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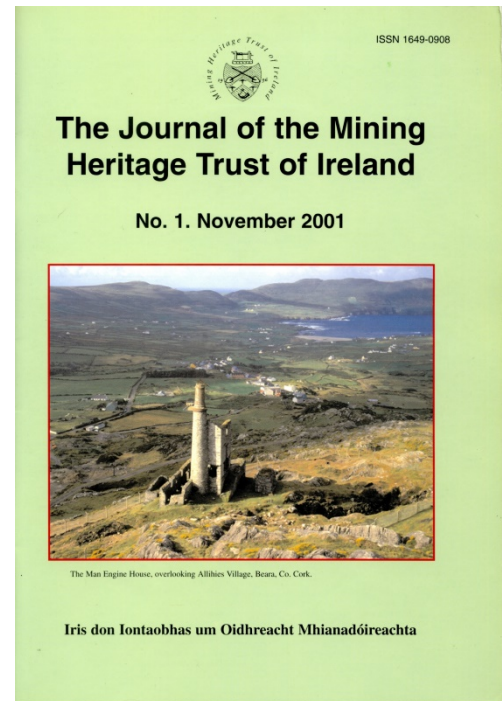
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THE MINING BOOM OF 1824-'25: PART 1



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Abstract: A complex chemistry of economic forces brought about an investment boom in Ireland's mineral potential in 1824-'25. Four major companies were formed giving rise to competition for sites. The one that emerged most successful was the Mining Company of Ireland. *Journal of the Mining Heritage Trust of Ireland*, 1, 2001, 49-54.

INTRODUCTION

Up to, 1824 there had been only sporadic mining activity in Ireland, all of it (as far as is known) by private arrangement among small groups of shareholders without any call for public investment. In 1824-5 in Ireland there were set up four public companies amidst an atmosphere of "boundless speculation" in Irish mines. This article sets out to look at the atmosphere under which this new economic phenomenon developed, its more immediate manifestations and to summarise its sequels. The companies were -

- The Hibernian Mining Company
- The Mining Company of Ireland
- The Royal Hibernian Mining Company
- The Imperial Mining Company.

The reports on the origin of the first of these companies reveals much of the stimulus that lay behind these initiatives while details of the second reveal something of the margins of success or failure of such mining enterprises. The far scantier detail that remains of the other two seems to support the general conclusions.

THE SOCIAL AND ECONOMIC CLIMATE 1822-'24.

The formal origins of the Hibernian Mining Company date to April 1822 when a meeting of English Hibernophiles was called in the London Tavern, "to consider a general subscription for some immediate assistance to the extreme temporary distress of some of the southern provinces of Ireland". Even before the meeting started "several thousand pounds" had been subscribed, with £200 each coming from Lord Liverpool and Robert Peel. The Archbishop of Canterbury expressed his concern and many Irish M.P.s attended (*WM*, 13-5-1822). This was followed by emergency debates in both the Lords and Commons about the crisis in Ireland and the latter body granted £500 for famine relief work to the committee elected at the London Tavern meeting. A Dublin committee was then established to distribute this aid (*WM* 20, 22, 25, 29-5-1822, reports).

Over the next four months it would seem that so much was raised that when the crisis had eased by that Autumn there was

still a massive £50,000 in hand. The London "Committee for Managing the British Subscription to the Peasantry of the Distressed Districts in Ireland" (as it came to be clumsily called), aware of the limitations of short-term stratagems, looked towards "reviving or creating sources of employment — - to prevent you again experiencing the same suffering" (*WM* 31-8 & 14-9-1822).

The context of this was the famine of 1822, Rockite activities possible aggravated by it, and, even more offensive to rational commercial minds, the popular circulation in Ireland of the prophecies of Pastorini forecasting the destruction of Protestantism for 1825 (see Donnelly 1983). Others too considered the Irish problem, including the honourable members of the House of Commons whose report was published in 1823 (*PP* 1823). The Royal Irish Academy held an essay competition on about it in 1822 and R. Ryan's winning entry was published under the title, "What are the best means of rendering the national sources of wealth possessed by Ireland effectual for the employment of the population?" (*RIA* 1823). Newspaper correspondents too agonised over the Irish problem (*WM* 21, 23, 26 28-10 1822 and items from *The Sun* in *ibid*, 7-12-1822) as did the benevolent and effective Quaker James Cropper in Liverpool who tried to solve it in 1824 (Charlton 1971). His, and the other "solutions", depended on some combination of development of Ireland's agricultural potential or of its textile manufacturing possibilities.

Little has emerged about the people in London who were concerned enough to raise sums which left a post-crisis fund of £50,000. The disposal of this they now had to decide on. They discussed possible forms of investment during 1822 including the usual options of cotton manufacture, drainage of bogs and milling (*WM* 18-9-1822). It seems that not until the end of 1823 were the thoughts of the fundraisers directed towards mineral development in a generalised way (*DEP*, 6-4-1824). However, there were six possible reasons why by early 1824 mining investment would possibly have seemed an attractive proposition.

One precondition for mining investment in relatively backward areas would have been the guarantee offered by

stable price and reliable marketing conditions. Both of these had been achieved by 1824 after some decades of difficulties (Harris 1964). Also, after war-time and post war fluctuations, the price of lead, for instance, stabilised in 1819 at about £22 per ton but jumped in 1825 to £25. The more fickle copper market began its post war recovery in 1821 with the price climbing over the next five years from £103 per ton to over £123 (Hunt 1887).

For those who knew anything about Irish mineralogy, a headline as to future potential had been set by Colonel Hall who single-handedly found and developed up to thirteen copper showings over previously unmined (in modern times) West Carbery during a dozen years or so before 1822 (Cowman & Reilly 1988). This apparently generated so much interest in the mineral potential of West Cork that one well-place observer wrote in 1820 -

“The great landed gentlemen of Ireland are very much inclined to become miners— of late there has not been a part of the country (probably referring only to West Cork) that has not been examined for mines —. I’m tormented from gentlemen giving me samples to assess and specimens for me to give my opinion on.” (Captain Martin, Allihies).

Adding to such assumptions of untapped mineral resources was the “proof” from the previously unknown Allihies. It had started in 1812 but significant tonnages did not begin to hit the Swansea market until after 1819 (Williams 1990). This remote mine seemed to offer an analogy for the rest of the country proving what systematic investment of capital could achieve. By early 1824 this assumption was articulated thus -

“Ireland abounds in copper, lead, iron, spelter or zinc, coals, culm and other minerals, metals and metallic substances and also —(15 other substances are listed). And whereas the several mines, mine works — have not been sufficiently worked for want of sufficient capital — (HMC Act 1824).

That there was money available for investment will appear below. However, one contemporary mining advocate pointed out that with interest rates as low as 2½ % and with at least £20 million of “disposable British money on the London market — the moment is particularly favourable for reference to the natural resources of any part of the Empire”, primarily, Britain’s nearest neighbour (WM, 18-2-1824). Presumably with the uncertainty about agricultural prices at the time, land was not seen as a particularly secure alternative investment.

Furthermore, as was pointed out in 1824, much mineral investment had been in uncertain places like Mexico, “a distant country without recognised government, just emerging from slavery” in comparison with which Ireland seemed a much safer proposition. (DEP 21-2-1824).

However, decisions on mineral investment are not always rational: one modern British historian referred to the “speculative mania” in mining shares which climaxed in 1824. (Mathias 1969). It would seem that a combination of rumours

and tips, repeated and shared, could produce a mineralogical mythology that felt no dependence on objective analysis. That such was the case over a twenty month period in 1824-’25 is suggested by an informed opinion in 1838 which gives a figure of 65 mining companies being set up over that short span in the British Isles attracting a total investment of £32,361,000 (MJ 1838). If this is so Ireland’s share is not disproportionate amounting perhaps to 2-3% of this total.

BEGINNING OF THE MINING COMPANY OF IRELAND

While these various influences were being considered by the philanthropic gentlemen in London, a group in Dublin had called a meeting for 5th February 1824 with a view to developing Ireland’s minerals. Whatever background discussions and informal contacts proceeding the meeting, it seems to have created an excitement and expectation. According the following day’s papers, “long before” the scheduled 1.00 start “a numerous assemblage of gentlemen of the first wealth, intelligence and respectability” crowded into the Chamber of Commerce office (FJ 6-2-1824). The various predispositions towards Irish mining manifest themselves as three powerful undercurrents of expectation.

The first of these again was the assumption that there was enormous mineral wealth out there waiting to be tapped. As one enthusiast put it, the Mining Company of Ireland was about to “explore the varied and abundant resources of this neglected island” (FJ 20-3-1824). One Dublin editorial writer promulgated the assumption gushingly thus:

“This country abounds in mineral wealth — her mines are yet virgin, her wealth is unexplored —The south abounds with copper lead and iron ore —. We have not only inexhaustible mines of the most valuable kind, but —” (DEP, 7-2-1824).

A year later confidence in this assumption was still being expressed re the Mining Company of Ireland:

“Their great object is in fair course of attainment —and the natural wealth of the country, so long unexplored, brought to light so that peace, comfort and prosperity will ensue.”{MCI March 1825}.

The last six words introduce the second undercurrent. Sympathy for distress in rural Ireland had also manifest itself at the meeting in the Dublin Chamber of Commerce, where, to some at least, the proto-Mining Company of Ireland was to be a philanthropic enterprise. Addressing the meeting the M.P. Spring-Rice thus expressed it:

“In ordinary commercial meetings the object would be a mere pecuniary one, but in the present case a moral consideration united with that of interest in the prospect of employing an industrious but starving peasantry and therefore rescue them from the charge of being turbulent, idle and refractory”.

Three other speakers at that meeting spoke along the same lines

and indeed the *Freeman's Journal's* account of it is headed "Employment for the Irish People" (*FJ*, 10-2-1824). Another newspaper referred to the inauguration of the Mining Company of Ireland as "a truly patriotic scheme" (*DEP* 7-2-1824). A provincial newspaper in July 1824, referring to the flurry of new mining activity pointed to the example of Allihies where, before mining started,

" — there was not a more miserable population to be found upon the face of the earth; more poverty ignorance and filth could not well be conceived —"

Now, after twelve years of mining there is "decency, order, comfort" which was the best antidote to Captain Rock (*WM*, 25-7-1824). The directors of the Mining Company of Ireland were to refer to their company as "an agent of national prosperity" and assumed that its activities would ensure that "peace, comfort and prosperity will ensue" (MCI Reports April 1824 and March 1825).

The third expectation that excited those philanthropic gentlemen attending that Dublin meeting was the assurance that they could also serve as an agency for channelling investment arising out of the goodwill of a significant section of the English population. This, however, was questioned by two gentlemen who were afraid that English interests would be "jealous" of Irishmen "taking advantage of those resources which nature had placed within their reach". One of the initiators of the company pounced on that:

"So far from any apprehension of the English people being affected by any spirit of enmity" (the speaker was authorised to state that) "if £50,000 were subscribed in Irish capital, an equal sum would be made good in England".

He then thanked an unidentified group there (the proto-Hibernian Mining Company committee?) for "important services" (*FJ* 6-2-1824). Furthermore, the spirit that seemed to animate subsequent proceedings is summed up in an extraordinary bit of hyperbole (presumably!) by Spring-Rice, using all his Westminster experience:

"— at this moment an anxiety exists in England — (to) advance the interests of the Irish nation generally and that it would be their own fault if the Irish people did not turn that spirit of liberality and generosity to their own advantage".

He quoted as an example the management of a new bridge being built over the Thames whose "very first objectives" were "whether they could not through it benefit Ireland by building the bridge of Irish granite". (*FJ*, 6-2-1824). Within that context, when the next major social crisis occurred in Ireland in the late 1840s there was a most spectacular benevolence towards Irish mining by English investors which was to manifest itself in a positively ingenuous suspension of critical approach, particularly in regard to the most famine stricken portions of west Cork (Cowman & Reilly 1988).

Therefore, what probably excited the respectable assemblage

who attended the inaugural meeting of the Mining Company of Ireland in Dublin on 5th February 1824, was the assumption of unlimited mineral wealth, philanthropic purpose in exploiting it, plus the moral and financial backing of benevolent English interests. However, they could not ignore the pecuniary aspects of their three-fold animation. Four thousand £25 shares were offered to them at first, the initial deposit being ten shillings, the rest to be called on as occasion required. There was to be a maximum of twenty five shares per person so that nobody would, as was soberly explained, "too far involve themselves in what could turn out to be a visionary speculation". If investigation into mining sites proved negative, conservative council stated, the most that an individual could lose was £12-10 shillings. This prudence was bitterly complained of by the mercenary elements from the floor who considered this as being likely to limit their profits (*FJ* 6-2-1824). Hence it was decided instead to issue 20,000 shares at £5, initial deposit 10/-, giving the Mining Company of Ireland immediate access to £10,000 and with a potential funding of ten times that amount (MCI March 1825).

Within weeks the company could refer to "the unsatisfied avidity of the public for shares" as well as to "a rage of boundless speculation in its prospects". At the same time, however, fuelling such demands was the company's report (after what can have been only the most cursory six week mineralogical survey) that "there is no room for rational doubt that the advantageous working of the — mines with which Ireland abounds is a practical measure" (MCI Rep. 1st April 1824). Hence all shares sold out immediately and within two weeks were reported to be changing hands at 40/- (four times the original price) (*DEP*, 21 and 24 -2-1824). Over the next 18 months there were two further calls totalling 30/-. These too were almost fully subscribed - i.e. of the £40,000 worth of shares sold, all but £307 was received (MCI Rep. July 1825, Appendix 2).

A listing of shareholders two months after the inaugural meeting provides over one thousand names. About four hundred of these held over twenty five shares and were therefore eligible to be directors. Twenty two of these were members of the Quaker Pim family (MCI 1824). It seems, however, that there were immediate problems relating to the much vaulted English goodwill as "several hundred shares, having become forfeit by persons resident in England — we have just cause to complain of their conduct" (MCI 1st April 1825). The difficulty may have been that there was sufficient cash in Ireland and that there was no sales mechanism in England for these shares. It would seem that English investors had only got their hands on 1568 of the 20,000 shares by mid 1825 by which time a bank in London had been given the agency for the company. (MCI Rep. July 1825, Appendix II). Nevertheless there seems to have been continued suspicion relating to English shareholders. Quite possible the company were playing the patriotic card in late 1826 when, announcing that times were tough (q.v.), that there would be no dividend, they refer to the several hundred shares "having become forfeited by persons resident in England" being sold by auction in Dublin, adding "we — regret that, residing at a distance they were unable to appreciate the value of our concern" (MCI Rep. 2nd 1826). Yet within 18 months it was reported that, "a considerable portion" of the shares were "now the prop-

erty of persons residing in England or Scotland”, this being at a time of continuing bad news for shareholders (MCI April 1828). It would seem that there were unstated issues involved.

ESTABLISHING THE HIBERNIAN MINING COMPANY

This Dublin meeting had taken place while arrangements were still in train in London to establish the Hibernian Mining Company. Consideration was given to combining the philanthropic efforts of the two mining companies. While goodwill was expressed on both sides, the entire legal procedure for setting up the amalgamation would have to be restarted, so it was conceded that it was best for now to proceed separately. This was the recommendation of the 21 man committee appointed at the Dublin meeting. They also recommended that the Mining Company of Ireland concentrate its attention of the “copper, copper, coal and slate” on the Audley estate in west Cork. (MCI Rep. 1st April and 16th Oct. 1824). That this would almost bankrupt the company could not be foreseen, nor could it be anticipated that competition for viable mining sites between the two companies would ultimately ruin the Hibernian Mining Company.

Thus galvanised, the London committed within three weeks (on 22nd Feb.) had called a meeting with a view to reconstituting themselves as a mining company (*WM* 14-8-1824). Their new aim, according to the act was to use English capital in order to exploit a wide range of minerals in Ireland with a view to being “highly beneficial — to Ireland generally and to the labouring classes thereof —” (HMC Act 1824). It may not be just coincidence that their mining activities were concentrated in an area of most intense Rockite activities in north Kerry. {Donnelly, map).

The act establishing the Hibernian Mining Company sets out details of how it was to be run. There was to be a committee of 24 members, half living in Dublin and half in London. However, “*the proceedings of the committee of directors in Dublin shall be — subject to the approval of the directors in London, except in cases of emergency —*”. This was accompanied by a number of very specific safeguards, such as a thirty member committee of Governors who would act as watchdogs over both lots of directors (HMC Act 1824). Cumbersome as this seemed it appears to have worked quite well to judge from the surviving correspondence between the London and Dublin secretaries (HMC corresp.).

The stock of the company was to comprise up to 10,000 shares of £50 each, giving a nominal potential value of a massive half million pounds. However, only a fraction of that was actually collected and by the end of 1826 only £7 per share had been called on. That would have made the gross capital £70,000, plus the initial £50,000, presumably, from the distress fund (although there is no further mention of that) (DSER 1825). Such reportedly was the demand for shares that the company had to hold some in reserve to offer to the proprietors of miner-

al locations in order to give them a vested interest. The same report makes much of the social status of some of the investors in the Hibernian Mining Company. These included 16 peers and 9 MPs (*FJ* 12-8-1824).

THE ROYAL IRISH MINING COMPANY

Meanwhile, early in 1824, the supposed abundance of minerals in Ireland and the apparent fund of investment goodwill attracted the attention of others for whom, perhaps, philanthropy was not the prime motivation. Thus two other mining companies were set up in 1824-5 as well as a number of private mining endeavours.

Within two months (i.e. by 1st April 1824) of the Dublin meeting which set up the Mining Company of Ireland, the Royal Irish Mining Company were offering the public sixteen thousand £25 shares, initial deposit five shillings. Five days later their publicity refers to a “press of subscriptions” but within a week the public were being offered extra chances of payment (*FJ* 8, 13, & 19- 4- 1824). Apparently some “technicalities” hindered the development of the new company - possibly a difficulty in getting their parliamentary charter (*FJ* 30- 6, 7 -7 & 10 - 8 - 1824). For a period late in 1824 it seems they considered abandoning mining and simply using whatever capital they had to buy shares in the Mining Company of Ireland (*WM* 22 -11- 1824). By the end of the year, however, it may have become apparent that the necessary act of Parliament would in fact go through quickly. Certainly the directors were in a position to call a public meeting on 23rd January 1825 from which they dated their formal existence. They claimed to have raised £27,000 mainly from British sources (*WM* 9-1 - 1826). Within two weeks they were being quoted on the Dublin stock exchange (DSER, Feb 1825).

Thus the Royal Irish Mining Company were somewhat late into what proved to be a highly competitive field of obtaining mining leases for a very finite range of mineral resources - as became quickly apparent. They also shared the philanthropic veneer of the other two companies. Their aim, according to the Dean of St. Patrick’s while chairing a meeting, was “*to employ the poor peasantry (which) would be one of the surest ways of making them happy and content*”. The chairman of the directors, John McMahon rather exaggeratedly described the fruits of the company’s activities during 1825 as having provided “*extensive employment in apparently uncivilised districts —(so that) the comforts and industry of the people have been greatly promoted*”. He goes on to praise the “uniformly good conduct of the people” who have shown not “the slightest manifestation of insubordination”. He also refers to the third dynamic underlying the other two companies: the Royal Irish Mining Company is “a concern chiefly founded upon British capital and solely under Irish management”. That capital, however, amounted to only £17,000 (*WM* 9 -1- 1826). Fairly rapid mineralogical success would have been needed if this company was to survive.

THE IMPERIAL MINING COMPANY AND OTHERS.

Not enough is reported about the fourth company, the Imperial Mining Company, and the suspicion is that it was an attempt by an Avoca-based company to use the current climate to raise capital. (AIMC ms April 1816). The press raised immediate questions about it when it launched itself belated in January 1825 (*WM* 29 & 30 -1- and 2 -2 - 1825). It was first quoted on the Dublin Stock Exchange in March 1825 (DSER, 1825, 9 March.). None of the background to this was reported but they offered an unstated number of £10 shares, initial deposit 10 shillings (*WM* 7 & 31-2 - 1825). A further cautionary note must be added about their bone fides because of the person they appointed as company secretary - John Salmon, a man who keeps reappearing in various mining contexts over the next thirty years, usually when there was something “fishy” going on (Cowman 1988). He was one of the initial shareholders in the Mining Company of Ireland (MCI 1824) and may have been piqued not to have been elected as a director that body nor to have been selected as one of its initial investigatory committee of twenty one (*FJ* 6 - 2 - 1824). Whether being thus passed over influenced the setting up (or reestablishment) of the Imperial Mining Company can never, of course, be proved. However, there is no record of them ever actually engaging in mining (Griffith 1828). There is an undated report of them carrying out some trials at Silvermines but not finishing any of them with the comment that they “had no agent versed in mining” (Rep. to DS). Possibly in 1826 they then involved themselves briefly in slate quarrying in west Cork (*C&CMP* 8 -10 - 1826) as well as expressing interest in two slate quarries in Waterford (*WM* 6 - 11 - 1826).

It would be surprising if the mining mania did not infect a number of local enthusiasts in 1824-5. There is, for instance, a single mention of a Shankill Mining company about this time operating on an older lead working on the Dublin coast (Griffith 1828). Further north at Robbs Walls an Adam Greenhough from Derbyshire cleared out an old working there at the behest of the landowner (HMC ms). That he might have been just one of many such English miners cashing in on the Irish boom is suggested by a disparaging remark from a reputable source about “wandering English miners of the lowest order and worst repute” (Griffith 1829). Details of these, however are unlikely to survive, but the self publicising tendencies of one individual in local papers does at least provide an indicator as to what else might have been going on.

He was a Waterfordman by the name of P.J. Foley. He, like Salmon, was destined to play a questionable role in Irish mining later on. However, in 1824 he first of all tried to open mines in Waterford on his own. He then claimed to have opened up Knockmahon prior to the Mining Company of Ireland beginning there, but his motive, as he afterwards claimed was to interest this company in the area. Through 1825 he continued to “discover” new mineral locations in Waterford and belatedly tried to set up the Waterford Mining Company in 1826. When that failed he claimed to be acting in collaboration with both the Royal Irish and Imperial Mining Companies (Cowman 1992). An exploration of other provincial newspapers might well

reveal that there were many others like him ready to jump on the mining band-wagon.

{Part II of this item will appear in MHSI Journal II - “Boom Companies of 1824 – The Aftermath”}

REFERENCES

AIMC - Associated Irish Mining Company, Avoca. An Imperial Mining Company purchased 40 shares in April 1816 according to their minutes, NLI ms 16,309, 28th Feb. 1829

Captain Martin report from Allihies 14-10-1820 in Stevens' Letters, GSI microfilm.

C&CMP – Constitution and Cork Morning Post 8-10-1826 mentions their quarry near Glandore providing slate for a house and church at Castletownsend.

Charlton, Kenneth, “The State of Ireland in the 1820s: James Cropper’s Plan” in *Irish Historical Studies*, Vol. XVII, no. 67, March 1971, p 320-339.

Cowman D. and Reilly T. 1988. *The Abandoned mines of West Carbery*, Geological Survey of Ireland, Dublin, pp. 19-21.

Cowman 1988, “The Silvermines - Sporadic Working 1289-1874”, *Tipperary Historical Journal*, 1988, p. 103-4. Unpublished research shows Salmon in other dubious mining contexts.

Cowman 1992, “A Waterford Polymath, P.J Foley: visionary or charlatan?” *Decies* (Journal of the Old Waterford Society) no. 45 pp 45-48.

Donnelly, James S. Jr., “Pastorini and Captain Rock: Millinarianism and Sectarianism in the Rockite Movement of 1821-4”, in Clark & Donnelly (eds) *Irish Peasants - Violence and Political Unrest 1780-1914*, (Wisconsin and London 1983), p. 102-139, map p. 103.

DEP- Dublin Evening Post. 7-2-1824, editorial, some of the quotations being attributed to the *Limerick Observer*; 21-2-1824, editorial.; 6-4-1824, Report Mining Company of Ireland meeting. Mr. Brophy recounting his communications with a Mr. Roose of London suggests, that the “Poor committee” there had been considering mining since the end of 1823.

DSER - (Dublin) Stock Exchange Register and Daily Lists: NA Dublin 77 (81), Vol 1825, February and March 9th.; Vols. 1827-'28, passim. On 1st Jan. 1827 the nominal share value was given at £7 after which it ceased to be quoted.

FJ- Freemans Journal. 6-2-1824, report of meeting, anon questions and quote from Mr. Brophy and Mr. Spring Rice; 7-2-1824, editorial; “Irish Mines and Collieries”; 10-2-1824 Resolution one and statements by Messrs Spring-Rice, Leader, Stewart, and Brophy; 20-3- 1824, letter, Captain Fraser; 21 and

24 -2-1824, ad and editorial; 8, 13 and 19-4- 1824, reports; 30-6-, 7-7- and 10-8-1824, the last hinting most strongly at legal difficulties.

Griffith, R. 1828. *Syllabus for a course of lectures* (to the RDS, on mining).

Griffith, R. 1829. *The metallic mines of Leinster*, pp 6 & 8.

Harris, J.R. 1964. *The Copper King; a biography of Thomas Williams of Clanidan*, (Liverpool U.P. 1964), passim re Williams marketing difficulties.

HMC corresp. - Hibernian Mining Company correspondence books, mss 637, 638, 639 NLI.

HMC Act - Hibernian Mining Company Act of Parliament bound printed copy is my possession thanks to the good offices of Mr Julian Walton. (It is not listed in appropriate place in Index to the Parliamentary Papers.)

Hunt, R. 1887. *A Historical Sketch of British Mining*, London (reprint Yorkshire 1978), Appendix, Tables 14, 33 & 34, pp 892, 893-4.

Mathias, P. 1969. *The First Industrial Nation; An economic history of Britain 1700-1914*, (London 1969), p. 321.

MCI Repts.– Mining Company of Ireland, bi-annual Reports to shareholders as per dates given.

MCI 1824 - Mining Company of Ireland Shareholders 1824 listed in ms 3001 (NLI). Their addresses aren't given.

MJ - Mining Journal 1838 (ii), p. 20 (21 July), Editorial, adding, however, that only 10 of those companies had survived.

PP 1823, Report of the Select Committee — on the Employment of the Poor in Ireland, HC 1823, (561), VI.

Rep. To DS – Report to Dublin society by William Morris, undated and unprovenanced, in NLI ms. 8146, envelope 13.

RIA 1823 – Ryan's essay in *Royal Irish Academy Proceedings* for that year.

WM – Waterford Mirror. 13-5-1822, report "Relief for Ireland". This paper carries a good range of commercial reportage lifted from other newspapers; 20, 22, 25, 29-5-1822, reports; 14-9-1822, report of the meeting in London Tavern 31-8-1822, "Relief of the Poor" with cited comment attributed to the Cork Mercantile Chronicle. There is some ambiguity about the financial reportage; 18-9-1822, "British and Irish Committee for the relief of Distress" with mention also being made of a Ladies Committee established in Sept. 1822; 21, 23, 26 28-10 1822 and items from *The Sun* in *ibid*, 7-12-1822 ; 18-2-1824, letter "Internal resources of Ireland" (as this also appears in the *DEP* of the following day, it probably got wider dissemination); 25-7-1824, "Irish Industry"; 14-8-1824, Report of Management

Committee; 22-11-1824, report suggesting that the company had been dissolved on 26th October; 29- (editorial) & 31- (editorial and mocking anon item) -1 - 1825 and 2-2-1825 (editorial); 7th & 31-2-1825, report inaugural meeting of Imperial Co. and item "New Mining Company"; 9-1-1826, report of second half-AGM.

Williams, R.A. 1991. *The Berehaven Copper Mines* (NMRS, British Mining no. 42), pp 37-60 and fig. P 27.