

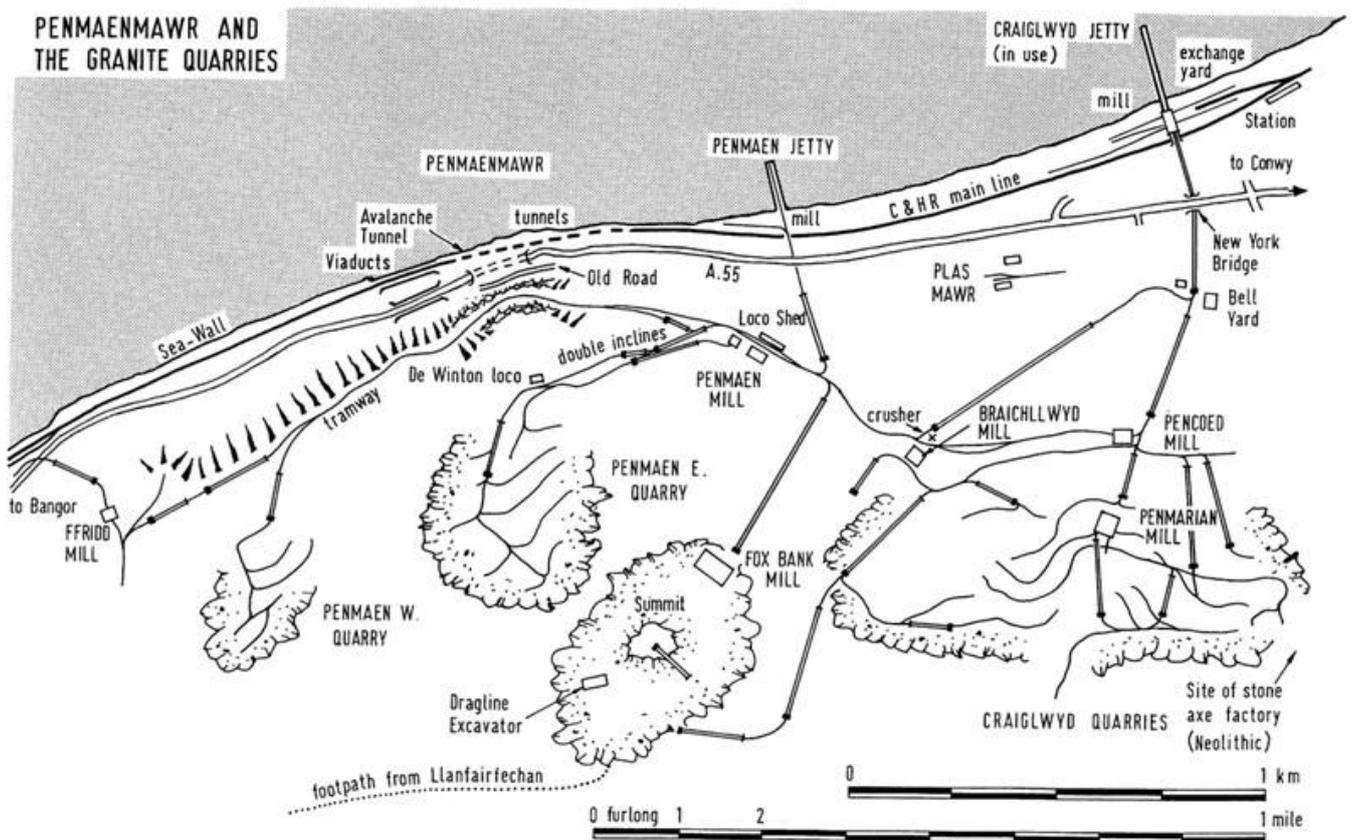
8) **Penmaenmawr and the granite quarries**

Penmaenmawr is a "resort" of largely Victorian origins, then famous for the patronage of W. E. Gladstone but now somewhat diminished in importance in the tourist repertoire; even the esplanade is now a street of council houses. Though the operators would probably strenuously deny it, this is no doubt due to the dominance of the town's main industry, the granite quarries that surround and tower above it.

The traditional road route over the Sychnant Pass from Conwy descends to the coastal plain in the neighbourhood of the old village of Dwygyfylchi. There was once an important mill here, but the associated workers' houses alone survive in the pleasant sylvan setting of Felin Newydd (741770). The village road joins the main coastal route opposite the gas works, whose modernised structures do little to improve the already bleak coastline. Nearby, an old L&NWR footbridge giving access to the beach across the main railway line has been cleverly extended to cross the road as well.

Mighty granite quarry workings dominate the hillsides to the rear and beyond the town of Penmaenmawr: the top of the mountain on which they are situated has been conspicuously "scalped" to the extent of some two hundred feet over the years, leaving a flat top with just a small pillar of rock upstanding in the middle. Large-scale granite quarrying started here as late as the 1870's, but a long time before this (in the Neolithic period) a remarkable form of early industry was in operation, namely a stone axe factory. Axes from Craig Llwyd have been found throughout much of Britain. The site, despite extensive archaeological excavations over the last hundred years or so, is well worth a visit.

What is now still partially in operation as the Penmaenmawr Granite Quarries of Kingston Minerals Ltd started life as two distinctly separate concerns, Graiglwyd and Old Quarries south of the town, owned by the Darbishire family, and Messrs. Brundrits' Penmaen Quarries around and upon Penmaenmawr Mountain. The companies were amalgamated and consolidated as the Penmaenmawr and Welsh Granite Company in 1911. Our plan shows the main features of the workings.....



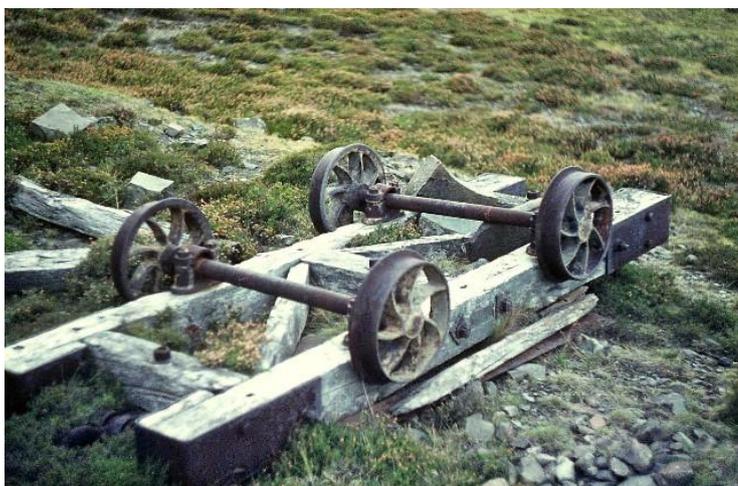
Output of the quarries, in the form of granite chippings for road surfacing and railway ballast, is still very healthy, but is achieved with the apparently greatly diminished level of activity resulting from the extensive use of modern machinery. The visitor is perhaps best advised, unless specially interested, to keep clear of the modern dusty crushing plant at Pencoed Mill, beneath the giant clock. It is difficult to recommend a set route to take in most of the older items of interest - the following is intended only as a rough guideline.

The main workshops of the Craiglwyd Quarry were situated at Braichllwyd (709757), at the summit of a long inclined plane from the works offices at Bell Yard (715762) which can be used for access. Near to the incline head, a small old jaw-type stone-crusher is exhibited on a plinth. From here, tramways run to left and right and there are further inclines to the rear. To the east, the old mills of the Craiglwyd Quarries and inclines to the workings are situated above their modern replacements in concrete, which are now fed by conveyor belts.

The tramway trackbed may also be followed westwards, over what was a connecting line built after the amalgamation of the two companies, to the extensive buildings of Penmaen Quarry Mill. The crushing plant is built of brick (*photo right, DVM*) but the locomotive shed and quarry workshops are stone, and all are now roofless.

Old inclines come up from the Penmaen Company's loading wharf on the seashore to the right, and further inclines parallel each other for increased capacity up the steep hillside behind the mill. To climb up these is well worth the effort, for apart from the relatively unknown and glorious sea views there are some interesting three-foot gauge track configurations still in situ in the vicinity of the lower incline drum-houses, which are also fairly intact. A notable feature of the inclines themselves, not overmuch appreciated by tiring climbers, is the way they are laid out with steepening gradients towards the summit, to assist the deceleration of ascending wagons.

Right at the top of the second set of inclines (though only about half way up the workings) the well-rusted remains of the last De Winton vertical-boilered quarry locomotive, "Penmaen" of 1878, are isolated in the tiny engine shed whence it retired after its last job circa 1944.



Many wagons of assorted types remain scattered around hereabouts (*photos: DVM*).

Beyond, at the far end of the level, further inclines continue their unrelenting ascent to reach the very top of the mountain at Fox Bank, affording splendid views over the bay and the town. In our picture the loading jetty in the distance was that of the Craiglwyd concern, and the mill of the former Penmaen system is seen at extreme left, beyond the main railway line near the bottom of the picture.....

The large quarried-away area on the summit is still worked, but using modern excavators and heavy lorries to remove the blasted material. The rock pillar previously mentioned remains to denote the original summit level of the mountain, gained by a winch-operated incline. On the main quarry floor a prominent survivor of the old order is a giant dragline excavator, of a type once familiar in the ironstone mines of the Midlands, and weighing several hundred tons. Brought up the mountainside in kit form and assembled at the place of work, this mighty machine is however self-powered, and capable of moving short distances on the level at very low speed. Now driven by electricity, it was once powered by huge diesel engines (older versions were steam-operated).



There was also a crushing mill serving the summit level, a typical corrugated-iron-sheathed structure which has been disused since crushing and grading operations were centralised on the modern plant at Pencoed. The summit level workings, and the separate levels of the Penmaen West Quarry (693756) served by a continuation of the tramway which we originally followed to Penmaen Mill, may be explored also from the next village of Llanfairfechan, and as access is somewhat easier from this side of the mountain it will be covered in the next section.

Granite, mainly in the form of road chippings, is still occasionally shipped from the jetty on the beach at Penmaenmawr, though most now leaves by the main line railway adjacent. However, it now descends from the quarry by means of a conveyor belt system rather than by tram-wagons on the inclined plane. The method of loading the ships using hoppers and variable level chutes to suit the tide has not altered, and the means by which the latter



are raised and lowered is interesting, for the counterweights consist of the frames of old De Winton locomotives, stripped and filled with concrete, running on rails fixed to the pier. There are four of these at present, which unlike the rusting survivor we have already noted, do not feature in the published "preserved locomotive" lists! Several years ago a German coasting vessel which had called to load at the jetty was run aground on the beach in rough weather, and remained high and dry for some days. Visits of such sea-going craft are now rare in comparison with pre-war days, but the volume of exchange of domestic traffic through the British Rail sidings between the station and the pier is quite heavy: a locomotive is busily engaged on shunting duties most mornings. An extensive though long disused

network of 3 ft gauge tracks survives on the loading wharf, with several examples of wooden wagons, and in a crumbling shed the last quarry diesel locomotive, a 1941 Ruston unofficially named "Crimea". The precarious state of the rear wall of its home is indicative of a braking mishap; - luckily it was solid enough to prevent the engine falling down the sixteen-foot sheer drop to the standard-gauge sidings below! Tramway access to the hoppers within the crushing and grinding plant at the head of the jetty is by means of a series of wagon turntables. The incline leading down from the main quarry is walkable and partly intact, since the conveyor belt system now in use is carried on tram wheels running on the original incline rails, to allow for expansion and contraction of the carrier structure. This feature would also explain the presence of numerous wheel-less wagons in the quarry! A spur line ran off above the first bridge and leads across the roadway to tip into storage hoppers at the top of the mill.



The main coast road crosses the inclines by "New York Bridge" which carries plaques recording its rebuilding on May 9th 1893.

The modern entrance to the workings is nearby, and just down the road is a large granite sign carrying the old company name:- this is in the grounds of a large mansion Plas Mawr, which was occupied by the Darbshire family, quarry owners, but is now completely demolished. Amongst the overgrown gardens, the course of a 2ft gauge garden railway constructed by quarry employees may be discerned, complete with platform where guests and visitors to the house boarded the little train (712762). To the rear of the grounds we may ascend past rows of gloomy but characteristic terraces of workmen's housing, largely unaltered, to reach the quarry offices and workshops at Bell Yard where our tour of the quarry workings commenced.

Keith A. Jagers November 1978

Updates – November 2011

The **Felin Newydd** cottages at Glyn Terrace, Dwygyfylchi, survive in residential use. **Penmaenmawr Gasworks** and the old L&NWR footbridge were obliterated by the A55 Expressway road construction.

Penmaenmawr **granite quarries** are now managed by Messrs Hanson Aggregates. Quarrying continued until 2008 mainly supplying railway ballast, but ceased upon the loss of this major Network Rail contract, and the workings are now "mothballed" although various ancillary activities continue on site. A road system was built up the mountainside allowing all recent working faces to be served directly by lorries. These are clearly visible as such on the Google satellite images, and comprise the Craiglwyd & Penmarian Mill areas, Braichllwyd, east of Penmaen Mill, and the Fox Bank & Penmaen East Quarry areas, these last two now being physically merged into one, with the former summit rock pillar being almost totally quarried away. Clearly all these areas are out of bounds to the casual visitor, and nothing much of historical interest survives there in any case. Since landowners nowadays can be deemed to have

responsibility for the safety of all visitors, whether or not they are trespassing, it is to be expected that all such areas would be securely fenced, patrolled and covered by CCTV cameras.

It is difficult however to be objective about public access to the older areas of the workings, which comprise the former tramways at and to the west of Penmaen Mill, the double inclines and that into Penmaen East Quarry, also the route around the headland to Ffridd and Penmaen West. The inclines and flat areas have been largely stripped of ferrous materials, though most of the winding houses remain intact, some still with drums and cables. There are no “official” footpaths shown on the current OS maps, but it is clear that many areas are still accessible and used regularly by locals. The best advice would probably be to heed all fences, signs etc that may be encountered, and stick to those paths which are evidently already well-used. The area around the double inclines can be clearly seen from the main coastal road below.....



As to what else may still be seen, starting in the area of the former Craiglwyd jetty on the beach: the **jetty** itself, along with its loading hoppers and counterbalances, has disappeared without trace. Now alongside the A55 Expressway the modern railway hopper wagon loading facilities remain, together with the standard gauge sidings, though all is now disused. The former raised **wharfs**, the narrow gauge lines and buildings have all long since gone, but the LNWR general goods warehouse remains, on the inland side of the main-line tracks, as do the characteristic old **main station building**, LNWR pattern footbridge and modern signalbox at the passenger station.

The old quarry **incline** bridges at the Esplanade and at New York, on the old main road, survive. The rusting conveyor system remains on the incline, sharing space with a footpath part of the way. Beside New York bridge, the **New York Cottages** (pictured right), some of the oldest erected for quarry workmen (in 1849) have been renovated for commercial use, and in one of them is a small **museum** of the local quarrying industry,



run by the Town Historical Society, open on several afternoons a week during May to September. The gardens of **Plas Mawr** house are now a recreational area, “Parc Plas Mawr” in which the foundations of the old residence and the site of the miniature railway near the southern boundary are still evident. The large quarry name sign facing the road has gone however.

The **Bell Yard** area can be viewed from Ffordd y Gilfach, and remains surrounded by the terraces of grey-granite workmen’s cottages. The former tramway connection to **Penmaen Mill** is now a lorry road, and at the latter site there are some remains of the more substantial parts of the crushing mill and ancillary buildings, with bits of old wagons strewn around.

Beyond the top of the double inclines, the remains of the de Winton locomotive “**Penmaen**” are reputedly still in the loco shed, which is now roofless, and more wagon remains can be found.

There is now little evidence of the old inclines coming up from the **Penmaen Jetty**, which has also completely disappeared, along with its adjacent mill, but the incline bridge under the old main Bangor Road remains. The former inclines up to Fox Bank and all historical items around the summit area have long gone.

Two of the former 3ft gauge quarry **De Winton** steam locomotives are preserved locally; “Llanfair” is on a plinth within the Welsh Highland Railway station yard at Dinas Junction, but has many parts missing, some replaced by cosmetic wooden items (right).....



The “Watkin” has been at the Industrial Railway Museum, Penrhyn Castle since 1972; our pictures show it just after arrival there, and as recently cosmetically restored and on display.....

