3) Penmachno to Betws-y-Coed

Close to the Machno mills, the minor road leading back to Betws-y-Coed crosses the River Machno by means of a stone arch known as Pant Bridge, built c1850. Just downstream may be seen a fine example of a medieval pack-horse bridge, a single-segmental arch often misleadingly referred to as "Roman Bridge"; an attempt no doubt to promote tourist interest. The remains of another derelict fulling mill, "Pandy Mill", are to be found further along the road near the junction of the Conwy and Machno rivers (808532). Hereabouts also there is some evidence of an old salmon ladder, which enabled fish returning to the spawning grounds to climb up the falls.

The present village of Penmachno came into being principally as a result of development of the local slate quarries, although its previous importance as a river crossing is represented by the old three-arched bridge, Pont Llan. Unusually these arches are of elliptical profile, the design of which (according to the plaque) is attributed to "I. Hughes, The Harry Parry of Carnarvon", and dates from 1785.

The atmosphere of the quarrying community is still strongly evident in the workmen's cottages and chapels of Glanaber Terrace, hard by the workings themselves. Cwm Machno Slate Quarries, although fairly large and in production as recently as 1961, did not share the fame of other concerns at nearby Ffestiniog, and was typical of a medium-sized company operating by traditional methods.

The slate mill stands stripped of machinery in the quarry floor; the pit for a 16 ft waterwheel that provided power for saws and trimmers is clearly visible alongside, and a small foundry was housed in the adjacent building. On ascending the old tramway inclined plane through the levels of the workings, the remains of an aqueduct and pipeline supplying the mill wheel will be noted. The water came from the reservoir at the top-most level: the old wooden launder had been superseded at some later date by the iron pipe which runs alongside, and the sluices controlled the rate of flow to the wheel as required.

The village of Betws-y-Coed has been an important staging post since the building of the Irish Road, and from the Victorian era also, a popular inland tourist resort of somewhat alpine atmosphere. The potential source of income represented by the latter has long been exploited by the old Rural District Council, to the point where the local rate was the lowest in the country, and at one stage non-existent.

The A5 road descends dramatically from the upland plateau of the Denbigh moors into the river valley, on a carefully graded shelf cut into the steep hillside. This two-mile section, from near the junction of the Machno valley road, was built new as part of Telford's improvements to the Holyhead route in 1817-16. What is now the Silver Fountain Inn, very much altered, was formerly a stabling point for the mail coach horses, fresh animals being attached for the long climb up to the next inn at Cernioge. This latter point, not shown on present-day maps, was near Pentrefoelas; its name appears on several old milestones in the district.

The River Conwy is crossed at Betws by means of Telford's elegant 105 ft cast-iron span known as "Waterloo Bridge". It carries around the spandrel the cast inscription:- "This arch was constructed in the same year the battle of Waterloo was fought" (1815). The castings, also adorned with leek, rose, shamrock and thistle emblems, were made by William Hazeldine (famous also for those of the Pontcysyllte aqueduct) at his Plas Kynaston foundry, Cefn Mawr, near Wrexham.

The route of the Capel Curig Turnpike Trust's road of 1802 may be picked up at its contemporary river crossing, known as Beaver Bridge (798547). Now forming a tourist path to the woodlands and falls in the Fairy Glen, the old road may be followed for about three-quarters of a mile on the north-east side of the river; it climbed to meet the present A5 about another three-quarters of a mile further on again. In the opposite direction from the Beaver Bridge, the 1802 road followed the left bank of the river, and this stretch may still be negotiated easily by car to rejoin the main road right in the centre of the village.

Betws-y-Coed has a varied assortment of items of interest to the industrial archæologist within its environs. On the left of the old road, the house named "Argraig" was the old Green Bank Smithy, in front of which survives an interesting and unusual "Potato Clamp". This is an underground storehouse - note the wooden door in the grass bank adjacent to the road - in which the

smith would keep sacks of potatoes (offered by farmers as payment for his services) for resale or for his own use. Further down the road, the premises of Betws-y-Coed Motors comprise the village's first garage, established in 1906.

Across the present main road the railway station is prominent, being of a size out of all proportion to its later day status of unstaffed halt. The main building was constructed in the distinctive style of Owen Gethin Jones, in Penmachno stone and yellow brick, when the railway arrived here from Llanrwst in 1868. (It was subsequently further extended to Blaenau Ffestiniog in 1872-79, and the impressive stepped viaduct over the Lledr south of Betws was also his work). Part of the station building is now used as a restaurant, but not now run by British Rail. The lengthy curving platform recalls palmier days of well-filled summer excursion trains, but it is now mostly covered in a green carpet of untrampled vegetation. On the opposite side of the track is the former slate wharf of 1869, to which slates were brought by cart from the quarries at Penmachno and Hafodlas, for onward transport by rail to the Northern cities. The goods yard as a whole was closed from 1965, but has since become the home of the Conway Valley Railway Museum, whose exhibits include a 1923 "Pullman" Car from the London, Brighton and South Coast Railway. Although seemingly very much out of place here, this vehicle had in fact been stranded at this spot by track removal during a previous phase of its life as a camping coach. Much other material of local railway interest is to be seen in the museum.

The most recent of the four river bridges at Betws is that known as Sappers Bridge, behind the station. This delightful suspension footbridge was erected in 1930 to replace a wooden structure which was swept away in a flood. The nearby cottage, "Glanllyn", is all that now remains of the village's discreetly hidden gasworks (Holyhead and North Wales Gas and Water Co., c1886).

One of the more important hostelries of the coaching era was the Royal Oak Hotel. It was rebuilt into largely its present form c1861, but the original stable block with arched entrance leading into a central courtyard still remains, now used as the hotel garage. It is situated on the same side of the main road as the station but opposite the hotel itself. At one time this establishment maintained a stable of twenty-three horses with twelve traps, engaged in the lucrative tourist trade to and from the Swallow Falls. Still to be seen here are the remains of an 8 ft undershot cast-iron waterwheel on the side of an outbuilding; this once provided power to operate a butter churn within, used until 1910.

Of all the river crossings in the locality of Betws-y-Coed, that of Pont-y-Pair is undoubtedly the oldest. Situated on the old Conwy road (792567), the five-arched bridge over the River Llugwy is reputed to have been constructed c1470 by "one Howel, mason from Penllyn" (near Bala). The adjacent hotel, which used to be called the Swan, has a splendid Victorian cast-iron balustrade fronting the upper storey. Spanning the A5 road hereabouts was one of Telford's distinctive wrought-iron "Rising Sun" tollgates, which functioned until 1884; this example survives in use for more domestic purposes at nearby Coed Cynhelier Farm, as testimony to the lasting workmanship of such items. Other long-lived features of the Holyhead Road are the mileposts - cast-iron tablets set into blocks of Mona marble - which may be noticed in situ at the roadside all along the way westwards from Shrewsbury.

Further up the old Conwy Road, Albert Mill, from which Mill Street now takes its name, is easily recognisable although long since converted into a dwelling house. This was a roller mill, a more modern descendant of the flat-stone arrangement, which until 1940 ground oats to be made into bread for distribution to the local needy. The house called "Bodlondeb" was formerly a hostelry known as the "Miners' Arms", an unlikely name totally uncharacteristic of its present surroundings. It derives from the existence in the last century of a large number of lead mines, in the area west of here to be described in the next section of this book.

The last part of the village proper to note is the little detached community known as Gethin's Terrace. This housed the workmen of the Hafodlas Slate Quarry, behind and above it, whose tramway inclined plane descends to the roadside beside the old electric turbine house (783565). This building, before becoming a private dwelling, had also been utilised as the headquarters of the local Fire Brigade. It has been remarked that the sole equipment of this noble concern from 1899 to 1940 was one handcart: furthermore, as an all-purpose barrow, this item constituted the Urban Council's total vehicular fleet until as late as 1972!

The workings of the Hafodlas Quarry are easily accessible by means of a network of footpaths and despite closure in the 1930's they retain many items of interest. On the lowest level, part way up the incline, the drainage adit from the bottom of the quarry pit emerges from the hillside; here also are the Checker's office and a partly intact weighbridge on the tramway leading to the waste tips. Broken wagon bodies lie around where they fell during salvage operations in aid of the wartime scrap drive.

At the head of the long incline there is a smithy with cottage attached, and the start of another incline to the main workings. The slate-dressing mill is situated nearby on this level, an elegant and well-constructed stone building with interesting door and window architecture. Power was supplied by a large waterwheel located at the centre, and pits for underground shafting to the machinery run outwards from it. The heavy steel frame was used for the support of further overhead line shafting, and the main roof structure.

The quarry workings themselves may be approached at two levels, the uppermost at the head of the upper incline just noted, which is so steep as to be almost unclimb-able, and the middle via the shorter incline rising from directly behind the mill. The winding-wheel and brake mechanism is still in situ at the head of this incline, with a weighbridge nearby. The former tunnel access to the main pit on this level appears to have been rebuilt to form a blast shelter for the quarrymen. A similar tunnel at the top level is passable, and emerges high up on the sheer sidewall of the main quarry. Directly opposite stands the hand-operated shearlegs, which seems to have been the sole means of raising slate blocks from the pit. The construction of the incline may be best appreciated from the drum house, where near to the footpath also stands the gunpowder store, suitably remote from the rest of the workings.

Another small slate working may be conveniently visited by continuing the walk to Rhiwddolion (and then to return via the marked trackway to the main road near the "Miners' Bridge"). This remote hamlet grew around the East Arvon Quarry, last worked in 1907. Although there is little of interest amongst the overgrown pits and tips, the ruined workmen's barracks and cottages, and the locality in general, are quite delightful given good weather for exploration.

For a comprehensive general description of Betws-y-Coed and neighbourhood the reader is referred to "Betws-y-Coed and the Conwy Valley" (Ivor Wynne Jones; John Jones of Cardiff Ltd. 1974). Much of the foregoing section has derived inspiration from this booklet, which covers in more detail most of the features mentioned above.

Keith A. Jaggers November 1978

Updates – November 2011

All of the **Bridges** mentioned in this section survive, and many are listed, protected structures. The former **Pandy Mill** building, by the Machno Falls just south of the junction of the Machno & Conwy Rivers, is a very overgrown ruin on private land.

Glanaber Terrace forms part of a thriving village community. The nearby slate quarry still has plenty of surface remains.

The **Silver Fountain Inn** continues to serve travellers on the main A5 road.

In **Betws-y-Coed** the potato clamp at **Argraig** survives and the original **garage** premises remain in use. The **Conwy Valley Railway Museum** continues to thrive. The old **gasworks** site now forms the entrance, parking and reception area for the Betws-y-Coed Golf Club. The fine **Royal Oak Hotel** continues, but its former stables complex across the road near the railway station is now the Snowdonia National Park Visitor Centre. The former **Swan Hotel** by Pont-y-Pair Bridge retains its fine ironwork facade; it is now called the Pont-y-Pair Hotel. **Coed Cynhelier Farm** still has its Telford "Sunrise" toll gate, at the main driveway entrance adjacent to the road. The **Albert Roller Mill** building is converted to flats, unsurprisingly named "Y Felin", and the very distinctive white-painted house "**Bodlondeb**" next door is a holiday let.

Gethin's Terrace is now part of a community with many newer houses. It is not (and never was) a Terrace in the accepted sense of the word, but rather a line of several identical semi-detached pairs.

The nearby slate quarry workings have been landscaped and are heavily wooded; there is little left of the former surface buildings here. **Rhiwddolion** is described as "The Forgotten Village"; the former quarrymen's barracks and other buildings are now very ruinous. A network of footpaths facilitates exploration, and guided walks are organised from time to time.