

Photo: Caernarvonshire County Record Office

## SLATES FROM LLANBERIS—Part two

K. A. JAGGERS

WE have seen how the railway systems of Dinorwic Slate Quarries Company developed alongside the industry they served; the main line, the Padarn Railway, performed its task with little alteration into the 1880s. However, the next twenty years were to see a general boom followed by gradual decline in the roofing-slate industry, potential prosperity being punctuated by a succession of industrial disputes, devolving mainly on the formation of trade unions by the quarrymen. To cope with increasing traffic, and to comply with the increasingly stringent requirements of the various newly-appointed Government Inspectorates, much modernisation of the system was carried out in this period.

New tank locomotives of a powerful and modern design appeared on the Padarn Railway to replace the ailing *Fire Queen* and *Jenny Lind*. Built by Hunslet of Leeds, the first of these, *Dinorwic*, arrived in 1882, followed by *Pandora* (*Amalthea* after 1909) in 1886. These were conventional 0-6-0 side-tanks, but had several unusual features, the more obvious being the spark-arresters fitted to the chimneys, and the large acetylene headlamps and associated

generators. A mechanism enabled the rear coupling to be unhooked from the train by operation of a handle from within the spacious cab. The engines were painted basically in the Midland style of red, but lining-out varied in specification during their lives.

Replacement of the old stone-sleepered track by new materials consisting of 80 lb. per yd. "Cammell" rails on conventional wooden sleepers took place concurrently, and set an engineering standard that was second to none among British railway companies of the period.

Meanwhile, of the older engines, *Jenny Lind* was cannibalised for spares, some going into a pump for the quarries, while the brasswork was stored away in the workshops, to re-emerge in the 1969 auction. *Fire Queen* suffered a luckier fate as she was preserved, reputedly at the instance of one of the daughters of

*Padarn Railway: 4 ft.-gauge Quarrymen's Train (above) at Gilfach Ddu, Llanberis, in 1930. Hunslet 0-6-0 "Amalthea" shunts carriages in readiness for the evening train from the quarry. The remote uncoupler, worked from inside the cab, and piping for the acetylene headlamp at the base of the chimney, will be noted*

the Assheton-Smith family, and moved into the former narrow-gauge engine shed beside the tunnel to the main quarry, on July 10, 1890. Her later history was told in a *Railway Magazine* article in the March 1970 issue.

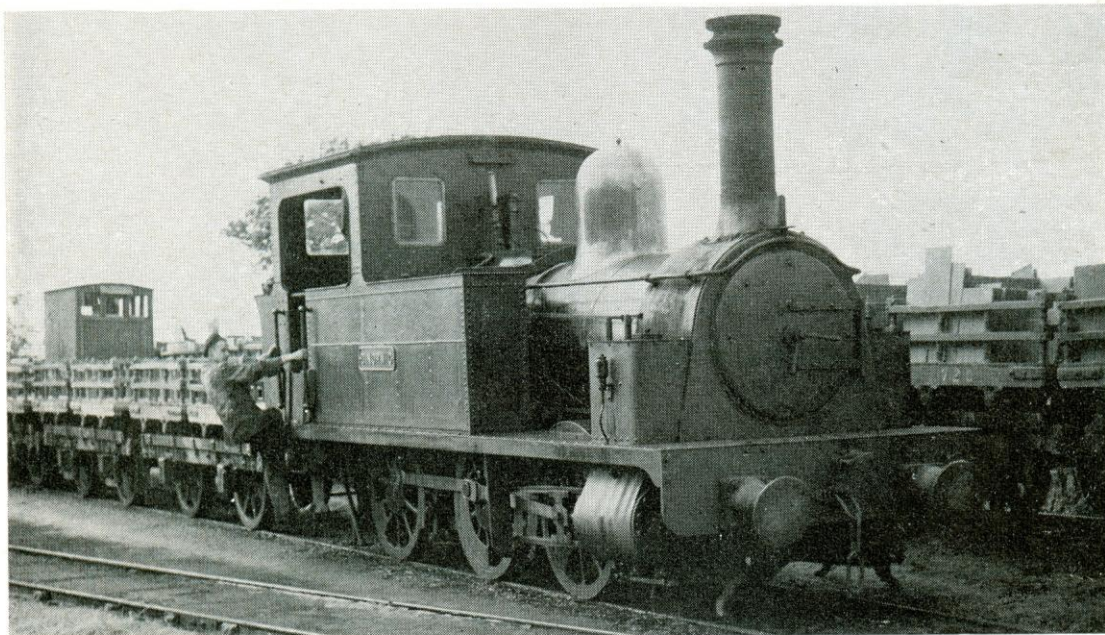
The quarter-mile long tunnel just noted had been abandoned as a means of access to the east side of the quarry in 1889, on completion of a new line around the bluff, on land reclaimed from Llyn Peris by the systematic tipping of slate waste. Access to the main workshop complex was granted to the 1 ft. 10 $\frac{3}{4}$  in-gauge system at the same time, enabling the growing fleet of small locomotives to be maintained alongside the Padarn Railway stock.

As fifty years earlier with steam power, the company also pioneered the use of electricity in North Wales, a primitive domestic lighting system being erected in the village of Port Dinorwic, on the quays, and in Vaynol Park in 1896. The scheme was also to have included electrification of the low-level quarry tramway (a distance of one mile, including a tunnel) on the overhead principle, but this did not progress beyond submission of tenders, the drawback being insufficient available head of water to drive the necessary generators. Narrow-gauge

ever, apart from attempts to regularise the working of the velocipedes by means of frequent and verbose directives from higher authority. Some 500 quarrymen used these contrivances to and from work, except on Saturday midday and Monday mornings, when they were kept at Gilfach Ddu workshops for maintenance, and the men travelled among the slates on the regular quarry train.

Eventually, in August 1895, a workmen's service—"Y Tren Chwarel"—was introduced, and the "Velocipedes" abolished, one of each type joining *Fire Queen* in the museum and others being retained for track inspection. A third Hunslet 0-6-0 locomotive, *Velinheli*, was purchased to work the train, which usually comprised 19 vehicles out of a batch of 21, seating 60 persons apiece, built by the Gloucester Railway Carriage & Wagon Co. They were painted dark brown and were distinguished by letters A, B, C and so on. Two further vehicles were added in 1903, to convey the men from Anglesey, who resided during the week at "barracks" in the quarry, on the weekend trains.

The system of working was that several carriages were attached or detached at intermediate stops, and manoeuvred into carriage



steam locomotives of a type somewhat larger than hitherto supplied by Hunslet for the quarries were obtained for tramway duty ("Mills" class) and the electrification proposals were never revived.

The last survivals of the old order on the main line, the manually-operated "Velocipedes", were becoming a hazardous burden on operating conditions in the 1890s, and proposals for their replacement by a conventional train were made in 1892. Nothing was done, how-

Photo: Maid Marian Locomotive Fund

Hunslet 4 ft.-gauge 0-6-0 "Dinorwic" collects a train of "host" wagons loaded with empty 2 ft.-gauge slate wagons

sheds for the night by hand-shunting. Access to the train was restricted to employees of the quarry holding a special bronze ticket or "check", of varying shape (oval, diamond, and so on) and embossed with details such as of station boarded, carriage and seat number. Platforms were provided at the recognised stopping

places, and at this juncture it is convenient to give a description of the route of the Padarn Railway as it existed henceforth. Mileages were measured from the Port Dinorwic end of the line, so we will start from there, although of course contrary to the normal traffic flow.

The Padarn Railway terminus at Port Dinorwic was above and to the rear of the village, and the narrow-gauge wagons, after offloading from the transporters, were lowered down the 1 in 4 Port Incline, thence tunnelling under the main road to reach the quays, also served by a branch from the standard-gauge Bangor to Caernarvon line. The incline winding-house and transhipment shed was a commodious slate building, still standing derelict. The "Clock Cottage" nearby had a large clock built into its wall, which could be seen from within the shed by means of a small spyhole bored right through

Passing under a road bridge, a short run across fields took the line to the first halt, Cefn Gwyn Platform (0 m. 76 ch.) of one coach length, beside a road level-crossing. This is one of several crossings which were manned from small huts linked by telegraph to the termini, and fitted with tall banner signals which rotated as the gates were opened and closed. Seven-eighths of a mile further on, the main Caernarvon-Bethesda road was crossed at Capel-y-Cysygr crossing, scene of a fatal accident in 1926, when the quarry train struck a paraffin lorry which had stalled on the crossing (at that time ungated and unmanned). Beyond is Bethel Station and carriage shed (four coaches).

Pensarn Halt (2 m. 47 ch., no shed) was of one coach length only and served the village of Llanrug to the south. At 2½ miles, a siding and

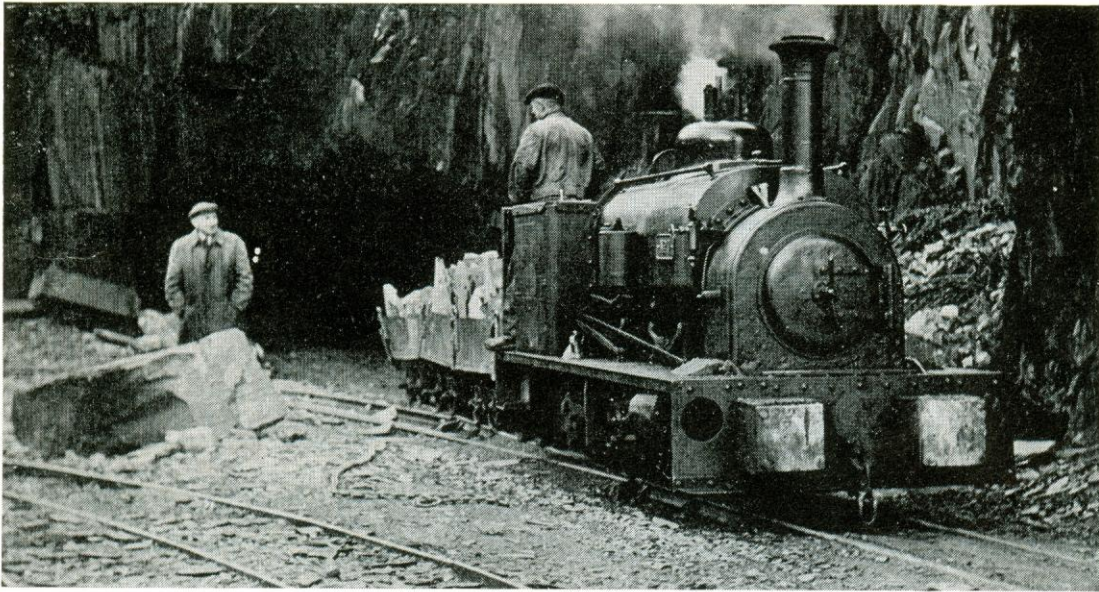


Photo: Maid Marian Locomotive Fund

*Hunslet 2 ft.-gauge 0-4-0 saddle-tank "No. 1" hauling slate blocks on the bottom-level tramway. The tunnel in the background linked the two sides of the quarry*

the wall. Nearby also was the shed housing the new Directors' Saloon carriage, now converted to a private dwelling, "Coach House".

Alongside one of the two running lines to the unloading point was the low platform for boarding the workmen's train. All such platforms were on the same side of the line; although the carriages had doors on both sides, those on the north side were normally locked out of use. The station was usually referred to as Penscoins, and a short distance away, around a bend in cutting, stands the long shed, which provided overnight accommodation for the service engine and the four carriages that started here, with coal and water facilities outside.

platform served the J. Jones' School Slate Factory at Crawia Mills, to which slate slab was conveyed on special wagons for finishing. By this point the standard-gauge Llanberis branch of the LMS had drawn alongside from the south-west, and the next half-mile must have been a remarkable sight when operating, as between the parallel 4 ft.- and 4 ft. 8½ in.-gauge lines ran a 2 ft.-gauge works tramway to another factory and waste tips, served by a standard-gauge siding. Pontrhyallt Station and shed, the largest on the line (3½ miles), accommodated nine carriages, and was pleasantly situated beside the river also overlooked by the LMS station opposite. One-third of a mile further on is a group of cottages, Craig-y-Dinas, the original stables at the midway point of the line in horse-worked days, and later a halt for the quarrymen's train. Penllyn Station (two coaches) was the last before the quarry and served the

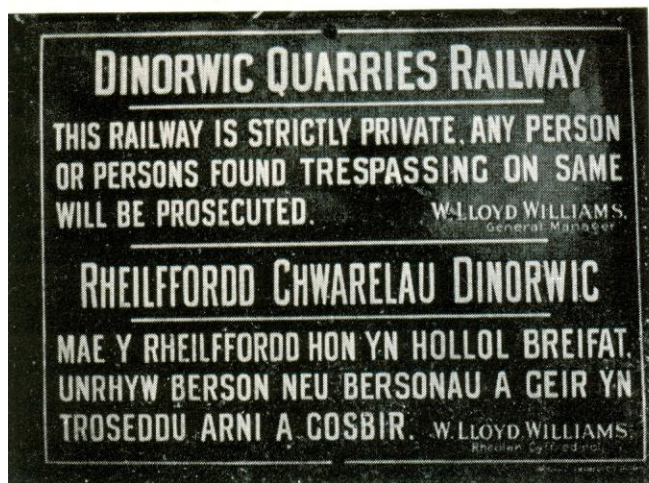


Photo: K. A. Jagers

Typical bilingual enamel sign from the Dinorwic Quarries Railway, now in Penrhyn Museum collection

villages of Cwm-y-Glo and Brynrefail: its carriage shed, unlike the others, was of iron, and does not survive.

Thus far (4½ miles) the scenery has been largely cultivated farmland and gorse scrub, with the old stone sleepers frequently used as walling, but this changes abruptly for the last two miles to a lakeside setting, the line being on a shelf of piled rubble. A considerable detour, engineered in the early 1900s takes the line out into

*The main gravity inclines (worked as two adjacent but separate systems) from the east side of the quarry, 1896. These remarkable pieces of engineering, built on a foundation of piled slate waste, assembled dry, can still be found all over North Wales*

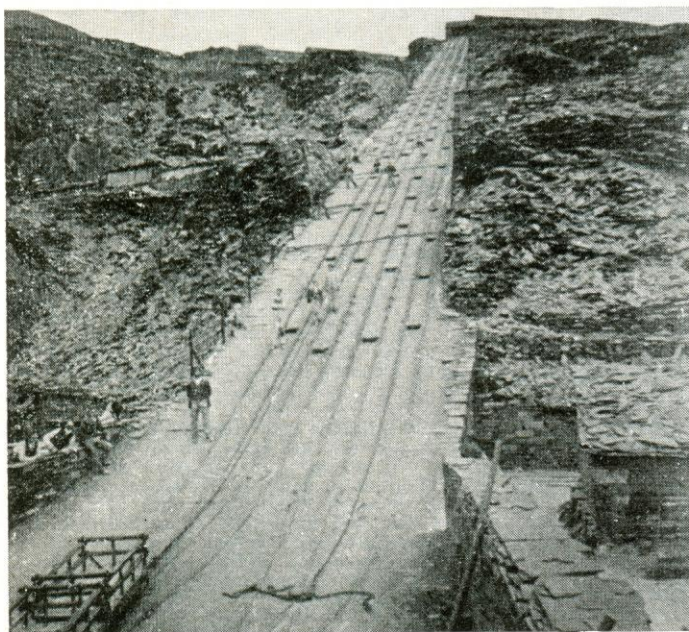


Photo: K. A. Jagers collection  
(original now in the  
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Record Office)

the lake over tipped waste from the Ladas Quarry (one of several short-lived satellites of Dinorwic): the old route is clearly visible and a large slab of slate with chair-holes for a 4 ft.-gauge point may be found. The quarry is entered through a grand archway under the tips in front of the quarry hospital: the lengthy platform and iron shed for the daytime storage of the carriages are at right, with the slate docks and workshops straight ahead. The line terminus was six miles and five furlongs from Penscoins.

Beyond, 1 ft 10¼ in.-gauge lines continued into the quarry alongside Llyn Peries for one mile, serving the inclines, which with their locomotive-worked feeder lines from the galleries, totalled some sixty miles of route.

The picture in the early 1900s must surely have been one of prosperity and efficiency, but the decline was already well under way. Some new Hunslet narrow-gauge engines were delivered, mainly to replace the older machines, and bringing the total to 19 by 1932. The names and details of these fascinating little engines have been well documented elsewhere (in *RM*, July 1971, for instance). Some experiments with oil-firing on 4 ft.-gauge locomotive *Velinheli* and one of the small Hunslets were contemplated in 1920, though probably not implemented, but a small 4 ft.-gauge petrol-paraffin shunter was obtained for use at Llanberis in 1926 from Hardy Motors of Slough. It was little used and languished most of its life in a shed, the Padarn Railway remaining steam-worked to the end. About 20 varied four-wheel diesels were obtained and supplemented the small Hunslets on quarry duties.

The quarrymen's train service, by this time reduced to five or six carriages, was easy prey to bus competition, and was discontinued in

1947. The railway survived for the carriage of slates for a further period before succumbing to the lorries, and the last train ran on October 27, 1961. No time was lost in demolition, and despite tentative approaches regarding preservation, all was gone by early 1963. Messrs. Pitt-rail contracted to lift the rails, using the locomotive *Dinorwic*, which was then cut-up on site along with the others. The workmen's carriages, having been gathered up from their sheds along the line, were sprayed with petrol and gutted, although, strangely, not before the doors (complete with windows and handles) had been removed and stacked away in the workshop yard—one of the little items with which this site rivalled the Festiniog's Boston Lodge works yard in the variety of its long-neglected assortment of paraphernalia, until 1969. For this was the year of the Final Reckoning: in July the quarry company went into liquidation, the last three hundred men were laid off and the remaining quarry railway system (on which steam was retired in October 1967) abandoned.

Already-preserved *Fire Queen* and the Directors' saloon coach were removed to safety at Penrhyn Castle, where they have since been restored and put on display; the rest was collected, catalogued, and auctioned by the Receiver in December at the quarry. Velocipedes of both types, *Black Bess* and *Arthur*, may also be seen at Penrhyn, together with a four-wheel cycle used on the railway by the Chief Engineer. Another velocipede, *General*, was at the Anglesey Folk Museum, Brynsiencyn but has returned to the North Wales Quarrying Museum at Llanberis and examples of the transporter wagons and narrow-gauge slate wagons are at the Narrow-Gauge Railway Museum, Towyn Wharf.

Most of the narrow-gauge engines were dispersed, some going to Canada, but only one has been scrapped. Three, however, *Dolbadarn*, *Wild Aster* and *Red Damsel* (now *Elidir*) remained at Dinorwic, to be used on the newly-constructed Rheilffordd Llyn Llanberis (Llanberis Lake Railway), and have since been rejoined by *Maid Marian*. This new narrow-gauge passenger line opened in 1971 and was extended along the lakeside route of the former 4 ft. gauge line, nearly as far as the old Penllyn Station, for the 1972 summer season. Happier days have also come to the Dinorwic Quarries workshop complex at Gilfach Ddu, saved along with much of the original equipment by the County Council authorities on behalf of the National Museum of Wales.

Much of the remaining character of the quarry will no doubt disappear with recent CEGB proposals for a pumped-storage electricity generating scheme involving Llyn Peris as the lower reservoir, and the remainder of the Padarn Railway has reverted to nature extremely quickly, making exploration even more difficult in some places than on the tramway it replaced in 1843!

(Concluded)