



This document is with a copy of the following article published by the Mining Heritage Trust of Ireland. It is provided for non-commercial research and educational use.

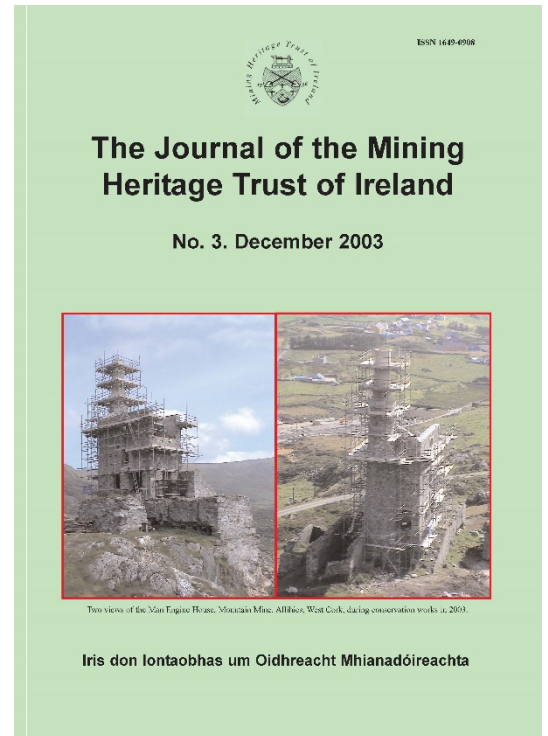
The Mining Heritage Trust of Ireland formally ceased its existence in 2019 but has provided a continuing website of resources with free access for those interested in the activities of the organisation in its various formats from 1996-2019, and in Irish mining heritage in a broader sense.

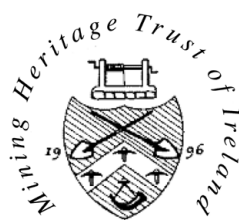
Duffy, E., (2003) 'In Search of Hodgson's Tramway' *Journal of the Mining Heritage Trust of Ireland*, **3**, pp. 21-24

Copyright of this article remains with the Mining Heritage Trust of Ireland whose archives, intellectual assets and library have been transferred to the Natural History Division of the National Museum of Ireland. Please contact [naturalhistory@museum.ie](mailto:naturalhistory@museum.ie) for any enquiries relating to the MHTI.

This cover page must be included as an integral part of any copies of this document.

Please visit [www.mhti.com](http://www.mhti.com) for more information.





# IN SEARCH OF HODGSON'S TRAMWAY

Ewan Duffy

175 Kingsbry, Maynooth, Co. Kildare

**Abstract:** This deals with the practicalities (and difficulties!) of tracing the scant remains of Hodgson's tramway. *Journal of the Mining Heritage Trust of Ireland*, 3, 2003, 21-24.

## BACKGROUND

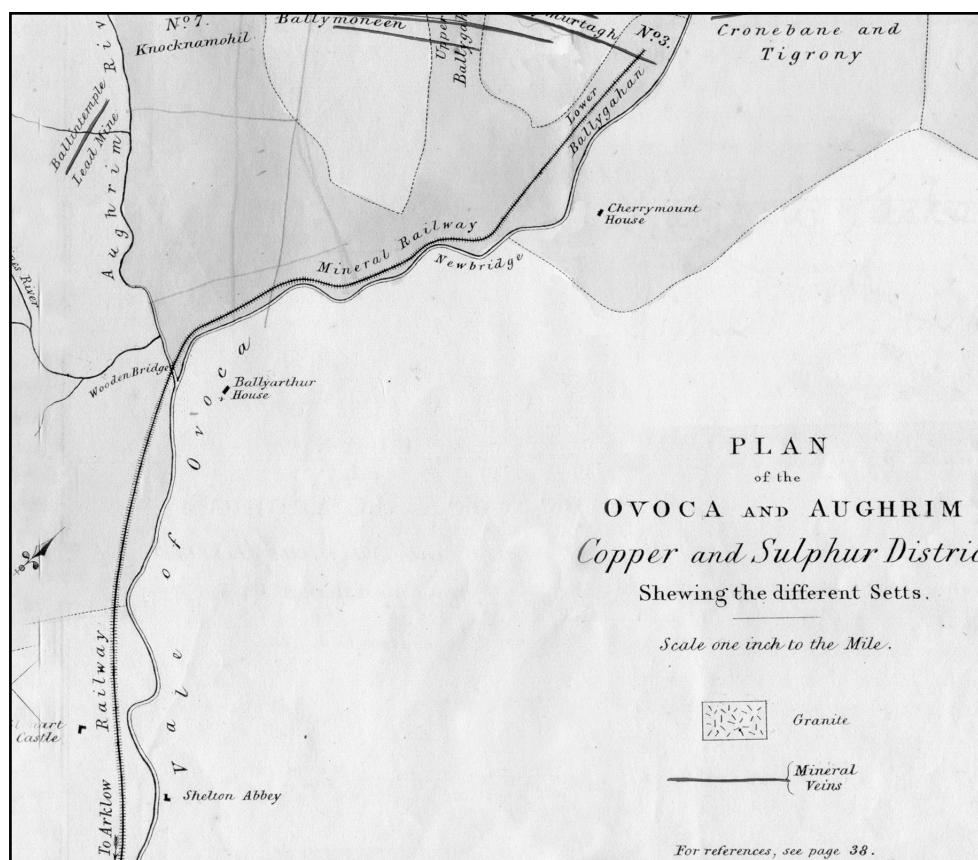
Young (born 1896) Henry Hodgson took over the abandoned Hibernian Mining Company's workings on the west bank of the Avoca river in 1822. The complex mineral veins ran with scant regard for human division: on the rise from the river was Ballygahan (Lower), then Ballymurtagh and above it Ballygahan again (Upper). The middle was the richest but most expensive to develop so Hodgson was obliged to bring in capital by setting up the Wicklow Copper Mining Company in 1827. However, his control was strong enough to give the running of the mine to his nephew, Edward Barnes. Hodgson himself retained direct private ownership of the Ballygahan mines (Anon 1856).

It has been suggested that in a teeming pre-famine country-side, it was not a major expense to move the pyrite, copper and iron the eight miles or so to Arklow for shipment but that the famine altered such structures. Therefore Hodgson considered alternative methods in the early 1850s (Shepherd 1974). The equally productive mines on the other side of the river were almost as far from shipment points and they continued with horses and carts successfully until the 1870s.

Just as Hodgson's mines in Ballygahan were private affairs so too was the building of his mineral railway along with the relationship between it and his public company at Ballymurtagh. A map of 1856, for instance shows his "Mineral Railway" running from lower Ballygahan to Arklow, but without any hint as to how Ballymurtagh might benefit from it. There could have been a line of buckets coming to the terminus although another commentator suggests that wagons might have been lowered by steam engine (Sheppard, ms).

Clearly the "mineral railway" developed (it is more accurate to use the term tramway as no more than two wagons were pulled by horse to Arklow.) and went through various phases so that the present visual evidence does not necessarily conform with the documentary evidence. For instance, at what stage was the now very visible spur to Upper Ballygahan built and when did the original rail-end disappear? What was the relationship between Hodgson's tramway and the Dublin and South East railway that interacted at several points with the tramway?

The table (below) shows the tonnages of sulphur that needed to be transported to Arklow which well justified the tramway by itself. There are no figures pre 1859 and there is a marked decline after 1867. At its peak that year it would have taken 100 cart journeys every single day of the year to have transported it, assuming a horse capable of pulling half a ton. Ballygahan closed in the 1879 and Ballymurtagh about the same time.



1858	15017.00
1859	15803.00
1860	17454.00
1861	12031.00
1862	12483.00
1863	10892.00
1864	8794.00
1865	12020.00
1866	15769.00
1867	17780.00
1868	4622.00

Figure 1. A section of an 1856 map showing the mineral railway from Arklow to Ballygahan.

There would have been subsequent incursion on many stretches of the line thereafter. What follows is a record of surviving evidence collated with an account of what was still there in 1947 (Murray), My search began at the highly visible tramway bridge (built later) at upper Ballygahan.

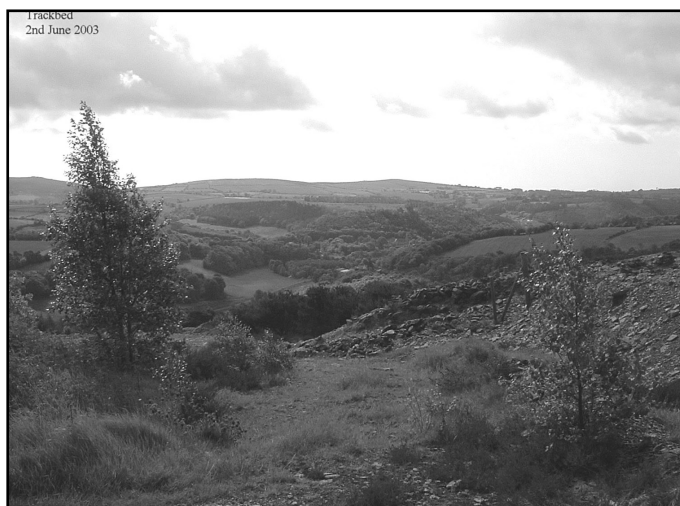
## BALLYGAHAN (UPPER) TO WOODENBRIDGE.

At Ballygahan, I found two rails which may have been in use as part of the tramway, being approximately 3'6" apart. The tramway passed over the tramway arch and therefore, I started my search proper just above it, one of the best remaining engineering features of the line.



**Figure 2. The rails at Ballygahan.**

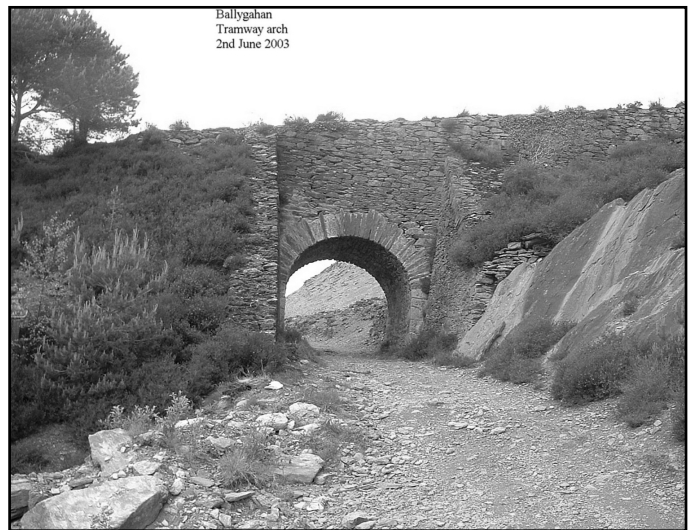
Immediately north of the arch, it is possible to make out what I believe to have been the trackbed. The difficulty facing me, as someone who has been identifying sections of trackbed for over 10 years, is that the angle of the pathway is not in line with the arch and therefore, a sharp curve would have been required coming off the arch. However, it should be remembered that tramways can have sharper curves than conventional railways.



**Figure 3. The trackbed at Ballygahan.**

South of the arch, the embankment can be made out and although heavily overgrown with trees and gorse, can be followed for a short distance. From the arch itself, views over the surrounding landscape, including the mining area of Tigroney can be seen.

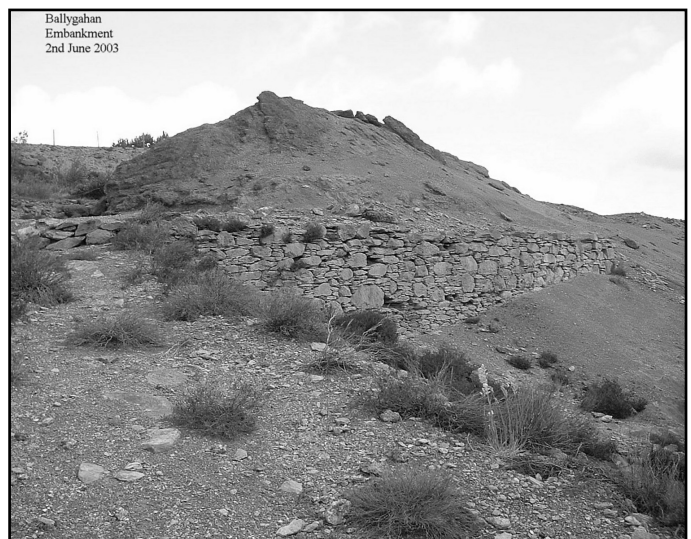
The embankment continues for some 200-300m, before drop-



**Figure 4. The tramway arch at Ballygahan.**



**Figure 5. The view from the Tramway arch.**



**Figure 6. The embankment for the tramway at Ballygahan.**

ping to the level of the adjacent "Red Road". Beside the trackbed at this point, there remains a chimney and about 200m away, the remains of an engine house and another chimney, the former retaining an attractive brick arch. Murray stated that the



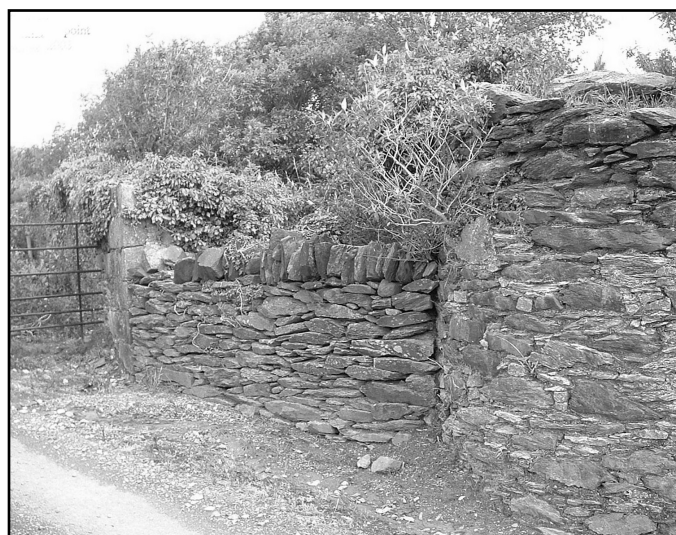
**Figure 7. The engine house chimney at Ballygahan.**



**Figure 8. The base of the chimney.**

house that contained the winding engine to raise the wagons up the line was about half way up the inclined plane. The former would appear to be all that remains of this feature.

From here, the road parts company with the tramway and it is difficult to pick out where it ran. There is no obvious sign of anything that looks like a tramway alignment, until you deviate away from the main road and turn up a private access road to a farm. On the right hand side of this, there is what looks like a filled-in gateway which leads into the undergrowth. It is at this point that errors could easily be made as I presumed that this was a filled-in crossing on the tramway. Ken Brown set me straight in his paper by correctly identifying it as the remains of another engine house. Such are the hazards of survey work. The modern road takes a hairpin approach down the hillside



**Figure 9. The gateway / engine house remains.**

with no evidence remaining of the tramway. It is likely that this took a more direct approach. The marshalling yard was at the foot of the hill on the southern side of the road with the tramway following a route back towards the main road to Avoca. There evidence of the tramway can be found again in the shape of an embankment.



**Figure 10. The location of Ballyrairie underbridge (highlighted). The arch has been filled in but stonework through the vegetation reveals its position.**

From here, the tramway ran in a cutting adjacent to the main road, the exact location of which is difficult to ascertain until just north of Avoca. Prior to the arrival of the railway from Dublin to Avoca in 1863, the tramway crossed the road on the level and ran alongside the Avoca River for most of its length to Arklow. The arrival of the railway from Dublin, extended from the previous terminus at Rathdrum, heralded change for the tramway. The Dublin, Wicklow & Wexford Railway Act of 1859 authorised the Dublin & Wicklow Railway to extend their line to Gorey via Avoca and to buy up the tramway and stock for £30,000, the purpose of which was to lay the mainline railway along the route of the tramway. On 1st May, 1861, the railway company took over the tramway.

The road into Avoca was raised, the river diverted south of the present road bridge to avoid the need for two river crossings and a new tunnel constructed under the road for the tramway, which remains to this day. Thus a new line of tramway was created. For a period, the tramway from Avoca to Ballyraine was locomotive worked, but from there to Arklow and from the mines to Avoca was horse worked.



**Figure 11.** The tunnel mouth.

South of the railway bridge at Avoca station, the route of the tramway becomes more difficult to ascertain. Murray maintained that the tramway generally followed the course of the river as far as Woodenbridge, some 2 miles to the south. However, he is unclear about whether or not the tramway was diverted after the railway was opened, although the fact that the railway crosses the Avoca River twice in the first mile would suggest that the tramway was diverted away from its original pre-railway route. There is little evidence of this section of the tramway route remaining today. The white cottage south of the railway station had been a smithy used for shoeing the tramway horses and other work. There was a loading bank behind this for transfer of the ore to conventional trains that brought the ore north to Dun Laoghaire for export after the railway opened. As this is now on private property, I was not able to ascertain if it still remains.

## WOODENBRIDGE TO ARKLOW

At Woodenbridge Junction, a former station on the mainline, the tramway crossed the Woodenbridge - Shillelagh branch line of the DW&WR on the level, one of only a few places in Ireland that this occurred. The "junction" was fully protected by locking apparatus to prevent a tramway train and a railway train from being at the crossing point simultaneously. The tramway then crossed the Aughrim River by a wooden bridge before rejoining the route of the railway line. Railway and tramway ran side by side to Ballyraine, about two miles north of Arklow at which point, the tramway dropped and passed under the mainline railway.

Convention had held that this bridge was long filled in and more importantly, that its location was unascertainable.



**Figure 12.** The white cottage, a former smithy for shoeing tramway horses.

However, in the region of Murray's description of the road and railway parting company, which is where he maintained that the tramway passed under the railway, there is on the riverside of the railway embankment, two low walls, sufficient distance apart to accommodate a tramway. This is just south of point MP47½ on the mainline railway and opposite the southern end of the now closed Anyhdrous Ammonia plant on the opposite side of the river. The route is followable for a short distance beyond this, running on a ledge between the river and a hill, before the terrain descends into an impenetrable bog.

To conclude, Murray recorded that the tramway headed back in towards the railway again before running through Ballyraine Wood. It left this via an opening in a stone wall to cross the river by a wooden bridge. The remains of its decaying timbers were still in existence in 1947. In Arklow town, the tramway ran under one of the arches of the town bridge and crossed the river again on a low viaduct, some piles of which were still visible at low tide in 1947. The tramway terminated at the South Quay in Arklow harbour, which the company owned until it was acquired by the Government under the Arklow Harbour Act, 1882. This specifically exempted the tramways, turn tables and weighing houses of the mining company from the provisions of the Act and gave them full rights of way over same.

## REFERENCES

- Anon, 1856. *The Mines of Wicklow*. Law of London.
- Murray, K.A. 1947. "Avoca Mineral Railway", *Journal of the Irish railway Record Society*.
- Shepherd, W. Ernest, 1974. *The Dublin and South Eastern Railway*. David and Charles, p.34-35
- Shepherd, E. Ms. [These comprise a history of Avoca mines which unfortunately was never published. Ernest Shepherd kindly gave the editor a copy].