Wonder Walls

The Extraordinary Dry Stone Walls of North Wales Sean Adcock

The tallest free standing dry stone wall in Britain and very probably the world can be found in North Wales, just one of a number of gargantuan 19th century stone structures built as part of the then thriving slate industry. A quarter of a million people a year 'use' this wall, most without ever really seeing it. It goes largely unheralded with very few, even those in nearby Penrhyndeudraeth, realising what a unique and important part of the world's,



Part of Cei Mawr, a free standing double sided wall, so large it's almost impossible to photograph

let alone North Wales', industrial heritage is on their doorstep. The 'Cei Mawr', a railway embankment bridging Afon Cae Fali, can be found on the Ffestiniog Railway 2km east of Penrhyn Station. Effectively a dry stone wall

with a railway on top it is almost 19m high, only slightly narrower at its base, and almost 5m wide on top. It's also 100m long. Originally built in the first half of the nineteenth century it was extensively buttressed in the late 1880s and remains in extremely good condition.

Sadly not all the stone structures relating to the slate industry are in such good repair. Some 25-30 cantilevered steps, each poking out a couple of feet, from a 30 feet or so high retaining wall could once be found at Abercwmeiddaw, Corris. In the late 1990s the wall, and of course with it the steps, was demolished as part of a landscaping scheme. Sets of similar steps

can be found elsewhere in the world, especially where agricultural hillside terracing is common. Few are on this scale, probably no others in Britain. In walling, industrial, and Welsh heritage terms was their demolition akin to taking a bulldozer to one of Edward I's castles? Perhaps even more drastic? The steps were almost certainly unique at the time, we have "Longshank's" castles to spare!

Dinorwig saw the 'invention' of the incline, where full slate wagons ran down the slope whilst at the same time pulling up empty ones. Within the Vivian Quarry, now a country park attached to the national Slate Museum, one has been reinstated complete with working wagons.



Part of the longest Dinorwic incline

Further west in the main quarry the more spectacular sets of inclines are slowly disintegrating. One section was lost to the Dinorwig pump storage scheme. We cannot halt industrial progress (in their day these were just that), but tracks were driven through others and the ends are now left crumbling. Throughout the quarry small sections are falling away, before too long small sections inevitably become large sections.

The Pyramids are a wonder of the

ancient world. Did you know North Wales has its own pyramids, albeit from a slightly more modern era? A wonder of the industrial age, the two pyramids of Dorothea, Nantlle, are somewhat misnamed. If anything they are more



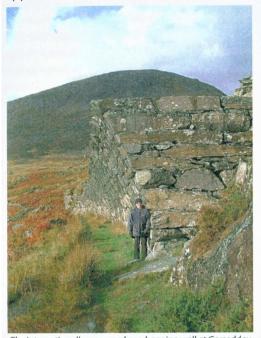
This 'Pyramid' at Dorothea stands around 12m tall on a 4m footing and is showing serious cracking

reminiscent of the ancient Egyptian Pylons, their name attributed to management and subsequent writings rather than common usage during their working life. Dorothea pit was over 300 feet deep in places and these two structures were the bases of winding gear above the pit, sufficiently tall to allow cables to gain clearance over the quarry lip. Wagons were hauled up inclined wires, once above the level of the lip a platform was winched out and the wagons lowered onto it before being hauled in to terra firma. The older of the two pyramids, built just before 1900, is lime mortared and in a bad state of decay, the slightly younger dry stone pyramid is built from poor quality stone and whilst faring better than its neighbour, is beginning to show its age with serious cracking and some bulging.

The mortared pyramid is, alarmingly, missing the bottom few feet of one corner alongside a path, the stonework perilously overhanging, a section of face high up has blown out. It has a set of cantilevered steps, deliberately damaged in order that they can't be easily used. Both are Scheduled Ancient Monuments but not at the highest level. They are obviously of National importance, they are arguably (can there really be an argument?) of world significance. They are unique and yet this does not stop officials and developers from wanting to demolish them, the first on the perceived grounds of Health & Safety and the second using the excuse of H&S to get rid of impediments to speculative development. They are beyond economic repair... How can we place a value on unique structures? It is certain that neither will spontaneously recover. Is the best we can hope for that they will be left alone until safety inevitably brooks no argument? Where does health and safety, or development end and desecration begin?

Currently 'World Heritage status' is being sought for the North Welsh Slate Industry. This would arguably help the preservation cause, but more through awareness than actual protection. Few realise WHS is partly allocated on a quota basis, and frequently has a tourism bias to the selected, already managed and preserved sites. It is early days in the current process and it is far from clear what will eventually be included, beyond the tourist sites - the Welsh Slate Museum and Country Park, Llechwedd caverns, Ffestiniog Railway. Dorothea probably not, the majority of Dinorwig most certainly not. The Gorseddau tramway might be included and therefore, most likely by happy coincidence, the 'wailing wall'. Disposing of

slate waste was a perennial problem at many quarries. In Gorseddau in Cwm Ystraddlyn, it led to the creation of another unique structure an overhanging wall ('wailing wall' seems to be another modern appellation). Built around 1860 it is just



The internationally renowned overhanging wall at Gorseddau has defied gravity for 150 years.

under 100m long and almost exactly 4m high. The top curves out elegantly, overhanging the base by 1.5m. Situated at the base of a waste heap it is thought that it was built to protect the tramway from waste heap spillage. Ground conditions and lack of space suggest its construction was indeed a more viable alternative to relocating the tramway. As with all of these structures they were functional, little is recorded as to their building, history, or purpose, they were taken for granted and more or less ignored, part of the scenery. Perhaps nothing changes.

All these structures, and more, are at least preserved photographically. Along with launder pillars in Bethesda and Cwm

Orthin, archways from Fairbourne to Penmachno, blondin towers, blast shelters, the Cwm Croesor tramway embankment a quarter scale model of Cei Mawr which if it were not for the latter would lay its own claim to the 'British record', and Tyddyn Isa Slate quay - a 200 year old wall built in the waters of the Afon Dwyryd, they can be seen in the North Wales quarry section of www.wallingwonderland.info a website run by Sean Adcock, Honorary Secretary of the North Wales Branch of the Dry Stone Walling Association. The DSWA works to preserve, improve and advance education in the craft of dry stone walling for the benefit of the public, and as part of this remit Sean, a full time waller, has given many presentations on these structures. In addition, this June (2-6th) the Branch will be hosting a group from Canada and taking them on a series of walks looking at many of the quarry structures. The programme will be weather dependant but anyone interested in joining in should contact me:

> sean@stonewaller.freeserve.co.uk 01286 871275

For those who would like to learn how to build in dry stone, (albeit on a smaller scale!), the North Wales Branch runs a series of taster days and courses. Further details can be found at www.dswales.org.uk or from Paul Smyth pasmyth@btinternet.com

07554 245667 ~ 01766 513213

Course dates:

April 27 Taster day, Moel Famau, Mold May 25 Taster day, Pensychnant, Conwy June 29 Taster day, Moel Famau, Mold July 27 Taster day, Blaen y Nant, Bethesda Sept 7 & 8 Course, Moel Famau, Mold Sept 28 & 29 Training Course Pensychnant, Conwy