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Graveyard rocks: Lt John Irving's memorial in the Dean Cemetery, Edinburgh

By Phil Stone and Andrew McMillan

Without a hint of the macabre, geologists are commonly attracted to cemeteries; but not so much to celebrate the dear departed as to admire the lithologies in which their eulogies have been inscribed. Here in Edinburgh, we are spoilt for choice, but for one memorial in the Dean Cemetery it is the loose rocks piled up around the base of the formal monument that are as much a geological attraction as the gravestone itself (Figure 1), particularly given the dramatic historical circumstances of the grave. This is the last resting place of Lt John Irving (1815–1848?), a casualty of Sir John Franklin's ill-fated attempt to force the North-West Passage through the frozen waters of the Canadian Arctic, the notorious *Erebus* and *Terror* expedition that set sail from the Royal Navy's Woolwich dockyard in May 1845.

Irving's Fate

John Irving was born in Princes Street, Edinburgh, on 8 February 1815. His education at the newly established Edinburgh Academy was followed by a career in the Royal Navy (interrupted by a few years spent farming in Australia) and in 1845 he volunteered for the Franklin expedition and was appointed third officer to HMS *Terror* under Captain Francis Crozier, Franklin's second-in-command. The expedition was a disaster. *Erebus*, *Terror* and their crews disappeared into the Arctic and the ships became inextricably trapped in the ice. After two winters beset, in 1848 the surviving crew abandoned the ships and made a futile attempt to trek overland to the very distant refuge of a Hudson's Bay Company outpost. Nobody made it; they all died of starvation, exposure and scurvy. It took many years searching by a succession of relief expeditions before the details of their fate was established. The whole sad story has been well publicised in recent years following the discovery of the wrecks of *Erebus* and *Terror* in the coastal waters of King William Island, Nunavut, with a good summary by Hutchinson (2017). It even features in a best-selling popular 'biography' of HMS *Erebus* by television celebrity Michael Palin (2018).

The precise date and circumstances of Irving's death are unknown, but it must have occurred early enough in the 1848 retreat for his comrades to still have sufficient strength and discipline to stitch his body into a canvas shroud and cover a makeshift grave with a pile of the local rocks, Lower Palaeozoic limestones. Search parties eventually located numerous skeletons, disarticulated bones and expedition debris along the west coast of King William Island and on the mainland coast to the south. Identification of the dead was mostly impossible, but in June 1878 a small silver medal was found amongst the bones in a shallow grave on King William Island. It was a mathematics prize won by John Irving at the Royal Naval College in 1830. On this basis the accompanying skeleton was identified as Irving's. The bones and medal were gathered up by Frederick Schwatka of the United States Army, leader of the team that made the discovery, and dispatched back to Irving's family in

Edinburgh (Stackpole 1965). There, a grand funeral was held, with full military honours, on 7 January 1881 with Irving's bones laid to rest in the Dean Cemetery. His family published a memorial volume (Bell 1881) and as an appendix included the account of the funeral published in the *Edinburgh Daily Review*. It was a truly magnificent affair.

The grave and the rocks

The Dean Cemetery is privately owned and very well maintained. Visitors are welcome but are asked to keep to the footpaths and are not permitted to walk on the grassed areas between the graves, which in places are very close together. Given the size and age of many of the memorials, they pose an obvious safety risk to the unwary, another justification for restricted access.

Irving's memorial is a tall Celtic cross (Figure 1) executed in characteristic style by the McGlashen company, well-established Edinburgh masons at the time. The lithology is a grey and very homogenous, fine-grained sandstone. It is reminiscent of the Devonian sandstone obtained from Leoch Quarry, Dundee, which was renowned for its durability (Harry 1952), but it is also possibly similar to some Carboniferous examples from Northumberland. Whatever its origins, the sandstone has stood the test of time extremely well so that all the intricate detail of the carving is still sharply preserved. A long, vertical panel of text summarises the story, the crucial medal is represented in the ornament, and an elaborate relief, credited to William Brodie (1815–1881) – a sculptor better known for 'Greyfriars Bobby' – imagines the scene at Irving's Arctic burial (Figure 2).

Unusually, the monolith is elevated on a brick plinth 60 cm high. This was left roughly finished, and as part of the original design of the memorial it was clearly intended to be camouflaged in some way. Hence the rocks piled up around the plinth. For the most part these are rough blocks of an attractive pegmatite (Figure 3) which, in some of the blocks, grades down into a very coarse granite. The pegmatite blocks have the appearance of quarried material but several smaller, more rounded and weathered cobbles of feldsparphyric granite were probably found loose and may have a different provenance. At the back of the memorial a few pieces of grey granite have been incorporated, and there the foundations of the pile have been supplemented by assorted pieces of broken cut slabs, perhaps masons' scrap or even scavenged from elsewhere in the cemetery when restoration was required. A slab of polished, red granite, perhaps from Peterhead, forms the base of the pile at the front of the memorial.

That the rock pile was part of the original concept is confirmed by an engraving of the Dean Cemetery that shows Irving's grave in 1883, with an accompanying text that describes Irving's as "one of the most interesting internments of recent years" (Grant 1883). The rough outline of the rocks at the base of the column is clearly shown (Figure 4) although of course there is no indication of their lithology. But from that evidence, it is likely that the piled-up rocks were sourced and put in place by McGlashen as part of the original installation.

However, no records have come to light to establish the provenance of the pegmatite, or to confirm that it was the lithology first utilised and not a later replacement.

The likely inspiration for the rock pile was the nature of Irving's original grave on King William Island, and this has given rise to the idea that the rocks were collected from that site. But there the country rock is Lower Palaeozoic limestone, and the logistical difficulties of acquiring rock from Arctic Canada in 1881 would have been considerable, albeit with Naval support not insurmountable. Schwatka makes no reference to having collected rocks from the grave site along with the bones (Stackpole, 1965), and the fortuitous arrival of such an attractive and unusual lithology as ship's ballast also seems improbable. Overall, a Scottish source seems more likely, perhaps from the Grampian or Northern Highlands, with the pegmatite specifically selected to augment the grave.

Another Edinburgh connection

Irving's skeleton was one of only two recovered from Prince William Island and returned to Britain. A second set of remains was identified – on the rather flimsy evidence of a gold tooth – as Lt Henry Le Vesconte of HMS *Erebus* and interred beneath a memorial to the expedition at the Royal Naval College in Greenwich. However, when restoration works were required, the bones were temporarily exhumed, and the opportunity was taken to make isotope analyses of tooth enamel and a facial reconstruction from the skull (Mays *et al*. 2011). The Sr- and O-isotopes suggested a childhood in northern or eastern Britain, which told against Le Vesconte who grew up in Devon. The result of the facial reconstruction was an uncanny resemblance to his shipmate, Assistant Surgeon Harry Goodsir (1819–1848?), whose childhood in Fife (Moore 2020) also fitted the isotope results. And here's the Edinburgh connection: Goodsir was conservator at the Royal College of Surgeons' museum, he had only joined the expedition for the opportunity it would provide to collect natural history specimens. His younger brother Robert (1823–1895) joined two of the unsuccessful search expeditions and is also buried in the Dean Cemetery, but on the opposite side to Irving and in the middle of a well-populated plot with restricted access.

Harry Goodsir's collecting brief would have included rocks and fossils. It is known that *Erebus* and *Terror* spent their first Arctic winter at Beechey Island, in an anchorage much frequented by the subsequent search expeditions. There, the local Lower Palaeozoic limestone is richly fossiliferous, with abundant brachiopods, and Goodsir would certainly have collected a few fossils which are probably still somewhere in the wreck of HMS *Erebus*. She rests in relatively shallow water and marine archaeology is not inconceivable. Maybe some small part of Goodsir's collection may yet return to Edinburgh.

What next?

It would be fascinating to know the history of the rocks piled-up around Irving's grave. Are they the original installation or has the pile been 'refreshed' over the years? Periodic rebuilding will certainly have been required. And can the lithology of Irving's memorial be

definitively identified? Why not pay a visit to the Dean Cemetery and take a closer look – bearing in mind the cemetery's 'keep to the footpath' rule – and whilst there, take note of the extraordinary pyramid close to Irving's grave that commemorates Lord Rutherfurd (1791–1854). It was another McGlashen creation and features large expanses of polished red granite with sporadic xenoliths, most likely from Peterhead. Both memorials are close to the gate between the cemetery and the National Galleries of Scotland: Modern Two (formerly the Dean Gallery) car park, so are very easy to find and are conveniently adjacent to footpaths (Figure 5).

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And for additional local information see https://finger-post.blog/2022/09/11/franklin-expedition-guide-edinburgh/

Figures

Figure 1
The grave and memorial of Lt John Irving, R.N., in the Dean Cemetery, Edinburgh. Image by Phil Stone.

Figure 2
The lower part art of the text panel, the ‘medal ornament’ and the carved relief imagining Irving’s Arctic burial. Image by Phil Stone.

Figure 3
The pegmatite blocks piled-up around Irving's memorial with a slab of polished red granite at the base. The nearest corner of the brick plinth can be seen between the uppermost blocks. Image by Phil Stone.

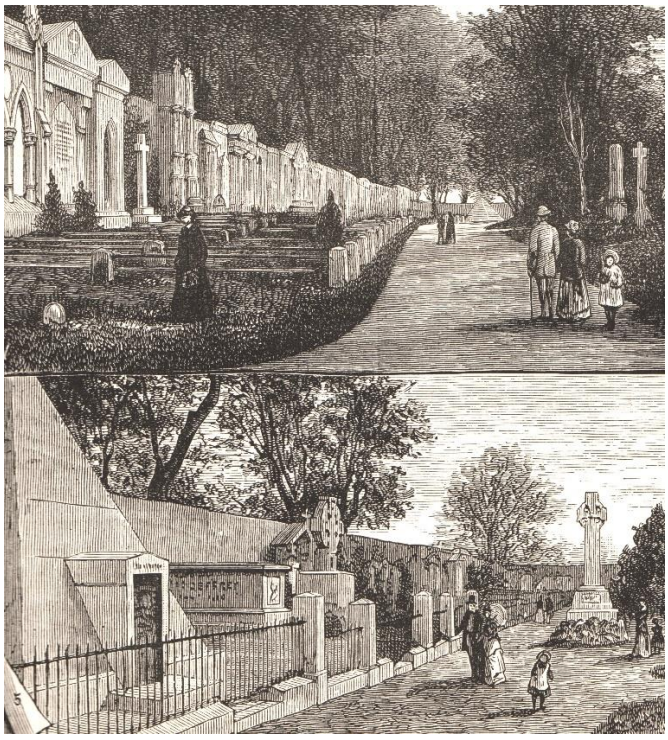

Figure 4
The Dean cemetery in 1883 shown in an engraving from *Edinburgh Old and New* (Grant 1883, p.69). In the lower picture, Irving's memorial with its rock pile is to the right, the front of the distinctive 'Rutherfurd Pyramid' is to the left. In the upper picture the pyramid is seen at the far end of the path. Detail from an original held by Andrew McMillan.

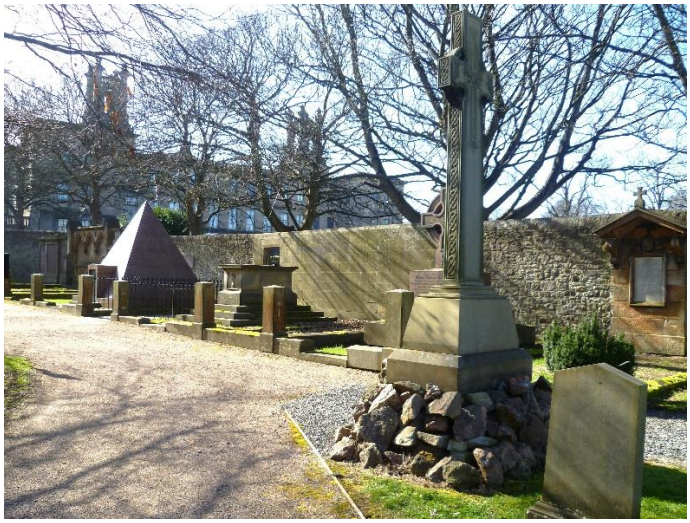

Figure 5
Irving's memorial and the 'Rutherfurd Pyramid' with 'National Galleries of Scotland: Modern Two' in the background. Image by Phil Stone.