploring the older quarry, railway and mill remains. The three original Dinorwic **locomotives** continue to run regularly, but the names of two have been changed; "Red Damsel" is now "Elidir", in a red livery approximating to the original style, and "Wild Aster" is now "Thomas Bach". Other visiting locomotives may be in use from time to time.

At the far end of the main visitor site at Gilfach Ddu, a footpath now climbs up over the high slate arch over the lake railway, and up to the **Quarry Hospital** building, now fully restored and open to the public with extensive displays including all relevant artefacts which were formerly kept in the main museum and many others. The former "**Fire Queen**" **shed** still stands beside the old tunnel, with **Glan y Bala** house and annex above now available to let as holiday accommodation.

The **North Wales Quarry Museum** is now well established and popular in the former Dinorwic Quarry workshops complex, with numerous new exhibits added, but still very many interesting items remain hidden away in storage. The massive original **waterwheel** has been restored to full working order and once again powers machinery in the workshops, much of which is demonstrated regularly. Our more recent pictures show some scenes on the Lake Railway and around the museum complex.....



The left hand view above shows some beautifully-restored standard-pattern Dinorwic slate wagons, with the foot of the main quarry inclines just visible in right background – we will explore these and beyond in the next section. The right hand picture in the workshops yard reflects that the museum now represents all quarrying activities in North Wales, not just that of Dinorwic, with wagons from Croesor and the Blaenau Ffestiniog area on view, also a Penrhyn Quarry Railway open workmen's carriage on the right.











