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Iris don Iontaobhas um Oidhreacht Mhianadóireachta



A PRELIMINARY REPORT ON CROOKHAVEN MINE, COUNTY CORK

By Paddy O'Sullivan

Abstract: A preliminary report is provided of the mining heritage of Crookhaven Mine, at Crookhaven, County Cork. The present remains are described and illustrated with reference to historical plans and sections. *Journal of the Mining Heritage Trust of Ireland*, **4**, 2004, 11-18.

BACKGROUND

My attention was first drawn to the minerals of this area when, as a young diver forty years ago, I set out to dive on Long Island sound and hoped to catch sight of the gold doubloons said to have been shipped on the Lady Charlotte wrecked between Long Island and Crookhaven in the 1820s. The seabed around the Barells Reef is little more than twenty-five feet deep and heavily furrowed with ridges and valleys. These are lightly filled with stones, pebbles and sand. On scanning the valleys with an underwater metal-detector a lively assortment of signals was identified - could each signal reveal an elusive gold or silver coin? Unfortunately, all signals proved to be bogus calls. On excavating the sand it was noted that seams of jade-green copper in the rocks were the culprits in confusing my metal detector. These presumably were the underwater extensions of the Crookhaven veins.



Figure 1. One of the painted "windows" in the southern powder-house. The "glass" is painted blue. Could this have lasted for nearly 150 years or is it a later affectation? [All photos by Paddy O'Sullivan]

Only the inland part of this mineral exposure was known to the 19th century explorers. Returning to Crookhaven on holidays in July 2004 I found much surface evidence and more significantly a hidden adit in the cliff. I returned in the Autumn with Michael Barry and Tony O'Mahony, more equipped for exploration. Time did not allow a more detailed survey to take place. Hence this is just a preliminary report. It coincides only roughly with the plan of 1863 and section of 1883 (Fig. 5). (in Cowman and Reilly, p. 103 and 119)

A VISUAL SURVEY

Attempts to mine here in the mid 1840s probably collapsed with famine and depressed copper prices. The boom of the early 1850s caused a revival and a pumping engine was erected here



Figure 2. The adit. Tony O'Mahony in the foreground, and Michael Barry to the rear.



Figure 3. A sketch plan made by Paddy O'Sullivan in November 2004.

A A fissure on ceiling of eastern stope which allows entry by use of fifteen foot ladder.

B A timber framed shaft going down, this shaft is flooded and lies in about four feet below the surface of water in the stope.

C Looking upward one can see a round chimney-like shaft running to the surface. This shaft is spanned by tree trunks supporting planks and rubble filled from surface.

in 1851. Probably the shallow workings, which was all we could explore, date back to that short-lived operation as it had petered out by 1857. A revival in 1859 lasted only four years and probably account for the deeper submerged workings.

There are presently two powder-houses. One is located on its northerly shore and is used nightly to lock up a gaggle of quacking ducks; the other, on the southern cliff edge is doorless and offers shelter to young calves. Both powder-houses have thick stone walls and strong corbelled ceilings, structurally they are in excellent condition. The powder house on the southern cliffs has an unusual and puzzling feature: a series arched recesses circle the house on its outside walls. These recesses had been fine plastered and carefully painted to give an impression of windows (Fig 1). This unexpected feature seems akin to hangE An adit to the cliff face and the sea

F A distant shaft surrounded by double barbed wire fence and which appears to be flooded to within thirty feet of the surface.

G The southern powder house

H The main engine shaft and engine house remains. This shaft is also double barbed wired and clogged with builder's rubble.

I The northern powder house D Looking upward to the ceiling one can see a six foot square shaft again back-filled by surface rubble. Both ceiling shafts are no more than eighty feet apart.

ing velvet curtains around the cow house; perhaps the promoters saw a need to present an attractive appearance to entice would-be shareholders.

Between the southern powder house and nearby cliff edge, there are piles of broken stones - all bear jagged edges as if broken by hammer, they may have been rejected in the mine's oregrading process. To the west are signs of waterways and at least two hand-dug sumps of swimming-pool proportions. Perhaps surface water was gathered for the boiler or to grade ore.

On looking over the cliff edge initially, I saw what seemed like a natural fissure in the rocks. Some weeks later three of us returned with a 16-foot ladder, lamps and a camera. With the aid of the ladder we were able, through a short adit (fig. 2). to enter



Figure 4. A mine plan from the Geological Survey of Ireland Historic Mine Records.



Figure 5. An enlargement of the main mine area in Figure 4



GSI section of 1883 was probably based on earlier data. Only the seven fathom lode above sea level was explored. The downward connector to the submerged 20 fathom level appears to be in the western stope but in fact is in the eastern. At the lowest 60 fathom level the company predicted a conjuncture of lodes by 1864 which did not happen.

Figure 6. This

The reader is also referred to illustrations of Crookhaven in Coffey and Morris 2002, A compendium of illustrations and descriptions of some **Irish historic** mine workings from rare, outof-print publications and other sources. Journal of the Mining Heritage Trust of Ireland, 2, 65-75, and also to Critchley and Shaw, this volume.]



Figure 7. The western stope showing adit to the sea (E on Figure 3) on the left. Tony O'Mahony (left) and Michael Barry (right) for scale.



Figure 8. The western stope. Tony and Michael are standing on carefully assembled mine waste.

a large cavern-like opening estimated to be about fifty-feet long and thirty-feet wide in parts. A portion of the "cavern" (presumably a stope) floor dipped under a lake of water forty-feet long and eight-foot wide which was gin-clear and had an average depth of four-feet (Fig. 7). At its eastern end was a submerged timber-framed shaft heading downwards. This is not shown in the section of 1883.

At the western end of the lake was a low aperture which turned into a short passage (Figs. 2,3) and quickly widened out to another cavern complex to the west. A shaft of sunlight blazing across the floor of this second stope (as it must have been) proved to be an adit which extended tunnel-like for seventy feet before emerging into daylight halfway down the cliff face and overlooking the sea beneath. This exit is not shown on the plan of 1863. However, two lodes are shown in the section (Fig. 6) so it is possible that the two stopes worked on each of them. This western stope measures eighty-eight feet in length and varies in width. There is evidence here of the mine waste being carefully stored (fig 8). Contemporary accounts mention the hardness of the rock and this is borne out by the large expanses of ceiling without the support of pillars. This stope also contains a round hole in its ceiling as though it might be a large chimney. This shaft runs upwards until interrupted by a badly decayed timber platform sitting on a few beams spanning the aperture. Its diameter is about six feet. This is what is shown on both plan and section as the western shaft but there was no sign of its extension downwards to the now submerged twenty-fathom level. Possibly what we had seen in the eastern stope was the link downwards.

The other end of the western stope-shaft can be seen on the surface. Settlement has caused back-filled rubble to shrink to a depth of approximately eighteen inches below ground level. I think it quite likely that this capped shaft will collapse in due course as one to the decayed beams used to support planks has already fallen to the floor. At the extreme end of the western



Figure 9. [left] A view

A: piles of broken stones B: Early working not explored C:Low walls

Figure 11. [below] Southern powder house. Note profile of a porch in the masonry



Figure 10. Remains of chimney and walls. The author for scale.



Figure 12. Shaft near a mound of broken stones, filled with rubble to five feet of the top.







Figure 13 [top left] The eastern shaft, flooded. Figure 14 [top right] The remains of chimney and beam wall on northern side of peninsula. Figure 15 [left] A contemporary image of Crookhaven showing the mine engine house in operation [in Coffey and Morris 2002, A compendium of illustrations and descriptions of some Irish historic mine workings from rare, out-ofprint publications and other sources. Journal of the Mining Heritage Trust of Ireland, 2, 65-75]. Figure 16 [below] The northside powder house.



stope a second shaft of square shape has been filled in with surface rubble. A wooden platform appears not to have been used on this occasion as the fill-rubble is piled on the floor at the base of the shaft inside the mine. As before, its presence on the surface is betrayed by shrinkage in the soil which has compacted over time. A Middle Shaft is shown on the plan of 1863 but there was no sign of it or else it is the more easterly of the two shafts on the western stope and the eastern shaft is no longer visible. However, a few hundred yards east of the stopes and in an inland location there is a mine-shaft which seems to be flooded to within twenty feet of the surface. A double layer of barbed wire fencing protects the area. This does not seem to correspond to any of the known workings and may represent an earlier or later trial.

Half way between both powder houses stands the remains of an engine house and a portion of its chimney stack. The pumping shaft is again fortified with a double barbed wire fence and appears to be filled with builders' waste to within perhaps thirty-feet of the surface. The section shows this as going to a sump of 110 fathoms (660 feet) with levels off it at 20, 40 and 60 fathoms (Fig 6). This last was exploratory only and probably reflects the failure to hit a supposed juncture of lodes in the early 1860s.

REFERENCE

D. Cowman and T.A. Reilly. 1988. *The Abandoned Mines of West Carbery*. Geological Survey of Ireland.