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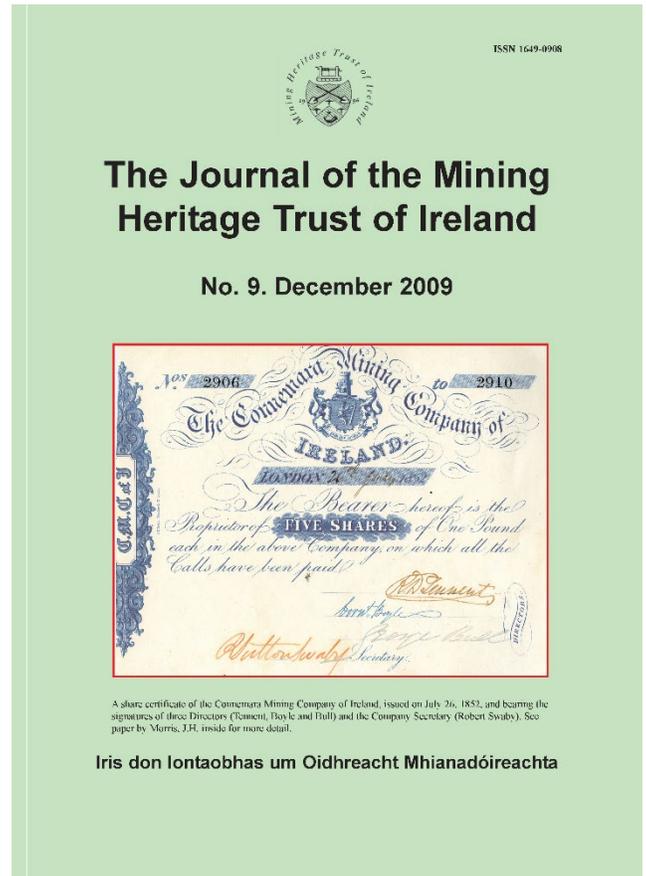
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AN HISTORY OF THE CAHERGLASSAUN SILVER-LEAD MINE, NEAR GORT, CO. GALWAY, WITH A PARTICULAR EMPHASIS UPON THE OPERATIONS OF THE CONNEMARA MINING COMPANY OF IRELAND, 1852 - 1855

by John H. Morris

Abstract: The Caherglassaun silver-lead mine, located near Gort, Co. Galway, is one of a number of small and now obscure mines which were the subject of a short lived bout of speculative mining frenzy in Ireland during the early to mid-1850s. Although the deposit was discovered at some time before 1840, the presently known documented history records only active developments during the 1850s: by a Mr. William Collett, some time MP (Member of Parliament) for Lincoln during the period 1850-1852, when it was predicted that it would turn Gort into a "regular El Dorado"; and a subsequent phase between c. 1852 and 1854 under the management of the English registered "Connemara Mining Company of Ireland" (CMCI). This paper documents the presently known history of the various developments, but focuses principally upon the activities of the CMCI, its corporate and shareholder structure, and upon one Director and prominent shareholder in particular, the Reverend George Bull. *Journal of the Mining Heritage Trust of Ireland*, 9, 2009, 13-26.

INTRODUCTION

The lowlands of the Gort region, Co. Galway intermittently feature prominently in the media, most frequently in connection with severe flooding problems, for example, during late November 2009. The frequency and regularity of such flooding events is not mere happenstance. It reflects a very unusual hydro-geological configuration, from which the local name for one very characteristic component has entered the international geological vocabulary - "turlough" [Irish, meaning "dry lake"].

There are many such ephemeral, or seasonal lakes in the region, and during the summer months, or periods of low water levels, they appear as no more than variable size depressions, albeit marked by a very specialised flora which can withstand periodic inundation. But during winter months, or other periods of high water levels, their character changes profoundly - into lakes bounded either within the natural depressions, or flooding well beyond the normal "lake" boundaries.

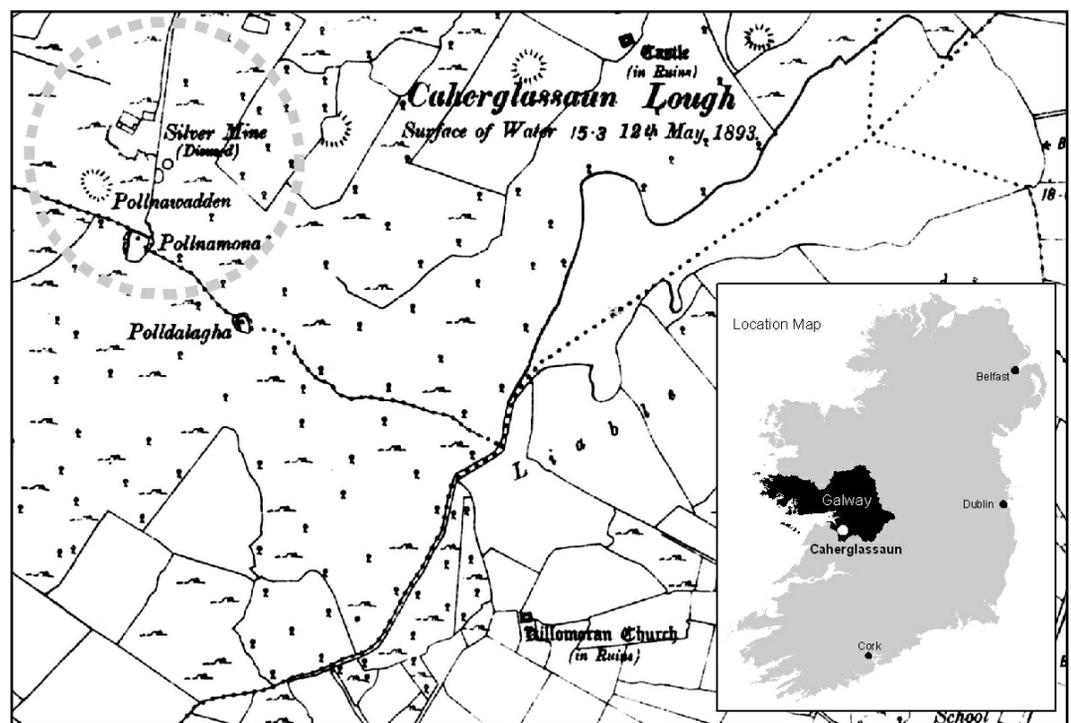


Figure 1. Map showing location of the Connemara Mining Company of Ireland silver-lead mine at Caherglassaun, Co. Galway.

The ephemeral nature of these lakes reflects the particular geological configuration of the lowlands which are underlain by highly permeable and cavernous limestones, bounded to the east by the generally impervious rocks of the Slieve Aughty mountains, and by the Atlantic Ocean to the northwest. Rivers and streams flowing down from the Slieve Aughty uplands enter the lowlands, where they persist for variable distances, before disappearing down "swallow holes" into underground channels through the limestones. These underground channels gradually merge as they approach Ballyvaughan, the location of the principal outfall for the entire drainage system into the Atlantic Ocean. That outfall, however, lies at mid-tide level such that outward drainage into the ocean can only occur at mid- to low tide levels, while, at mid- to high tide levels, the flow directions reverse. As a consequence, not only does fresh water back up into the lower reaches of the system, but parts of it are also tidal.

The hydrological system has sufficient outflow capacity to sustain drainage under normal or low rainfall conditions, but not during periods of high and, particularly, sustained high levels of rainfall. At such times the outflow capacity is exceeded and water backs up through the system, water levels rise in the turloughs and, if volumes are sufficient, flood over their margins onto the surrounding lowlands.

CONNEMARA MINING COMPANY OF IRELAND : COMPANY FORMATION

The Caherglassaun Turlough is located 6 km north-west of Gort and 5 km southeast of Kinvarra in Co. Galway (Figure 1). It consists of a permanent, tidal lake at its core, with a tidal range of 30cm or more. This is surrounded by a low lying depression, marked as "liable to floods" on the map (Figure 1). During times of high water, the entire site may flood to a height of 15m or more, while a series of collapse features act as swallow holes during such flood periods.

The winter season would not be the most propitious time of year in which to promote a mining venture in very close proximity to Caherglassaun, a factor no doubt considered by the promoters of the Connemara Mining Company of Ireland when they chose, in May 1852, to register their company in London and to proceed thereafter to invite English investors to subscribe for shares in the new venture.

Table 1 summarises company formation information, abstracted from surviving company registration documents now held in the Public Records Office, Kew, London. These documents are all date stamped June 30, 1852, by the J.S.C ("Joint Stock Companies") Registry Office, other than subsequent "Deed of Settlement" documents which are date stamped March 29, 1854, as is a list of shareholders. The venture was promoted by James Sutton Swaby, with Cornelius Boyle, the Reverend George Bull and Richard Dillon Tennent serving as first Directors, and with offices initially located at 19, Lombard St Chambers, Clements Lane, London, later moving to 3, Cannon Street, London in 1854. These and other details concerning trustees, bankers, solicitors and auditors are shown in Table 1. The fiscal information also shown in Table 1 is discussed further in connection with presentation and discussion of shareholders (Table 2) in a later section.

Once registered, the Company was then able to proceed to seek to raise capital by promotion of the venture and, to that end, published a prospectus, a copy of which survives in the Archives of the Guildhall Library, London. This undated prospectus (probably 1852) provides documentary evidence of established mining infrastructure on the mine site and waxed lyrical about its prospectivity. It also provides a most revealing example of 19th C mining venture promotion techniques. An introductory section outlines the bountiful resources of the region; a median section provides a glowing description of the mine property; and a concluding section draws comparison with successful ventures elsewhere in Ireland as a basis for postulating potential returns on investment.

The introductory section starts by noting that "*the Connemara district of Galway has long been known to contain large deposits of lead ore*"; "*nearly all the mines of Connemara and Clare can be developed by means of adits or levels*" .. "*at a very moderate depth from the surface*"; that "*water power can, in most instances, be made available for all motive purposes*". It further notes that labour costs are notably cheaper than in "this" (England) country or Scotland. Having established by inference the wealth of resources and opportunities in the region, and, by implication, the relative ease, and low cost of working said resources, it proceeds to note that the purpose of the Company would "*be directed to the efficient working of the silver-lead and copper mine of the Cahirgleisaun (sic), situated near the village of Gort, about 15 miles from Galway*" - a location which is in neither Connemara nor Clare.

The subsequent median section is here reproduced verbatim (other than explanatory notes inserted in parentheses), as this presents the only information specific to the proposed mining venture, in comparison with the overtly promotional nature of the opening and concluding sections.

"The Cahirgleisaun Mine has produced argentiferous lead of the richest quality hitherto discovered in the United Kingdom. A large specimen of the ore, taken from the mine, 12 fathoms (= 72 feet = c.22m) below the surface, and weighing nearly 7cwt ("hundredweight" : 1cwt = 112 pounds = c.51kg), is now being assayed by Messrs. Johnson, of Hatton Garden.

On this mine, a shaft has been sunk on the lode to a depth of 10 fathoms. Large blocks of the finest ore are in sight through the whole breadth of the lode, which is about 2 fathoms broad, between regular walls. There are washing-floors, railways, wagons and the requisite mining appurtenances, with offices, forge, ore-house and other erections. Twenty nine years of the lease are unexpired; the royalty dues are 1-16th; and the area comprises 300 acres.

The promoters are of the opinion that they have secured one of the richest mines in Ireland, combining cheapness of development with facility of transit. The population of these districts is distinguished for its peaceful and industrious character, although enduring extreme poverty."

The somewhat sombre nature of the concluding phrase reflects

CONNEMARA MINING COMPANY OF IRELAND - COMPANY REGISTRATION DATA			
	NAME	DESCRIPTION	REGISTRATION/ SIGNATURE DATE
REGISTRATION			June 30, 1852
Promoter	SWABY, James	"The working all descriptions of mines and digging searching for and obtaining the ores minerals and produce thereof and bringing selling leasing and disposing of the same"	
Directors	BOYLE, Cornelius	Address as per Subscriber/Shareholder Register	
	BULL, George	Address as per Subscriber/Shareholder Register	
	TENNENT, R.D.	40a Arlingon Street, Mornington Crescent, Hampshire Road, Middlesex	
Trustee	SWABY, James Sutton		
Auditor	KINGSTON, John Conway	Director, Industrial and General Life Insurance Company, Waterloo Place, Pall Mall, Westminster	
Bankers	Sir John William Lubbock and Company	Mansion House Street, London	
	Provincial Bank of Ireland	42 Old Broad Street, London 61 William Street, Dublin	
	Commercial Bank of Ireland	Change of Bankers noted in indenture	
Solicitors	TYRELL, PAINE and LAYTON	Guildhall Yard, London	
Secretary	SWABY, Robert Sutton	19 Lombard Street Chambers, Clements Lane, London	
DEED OF SETTLEMENT			March 27, 1854
CAPITAL	DESCRIPTION		VALUE
	Proposed capital at registration		£15,000
	Provision to increase capital		£100,000
	Share denomination	15,000 shares of £1 each	£1
	Borrowing capacity		To 50% of paid up capital
	Amount of capital subscribed or proposed to be subscribed at date of Deed		£5,030
	Signatories to Deed	SWABY, James TENNENT, R.D. BOYLE, C TYRELL, Timothy BULL, George (M.A.) SUTTON, Geo. T.P	
OFFICE	19 Lombard Street Chambers, Clements Lane, London		June 30, 1852
	3, Cannon Street, City of London		March 27, 1854

TABLE 1. Company registration data for the CONNEMARA MINING COMPANY OF IRELAND (CMCI) , abstracted from surviving company registration documents held in the Public Records Office, Kew, London : Folio BT41/162/918.

the reality of the immediate aftermath of the Great Famine (1845 - 1850) and the very numerous "Children's Burial Grounds" just to the north of the mine site and elsewhere in the region, and its tenor contrasts with that of the opening and concluding parts of the section, which emphasises "richness" - of ore samples and the mine itself. Unfortunately no record of the outcome of the analysis of the ore sample has so far been discovered. It is probably reasonable to presume that the description of mine infrastructure is fairly accurate and, if so, it is noteworthy that there is no mention of pumping engines or equipment of any type, especially as it is considered appropriate to list such minor infrastructure as wagons.

There is also a perplexing discrepancy between the depth of the shaft, and the depth from which the ore sample was obtained, the latter 2 fathoms (12 feet, c. 3.6m) below the depth of the shaft. This inconsistency could indicate that at least part of the workings were accessed by way of an internal winze, the bottom of which may have reached a depth of 12 fathoms (72 feet, c.22m) a depth below the water level in the nearby Caherglassaun Turlough (Figure 1. May 1893 = 15.3 feet = 4.6m = 2.5 fathoms above mean sea level). Flooding would consequently have been a continuous problem in all but the very shallowest of the mine workings.

The final section of the prospectus provides potential investors with a tantalising vision of the sort of returns they might receive from their investment:

"It is a singular fact that, notwithstanding the vast mineral wealth of Ireland, it has hitherto attracted a limited portion of English capital. With only two exceptions (the Kenmare and Glenaulin Mining Company) all the existing mining companies have a local management, and are chiefly supported by native capital. Considering the small amount of the capital employed by these companies, the returns have been excessive."

It then instances and records fiscal information for three Irish funded and managed mines then operating in Ireland, the *Wicklow Copper Mining Company*, the *General Mining Company for Ireland*, and the *Mining Company of Ireland*. It states that all of these companies paid significant dividends to their investors, as well as registering significant appreciation in share prices, before noting *"that the return upon the capital to be employed will be equal, at least, to that which has been realized by the most successful of these Local Companies"*. This tantalising prospect is, however, presaged by what any prospective investor should have taken as a salutary warning: *"The Promoters have not made any detailed estimate of the profits that will arise from the working of the mine."*

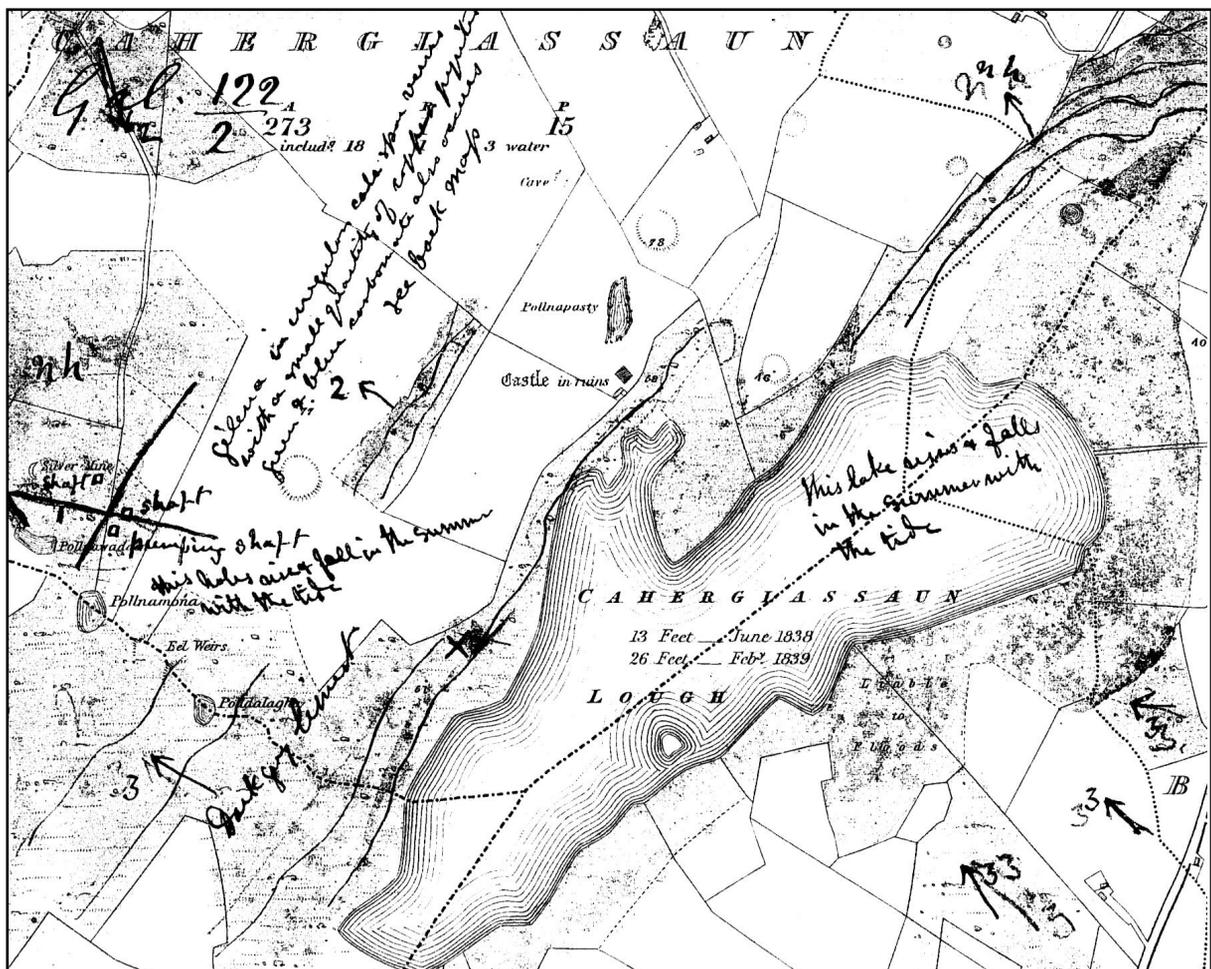


Figure 2. Enlarged portion of Geological Survey of Ireland field sheet, Galway 122/2 by G.H. Kinahan, c. 1862, drawn upon an 1840, first edition Ordnance Survey topographic base map. Note the location of "Silver Mine" engraved upon the base map, just above the most western of the three manuscript "shafts".

DEVELOPMENTS PRIOR TO ACQUISITION BY CONNEMARA MINING COMPANY (1850 - 1852)

The reference in the prospectus to existing mine infrastructure clearly indicates that mining operations had commenced at some time prior to the establishment of the CMCI. Knowledge of the mine and its mineralisation certainly predates 1840, as the mine site is engraved, as a "*Silver Mine*", upon the first edition Ordnance Survey map published in 1840 (Figure 2).

That depiction may well have drawn attention of its existence to a wider audience, and subsequent efforts to develop it further. However, it was not until the March 15, 1850 edition of the *Mining Journal*, that the mine hit the "headlines", wherein, citing the splendidly titled local newspaper, *The Galway Vindicator*, it is noted that a lead mine of rare value had just been discovered at Caherghlissane (sic), causing much excitement in the district. Even at that very early stage, it was stated that it contained a larger amount of silver ore than any of the rich mines in South America, and far exceeding anything in Her Majesty's British domains. Similarly effusive comments are made in a letter from an anonymous, but "*highly respected correspondent*" reprinted verbatim in the *Mining Journal*: that the deposit would transform Gort into a regular El Dorado, with silver seekers as thick as on the banks of the Sacramento, unless the Government seized the silver on behalf of the Crown.

Ebullient comment continued in the next issue of the *Mining Journal* (MJ, March 30, 1850), with the area being touted as "An Irish California", although more sober and tangible information was also provided. The silver, lead and copper discovery, located on property owned by a lady named Blair (but, confusingly, also noted to lie within the estates of Lord Gort and Mr. Gregory of Cool in the same article) was being worked by Mr. William R. Collett, previously M.P. for the City of Lincoln. It was noted that several shafts had been opened, and that silver veins were of the richest character and very close to surface.

Kinahan (1862), notes work undertaken under the supervision of a Captain Thom, which almost certainly alludes to this 1850 - 1851 phase of operations. He notes that pumping had been undertaken by a horse whim, via a shaft which had been sunk south of the engine house to a depth greater than the workings into which they drained. The report notes also that the workings must have been very wet, as water levels in the lakes and holes south of the mine rose and fell with the summer tides (see also Figure 2: such fluctuations were presumably less easily observable during winter flood periods).

Ore raised up to March 1850 was valued at £55/ton, and many hundreds of pounds (weight) of ore had been exported, all of which had been obtained from relatively shallow workings. About 200 men were employed, at a rate of 1/- (1 shilling) per day, as well as women and boys who were paid 8d per day. An unspecified number of experienced Cornish miners had been recruited also, both to direct the mining activities as well as to train local men (presumably in mining techniques) - for which they were stated to be very popular.

Apart from a passing reference to the display of a large silver-lead ore sample at the Dublin Exhibition in 1851 (Kinahan, 1886), further published comment, if any, on subsequent developments between 1850 and formation of the CMCI in 1852 has yet to be ascertained.

CMCI OPERATIONS (1853 - 1855)

Very little published comment has, so far, been discovered which describes the activities of the CMCI during the period 1853 to 1855 or, indeed, upon its takeover of the preceding operations, which most likely occurred about mid-1852 subsequent to its formation in May of that year.

Lodes exposed in the "Engine Shaft" at Caherghlissane (sic) were reported in September 1852 to be most encouraging by the correspondent to the *Mining Journal*, Pierre J. Foley (MJ, Sept. 1852). An engine was being erected and plans were in hand to sink the shaft a further 4 fathoms. This description appears to correspond with Kinahan's (1862) manuscript note that a 4 horse power engine had been erected for pumping purposes, with an associated shaft north of the engine house, as well as an incline shaft (stated "*to be now collapsed*" in the report). All of this work had been undertaken under the supervision of a Captain Foley, presumably Pierre J. Foley, subsequent to earlier work undertaken under the supervision of Captain Thom, as noted above.

The mines are reported subsequently, in January 1853, to be "*doing well*" (MJ, Jan. 1853) and raising ore worth £180 per ton, although ominously, but not very surprisingly, it is noted that the deep workings "*remain flooded*". By May that year the value of the silver-lead ore had dropped to £80 per ton, although a large quantity had been raised, and the mine was "*producing an average supply daily*" (MJ, May 1853)

An apparent news hiatus then follows until May 1854, when further reports by P(Pierre?)J. Foley under the title "Connemara Mines" appear in three successive issues of the *Mining Journal*, dated May 13, May 20 and May 27. It is reasonable to surmise that these articles refer to the Caherghlissane mine on account of both the title of the articles as well as reference to workings within the mine, named "Tennent's Venture", presumed to be so named after one of the Company Directors (Richard Dillon Tennent: Tables 1 and 2). References in various MJ articles note the existence of at least three named lodes upon which mine workings were developed at various depths: Tennent's, Job's and Tom's lodes.

The May 13, 1854 report describes developments, presumed to be drift work, on the NE and SW working faces on the "15": the latter figure is assumed to refer to a level at a depth of 15 fathoms. Both the NE and SW faces had each been set to 6 men at a rate of £9/fathom, to the NE following a beautiful looking lode of spar and gossan with spots of lead, with an expectation that the intersection of the three lodes would be encountered in about a further 4 fathoms. By comparison, work on the SW drive was merely "encouraging", with spots of lead, and shaft sinking to the 24 (fathom level) from the latter end had been suspended.

A drive on one of the three lodes, "Tom's", was not very productive, even though the lode was 3 feet wide. In comparison, work on what is presumed to be one of the other two lodes, "Tennent's Venture" looked far more encouraging. Tributaries were at work on a regular, west dipping lode in the forebreasts of both the N and S faces. These were following, in both directions, a leader of pure silver, about 1 inch wide and 3 feet high, which, Foley opined, would pay the cost of the mine, should it continue - of which he had no doubt. About a half ton of ore had been raised from this work, consisting of about 2cwts of "solids" (waste?) and 8cwts of "stamps work" (ore?). A reference to "*engine and machinery working well*" presumably refers, at least in part, to the 4 horse power pumping engine noted above.

The May 20, 1854 report provides similar, quite detailed information. The Tennent's Venture on the 25 (fathom level) was producing lead ore worth £50 per ton, and it was proposed that this part of the workings would be kept dry by a cross cut from the 24 fathom level, when sunk (Note: it is not at all clear how a level above the workings could be used to drain the lower level, unless the levels were extremely variable in actual, and therefore relative depths along their lengths). A NW drive on "Job's" lode on the 14 (fathom level) was looking more "congenial", with about 3.5 fathoms further to the projected intersection of the three lodes. On the 13 (fathom level), SW, a rich arsenic-lead lode was being developed, albeit with a further 9 feet to progress before entering fully into the lode. A cross cut was being driven west from this level, and opposite it four men had been set to cut a "plat" from which a shaft to the 24 (fathom level) would be sunk. The report notes that the men were suffering from swollen feet as a consequence of standing in arsenic rich water.

The final report in the series of three, dated May 27, 1854, is much shorter than either of the foregoing. It notes that the ore on the Tennent's Venture was worth £68 per ton, per fathom; that ore on the 13 SW was worth £30 per ton; and that calamine and a rich lead were being worked on the 14. It notes also that the "plat" had been set for shaft sinking on the next survey when stoping would then commence on various ore bodies.

These three reports follow a somewhat familiar pattern, noted by Cowman and Reilly (1988) in their analysis of "Bubble Companies" which proliferated during the period 1850 - 1854. Those authors document a fascinating insight into the anatomy of such companies, their formation, promotion, capital raising and their inevitable and frequently acrimonious collapse. There is little doubt that the CMCI is yet another, but previously undocumented example of such dubious enterprises, not least because Pierre J. Foley was involved in both this company and four other "Bubble Companies" described by Cowman and Reilly (1988: see their Table 5, p. 61, and discussion therein). In such company reports, it is not at all uncommon to describe developments in glowing terms, using appropriate superlatives (e.g. *beautiful looking lode; rich .. lode; rich lead*) and, very commonly, to project desirable targets or sought intersections etc to a distance just beyond the present workings - a device used liberally in the accounts above. It is also not uncommon to switch the focus of comment or desired/projected outcome,

if the original targets did not match expectations. In the above reports what could be an example of this practice is presented by the ebullient description of the rich silver leader being followed on the Tennent's Venture, only to switch to a focus on lead only in the very next report (NB. This example is chosen with caution, as the first report does not state the level on which the silver leader was being followed). Such artifices are all designed to encourage and maintain support for the venture: the confidence of shareholders, Directors, stock exchange investors and, not least, confidence in quoted share prices.

Whether or not the shaft sinking and stoping noted in the May 27, 1854 report ever commenced, and indeed what happened next during the second half of 1854 is presently unknown. However, it may be surmised from a report on "Irish Mine Shares" in the same, May 27th, 1854 edition that work at the mine may have ceased by that date, and this notwithstanding Foley's comments elsewhere in the same issue. The share report notes that shares were quoted at a 3/8 to 5/8 discount on their nominal value (£1), placing a notional value of £8,000 on the enterprise, but the article then goes on to state that this, and other such values, were considered artificial as the shares were effectively worthless, before alluding to "schemes" and "schemers".

The last reports on CMCI appear in two issues of the *Mining Journal* published in 1855. In the January 20 edition, it is noted that the £1 shares in the Company were then quoted at 10/-, but in the opinion of the writer it made no difference if the shares had been trading at £10 rather than 10/- as: "*this is one of the schemes of the days that are past, it is hoped never to return, or the like of them.*"

This is followed by a final, brief article in November that year, in which, and following the pattern of so many other "Bubble Companies", the final death throes were played out in legal proceedings. In this instance, the article notes that legal proceedings had been initiated by Mr. Tyrrell, plaintiff, to seek judgement of £129 from four shareholders, which, as the Company had been established under the provisions of the Joint Stock Registration Act, permitted such action upon failure to get satisfaction from the Company. It may be presumed that the Mr. Tyrrell was one of the partners in the firm Tyrell, Paine and Layton which had been acting as solicitors to the Company at the time of its establishment (Table 1). The shareholders are not identified but might reasonably be presumed to be the three Directors, Boyle, Bull and Tennent, and the promoter and trustee, James Swaby.

This note seemingly marks the demise of the CMCI, for which other definitive evidence is lacking, such as winding up/dissolution records, and while the outcome of the legal action is presently unknown, ownership of the mine, under the name Cahenglassaur (sic), had, by 1862, passed to the very well known mining company entrepreneur F.M.S. Taylor [Cole, 1922, citing Mineral Statistics: Lists of Mines]. This ownership continued to 1865, although it is not known at present what, if any, activities were undertaken during that period. Somewhat confusingly, Kinahan (1865) notes that the mine was owned by Mr. H. Hewson, with Captain Thom serving as Agent. Cole

(1922) notes that the mine was worked about 1861, but was very wet, since the workings lay below sea level. He further notes that the ore (bournonite, with traces of copper) occurred in "bunches" within calcite, and lacked any definite vein structure.

Kinahan (1865) provides a more substantial account of the workings, in addition to annotations and manuscript notes on the face and reverse of the 1862 Geological Survey of Ireland field sheet reproduced in Figure 2. He notes, in his 1865 account, that the mine had not been worked for about 4 years, depicts two lode zone trends, ESE and NE, and the location of a pumping and two other shafts (Figure 2). His full description is as follows:

"Here we find an irregular spar lode that bears about west 100 north, and underlies to the south. At the west, a cross-course seems to strike from it towards the SE, which to the north of the lode breaks into strings and veins between the beds (lay in lay). Towards the east there is another cross course that bears nearly NE. At the junction of these courses and the main lode the ore forms in bunches, one that was raised being reported to have been about 6 tons in weight. The ore occurs in bunches and small strings, no regular vein appearing. It was primarily galeena, although a small quantity of copper was got at the junction of the east cross- course and main lode, and many of the stones on the banks are stained with the green and blue carbonates. That rare mineral, bournonite, an ore of antimony was found here in small quantities. The mine, when examined (June 1862) had been unworked for about a year. The old workings are lower than the sea level and consequently very wet, as the course of the previously mentioned subterranean river runs close to them."

There are records of a Connemara Mining Co Ltd housed in the archives of the Public Records Office, Kew, London (BT31/20733/122598), but it is not clear what relationship, if any other than a very similar but not identical name, exists between the entities. This later venture was established with an objective to pursue mining and mineral ventures in Rhodesia and other parts of Africa, and it was wound up on March 17, 1924.

A Connemara Mining Company of Ireland Ltd, of 162 Clontarf Road, Dublin 3, was incorporated in Ireland on March 30, 2000, and registered at the Companies Office, Dublin with the registration number E0324361. It is stressed that this CMCI, which at time of writing is listed on the London Stock Exchange (AIM Market), is not in any way connected with the CMCI, the subject of this article.

CMCI : PROMOTERS AND SHAREHOLDERS

Mention has been made previously that the CMCI was promoted by James Sutton Swaby, and he along with the three Directors also named previously feature amongst the list of subscribers to the formation of the company as well as the list of shareholders.

The list of subscribers, dated February 3, 1853, provides the names, occupation, places of business and places of residence

of 65 subscribers. With very few exceptions, all the subscribers lived and/or worked in London, most appearing to be connected directly or indirectly with the City, Stock Exchange or Bank of England, though one names the "Jamaica Coffee House" as his place of business. The list of 65 subscribers is a remarkable number as normally subscriber lists would be far less, commonly not more than 15 or so. Many of those listed in the subsequent shareholder list feature amongst the subscribers, although there is not total conformance between the lists, which suggests that many potential investors may have reconsidered committing to the venture financially: perhaps some of them had reflected long and hard over the cautionary note towards the end of the Prospectus.

The shareholder list, dated March 27, 1854, is reproduced essentially verbatim in Table 2, other than omission of one column under which it was recorded whether or not shareholders had paid their deposits on their allotted shares: all had done so as it was a condition noted in the prospectus that such deposits, for the full value of each share (£1), had to be paid on allotment. This implies that the maximum capital raised by issue of shares amounted to £5,030, well short of the nominal £15,000 capitalisation of the company, and even more so from the provision to raise it to £100,000 (Table 1). But even that potential total has to be treated with caution as it cannot be assumed that the Promoter, Directors or connected parties subscribed the value of the shares allotted to them: they could, and most probably were issued to them as fully paid. The total value of such shares, based on their allotments (Table 2 : Boyle, Bull, James Swaby, Robert Swaby, Tennent, and probably Tyrrell, the Company Solicitor), amounts to £4050, leaving a potential total of only £980 raised from the initial list of investors by March 1854. Even allowing for the greater value of the £ Sterling in 1853, this represents a very small working capital, and at least part of this amount was most likely used to acquire the interests of the previous operator, by then the late Mr. W.R. Collett, M.P., rather than by issue of shares, as he does not feature amongst the list of shareholders.

Original share certificates of the CMCI are offered for sale quite frequently through various auction houses and "scripophily" dealers. The author has several in his possession, one of which is illustrated in Figure 3. Each of these certificates bears an unique share registration number, which can be matched against the numbers allotted to investors in the shareholder list (Table 2). The Certificate illustrated, and indeed all others in the author's possession as well as those observed for sale over the last 15 years or so, all, with one exception, derive from the batch of 1,000 shares allotted to James Sutton Swaby, Trustee and promoter of the venture. All certificates bear the same date of issue, July 26, 1852.

The exception is a single certificate bearing the number sequence 5121-5125, also dated July 26, 1852, which appeared for sale in a German auction house list in 2001. This number sequence lies outside the range shown in the March 27, 1854 shareholder list, which terminates at share number 5030 (Table 2). The existence of this certificate, and any others bearing certificate numbers higher than 5030 which may yet come to light, suggests that the Company continued to sell shares to raise fur-

CONNEMARA MINING COMPANY OF IRELAND REGISTER OF SHAREHOLDERS : March 27, 1854					
Name	Profession	Place of Residence	Share Number(s)	Aggregate	Date of Signature
BOYLE, Cornelius	Gentleman	Highgate Rise, Middlesex	1 - 1000	1000	March 4, 1853
BULL, Reverend George	Clerk	Dorney Vicarage, near Windsor	1001 - 1500	500	March 8, 1853
HARDY, Campbell	Gentleman	17 Sutton Place, Hackney, Middlesex	1501 - 1525	25	
HARDY, George	Gentleman	18 Rotherfield Street, Islington, Middlesex	1526 - 1545	20	
JOSEPHS, Edward	Gentleman	13 Upper Smith Street, Northampton Street, Clerkenwell	1546 - 1560	15	
LOW, David	Merchant	6 Nicholas Lane, Lombard Street	1561 - 1589	20	
LOWNDES, William	Gentleman	The Bury, Chesham, Bucks	1581 - 1600	20	
NEWMAN, John C	Gentleman	10 Warnford Court, Throgmorton Street, City	1601 - 1620	20	
PIDCOCK, John H	Gentleman	9, Devonshire Street, Hyde Park	1621 - 1820	200	
PITMAN, John	Gentleman	22 Royal Exchange, London	1821 - 1870	50	
PRYNANT, John	Gentleman	67 Lombard Street, City	1871 - 1885	15	
ROGERS, Edward	Gentleman	10 Wavenford Court, Throgmorton Street, City	1886 - 1900	15	
SIMONS, Charles Marshall	Gentleman	Wellington Place, St Johns Wood, Middlesex	1901 - 1930	30	
SUTTON, George Frederick Prince	Solicitor	6 Basinghall Street, City	2931 - 3930	1000	May 13, 1853
SWABY, James	Gentleman	23 Earls Terrace, Kensington, Middlesex	1931 - 2930	1000	March 4, 1853
TENNENT, Richard Dillon	Gentleman	15 Hamilton Place, New Road	3931 - 4180	250	March 4, 1853
TYRRELL, Timothy	Gentleman	Guildhall Yard, London	4181 - 4480	300	March 4, 1853
WESTON, Henry	Gentleman	Love Lane, East Cheap	4481 - 4580	100	
WYLLIE, Sidney A	Gentleman	10 St. James Square, Nottinghill, Middlesex	4581 - 4780	200	
WHITEHEAD, John	Gentleman	2 Royal Exchange, London	4781 - 5030	250	
TOTAL shares issued				5030	

TABLE 2. Lists of shareholders in the CONNEMARA MINING COMPANY OF IRELAND, abstracted from surviving company registration documents held in the Public Records Office, Kew, London : Folio BT41/162/918.



Figure 3. A share certificate of the Connemara Mining Company of Ireland, issued on July 26, 1852, and bearing the signatures of three Directors (Tennent, Boyle and Bull) and the Company Secretary (Robert Swaby). This certificate formed part of the allotment issued to James Swaby.

ther capital after that date. It is conceivable that such sales may have been recorded in later shareholder lists which no longer survive. It is unknown how far into 1854 such sales may have continued, although it is highly unlikely that CMCI was able to sell many, if any such shares after the acerbic comments made about its share value, and allusions to "schemes" and "schemers" in the MJ issue of May 27th that year. It is consequently likely that any such sales were limited to the period late March to late- May 1854, the very same period during which Pierre J. Foley contributed articles on CMCI to three consecutive issues of the MJ. These, following upon a year of silence, are all couched in very prospective and encouraging tones, to the extent that they almost certainly formed part of an orchestrated capital raising promotional effort by the company.

It is likely that either or both lists of subscribers and shareholders contain the names of individuals well known and respected in their place and time, although neither list bequeaths to posterity the name of any individual of note in later times. However, one name and associated profession is uniquely distinct from the otherwise very repetitive list of Gentlemen, Esquires and occasional Merchants, Solicitors, Stockbrokers and the like: that individual is the Reverend George Bull, profession "Clerk" (= Clergyman), with an address at Dorney Vicarage, Windsor, Berkshire.

REVEREND GEORGE BULL

Who was the Reverend George Bull? How did a Clergyman come not just to be associated with this mining venture, and indeed one other promoted by James Swaby (*The Glenaulin and Carivilleen Mining Company of Ireland*), but also to be a Director of both Companies?

Dorney Vicarage still exists, albeit it now reincarnated to serve

as a residential youth centre supported by Eton College (www.etonorney.org.uk). But in the 19th century it is reasonable to assume that it still served as the residence of the Vicar of St. James the Less, the Parish Church of Dorney. The web site of that Church (<http://www.stjohnstjamesed.org.uk/index.html>) very helpfully provides a roll of past Rectors and Vicars, beginning in 1265 and extending up to the present day. The Reverend George Bull is neither listed in that roll, nor is he recorded in any form of adjunct capacity, as a curate for example. Instead the incumbent during the critical period 1842 - 1856 is given as Henry Palmer, although, curiously, neither he nor George Bull are listed as residents in Dorney in the 1851 Census.

To add to further confusion, there were at least three clergymen named George Bull in service during the early/mid 1800s, two of whom are listed in Crockford's Clerical Directory, the definitive register of Anglican clergymen from 1858 onward:

- Reverend George Stringer Bull (who earned the sobriquet the "Ten Hour's Parson" to reflect his sustained national campaign to have children's working hours in factories reduced from fourteen to ten hours per day: Gill, 1963), Bradford and Birmingham (1799 - 1865);
- The Very Reverend George Bull, Dean of Connor, Co. Antrim (c.1813 - 1886);
- and the Rev. George T(L?)ippett Bull, Vicar of Treslothan, Camborne, Cornwall from 1846 onward (c.1817? -?).

Circumstantial evidence could focus attention upon either George T(L?). Bull or George S. Bull to be the CMCI George Bull: the former simply on account of his service in Cornwall and consequent likely familiarity with mining (especially if he is the George Bull, clergyman, listed in the 1841 census return for Bodmin), and the latter on account of a similarity in handwriting style. A sample of George S. Bull's handwriting, con-

tained in a letter which he wrote in 1854 and reproduced in part by Gill (1963), bears a passing similarity to the signature of George Bull on various CMCI documents (for example on the share certificate illustrated in Figure 3).

Such evidence is all, however, completely misleading, as Leslie (1993; undated) states unequivocally that the (Very) Reverend George Bull, Dean of Connor, was Vicar of Dorney between 1846 and 1855. He assumed the role of Dean of Connor, and was formally installed in that capacity in September 1855, through an exchange of appointments with John Chaine, who continued to serve in Dorney up to 1858. The following biographical information is all summarised from Leslie (1993; undated).

George Bull was born c. 1813, son of William B. Bull, a solicitor. Nothing is recorded concerning the early years of his life, including his secondary education, but upon completion of the latter he went on to study at Corpus Christi College, Cambridge from which he graduated with a B.A. in 1837, an M.A. in 1840, and a D.D. in 1860. After his period of service in Dorney between 1846 and 1855, he served as Dean of Connor from 1855 until 1886, as well as Rector of Carrickfergus (Church of Ireland), Co. Antrim between 1870 and 1886. He married Anne, daughter of Peter Kirk, J.P., of Thornfield, Co. Antrim and M.P. for Carrickfergus between 1835 and 1841, in Carrickferus Church on June 18, 1857. They had one son, George Edmondstone, born on Sept. 25, 1858. That George changed his name by Royal Licence to Kirk and married twice during his lifetime: in 1887 to his first wife, Ethel who died two years after their marriage; and in 1893 to his second wife Agnes, with whom he had one child, a daughter. He died in March 1909. Anne, wife of George, died on Nov. 16, 1881 and George died, aged 73, at Thornfield, Carrickfergus on March 24, 1886.

The Very Reverend George Bull appears to have been a man of some personal means. He is listed in "Griffith's Valuation" for Co. Antrim (1861) as the tenant of land at White Abbey and Forthill, and a house, with gate lodge and attached lands at Redhall, as well as the landlord of two smaller residences, also in Redhall [<http://www.askaboutireland.ie/griffith-valuation/index>]. At some time during the 1860s, he occupied a large detached, 5 bedroom house at 6a, York Avenue, Whitehead, Co. Antrim, which became and is still to this day known as the "Dean's House" [<http://www.propertynews.com/property/houses-for-sale/Whitehead/WHITEHEAD/6a-York-Avenue/HCCCHCC0713>]. He also owned numerous commercial and residential properties in the Clerkenwell district, London, as evidenced by various legal documents lodged by Stockton Sons and Fortune, Solicitors with the London Metropolitan Archives and indexed in the PRO, Kew, London at: <http://www.nationalarchives.gov.uk/a2a/records.aspx?cat=074-acc1423&cid=1-1-2#1-1-2>

These archive records note a number of property transactions undertaken by the V. Rev. Bull at various dates between 1851 and 1861. These include, for example:

- 1856, Jan. 7: Assignment of leasehold premises on St. John St., Clerkenwell for £350

- 1861 : Dec. 18: £250 mortgage taken out on property on St. John St., Clerkenwell

- 1861 : December : purchased a number of commercial and residential properties on Ann, William, Margaret and Spring Streets and Wilmington Place, Clerkenwell for £1200.

The 1861 mortgage record is curious and out of place with his other transactions in London, but suggests that he needed a significant amount of capital at what may have been quite short notice, given that he was also purchasing properties at the same time. There are various possibilities, such as matched transactions in the acquisition of properties in Clerkenwell, or the need for capital to acquire or build the "Dean's House" in White Abbey, but there is another intriguing possibility worthy of further research: it is possible that his need for capital may have been related to the final outcome of the legal action initiated by Mr. Tyrrell against unnamed CMCI shareholders in November 1855.

While these records provide a tantalisingly incomplete insight into various aspects of George Bull's life and property interests, the central question still remains unanswered: how and under what circumstances did he become associated with the *Connemara Mining Company of Ireland* and its sister company, the *Glenaulin and Carvilleen Mining Company of Ireland*? Unfortunately it is not possible to answer that question definitively at present, although various surmises may be made to serve as hypotheses to test by further research. It is fairly clear that George Bull enjoyed a fairly privileged and financially comfortable background. Through that, especially his father's legal contacts, his secondary education, and subsequent education in Cambridge, it is probable that he became acquainted and developed friendships with other similarly advantaged individuals, all of whom may have contributed to the network of contacts through which his business interests evolved over time.

It is equally possible that further business contacts evolved out of his early years in Dorney during the mid 1840s, and the later evidence of property interests in Clerkenwell during the 1850s and 1860s, attest to his retention of business interests in London, and this notwithstanding his residence in Co. Antrim from 1855 onward. In that regard it is curious that he chose(?) to occupy a home and lands as a tenant, rather than as an owner, when it is reasonably clear that either in his own right, or through family money, he could well have purchased his own residence. Perhaps this signals that he saw the Co. Antrim appointment as no more than a temporary assignment in expectation of further advancement, which may never have materialised.

Much may be speculated, but somewhere amongst this likely very wide circle of contacts lies the key link to CMCI, most likely to James Sutton Swaby, its promoter, in particular, and through him to his presumed relative (brother?), Robert Sutton Swaby, Solicitor and Company Secretary: the legal connections could yet prove a rich seam for future research.

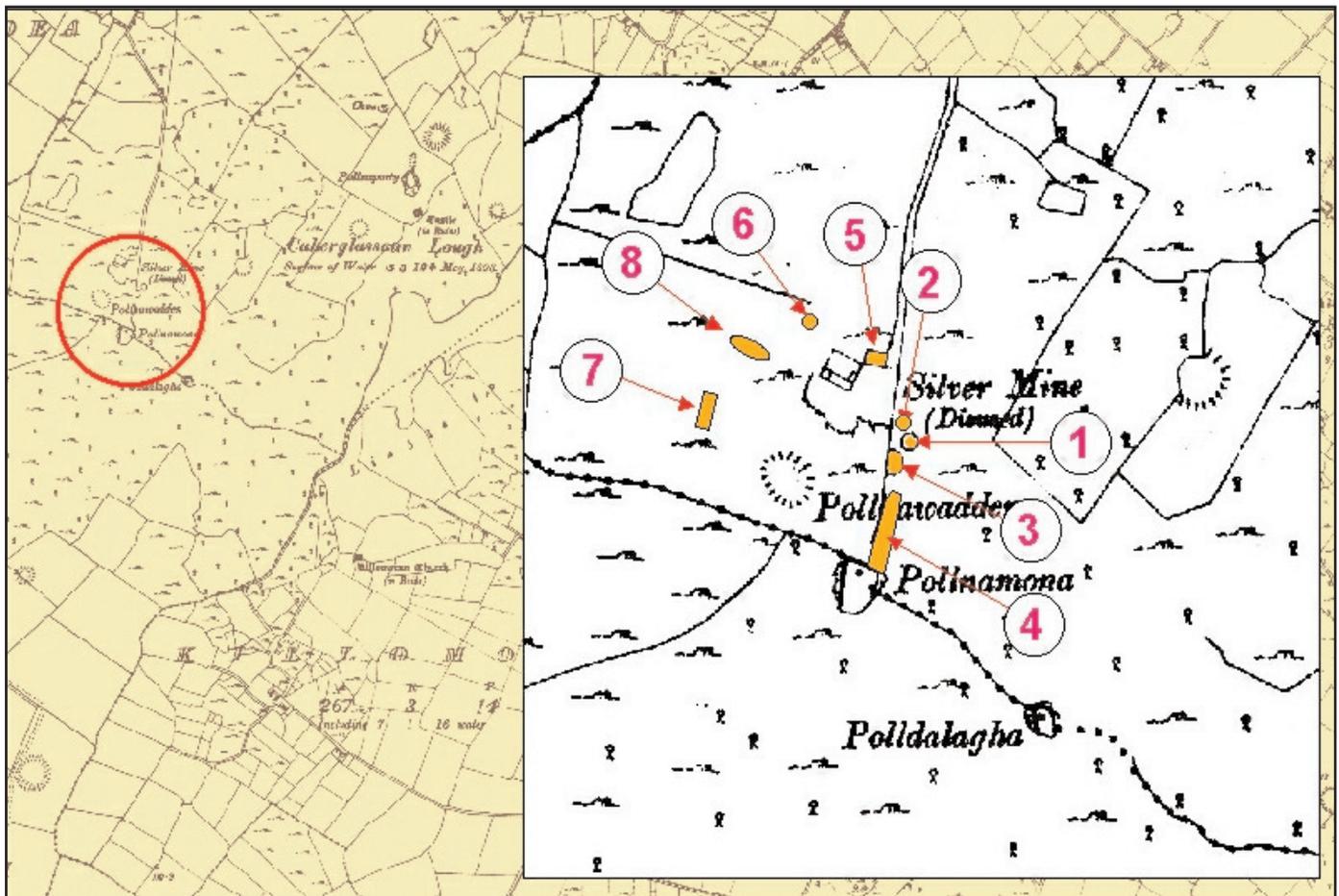


Figure 4. Detail map of the Caherglassaun Silver Mine site, Co. Galway, enlarged from the OS 6 inch to 1 mile map, published in 1922. Numbered features are described and illustrated in the text: these include features engraved on the base map, as well as others encountered during the course of the site survey in 2004.

EXTANT REMAINS

The 1922 edition of the OS 6 inch to 1 mile map records and locates the mine site as a disused "Silver Mine", about 400m due west of Caherglassaun Lough (Figures 1 and 4). The map shows, beneath the letter "S" of Silver, a circular feature, presumed to be a shaft; a prominent "D" shaped enclosure; and just to the west, the outlines of several small buildings. Other features, just to the west of the buildings and not shown on the



Figure 5. Back filled depression marking the presumed site of what may have been the "Engine Shaft".

map, were recorded by the author during a site survey undertaken in August 2004. Two "swallow holes" adjoin the site, Pollnacadder, and Pollnamona at the south end of the rectangular feature shown in Figure 4.

Feature 1. This very prominent circular feature is presumed to be the site of a shaft, perhaps that of the "Engine Shaft" mentioned briefly in the report of September 1852. It might also accord with the 10 fathom deep shaft from which was obtained the ore specimen described in the prospectus. Its location coincides with that of the "pumping shaft", one of the three shafts shown on Kinahan's 1862 field sheet and which, with feature 4, lies parallel to the course of the NE trending lode defined by Kinahan (Figure 4).

The site was, in 2004, marked by a prominent depression back filled almost to ground level with hay and other materials (Figure 5). If this is indeed the "Engine/Pumping Shaft", then there is now no sign whatsoever of where the engine house may have been located, other than that it may have been located within a quite pronounced flat area about 17m up slope to the north (Figure 6; but see also discussion of Feature 5 below). Not only is this in the opposite direction relative to the shaft, as noted in contemporaneous reports, there is no vestige of any wall foundation or even loose masonry blocks in the latter area, such that this supposition is very debatable.



Figure 6. View looking south towards Pollnamona (down slope beyond, and behind bushes in centre background) across the putative site of the Engine House and "Engine Shaft": the position of the latter, just in front of the bushes, marked by the author's youngest son, then aged 12, with one of his younger cousins standing closer to the camera at the possible site of the Engine House.



Figure 7. Wrought iron fence delimiting part of the "D" shaped enclosure.



Figure 8. Presumed trench excavation along the course of the NE trending lode depicted by Kinahan (1862: Fig. 2).

Feature 2. There is another circular depression about 10m west of the putative "Engine Shaft" which might well mark the location of another shaft. This depression measures about 1.5 to 2m in diameter and is about 1.5m deep.

Feature 3. The purpose and function of the "D" shaped enclosure is unknown as it was so heavily overgrown that it could not be entered. Part of it is delimited by a length of quite fine wrought iron fence about 1m high (Figure 7).

Feature 4. The elongate, c.3 to 4m deep rectangular shaped feature is most reasonably interpreted as a trench excavation along a lode zone, although it is now heavily overgrown (Figure 8). The trench orientation accords very well with that of the NE trending lode shown on Kinahan's field sheet, although he hand drew the course of the lode slightly to the west of its location on the ground (Figures 2 and 4). Its lower end is presumed to pass straight into Pollnamona, which was water filled at the time of the survey.

Feature 5. A moderately well preserved section of gable wall, about 7m long, is visible at this location (Figure 9). It is delimited at both east (left) and west (right) ends by two remnant sections of wall constructed of very well dressed masonry blocks, for convenience termed Pillar A (east; about 0.8m thick) and Pillar B (west) for ease of distinction. These are not tied into the intervening length of wall and their construction quality contrasts very markedly with the comparatively crude construction of the intervening, infill section of wall.

The construction quality of both pillars, along with their thickness, might indicate that one or both may once have formed part of load bearing walls, perhaps of the Engine House noted in various reports of the time. However, if part of one building, it is strange that they are not tied together by the intervening section of wall. Instead, both pillars appear to face away from the infilled section as if they each formed part of two separate buildings. Pillar B (Figure 9) contains a section of brickwork in its west face which may have formed part of a fire breast, while a very deep trench, orientated perpendicular to the visible length of the gable wall lies immediately behind Pillar A. The length and depth of this slot suggests that it might have accommodated a flywheel - perhaps of the 4 horse power pumping engine.

Feature 6. A circular wall about 0.7m high and 5m in diameter (Figure 10), lies just west of the range of small buildings shown on the OS map, but of which no trace now remains (Figure 4). It is tempting to speculate that this may have formed the base of a chimney, although it might equally mark the location of yet another shaft, as its location accords well with the most western of the three shafts noted by Kinahan (1862) just to the east. The now vanished range of small buildings may have formed part of the offices, forge, ore-house etc noted in the CMCI prospectus. Extant remains of what appears to be the foundation level ruins of another two small buildings are located a little further west again (**Feature 7**)

Feature 8. This comprises the only visible, and accessible mine workings, albeit consisting of only a shallow pit with several small, blind end galleries leading off it. The lode structure



Figure 9. Building gable wall section, infilling between two remnant wall sections constructed of very finely dressed limestone: Pillar A, on the left, east side; Pillar B on the right, west side, and partially obscured by bushes.



Figure 10. Chimney or shaft collar?

is, however, quite well defined in these workings, varying from quite regular, tabular veins, to highly irregular stockwork form mineralisation (Figure 11). The lode is heavily iron stained and while calcite debris is common in the vicinity, and especially in the nearby trackway, no visible metallic mineralisation was noted.

ADDENDUM

This paper is very much a presentation of research "in progress", as there are many strands which still remain to be explored in much greater detail. These include, for example, further accounts of developments during various periods in all years between 1850 and 1854, as complete copies of neither the *Mining Journal* nor the *Galway Vindicator* for those years were available at the time of writing. It is now certain that the CMCI George Bull may be identified with the Very Rev. George Bull, Dean of Connor. However, the discrepancy between Leslie's (1993) record of him as Vicar of Dorney, between 1846 and 1855 and the Parish Roll listing of Henry Palmer in that capacity during that period is perplexing, as is the so far unsuccessful effort to discover more details about his parentage, early life



Figure 11. Lode structures exposed in shallow workings.

and career, despite some promising leads. These include, for example, listing of a George Bull (George T. Bull?), Clergyman, aged 24, in the 1841 Census returns for Bodmin, Cornwall, as well as an obituary notice for a William Bull, Solicitor, of Aylesbury, Buckinghamshire, who died in March 1834.

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