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Carmarthen United: An example of undercapitalisation in a mid 19th century lead venture.

by Peter Claughton

ABSTRACT

Using recently discovered documentary evidence, this paper examines the operation of a small lead mine in west Wales, identifying a lack of working capital which hampered chances of success during a period of relatively high lead prices.

INTRODUCTION

The late 1850s saw an increased investment in lead mining, prompted by the high price of lead. With the introduction of limited liability status in 1855, along with the Companies Act of the following year, the way was opened for low risk investment in mining and this stimulated the formation of a number of small companies to work mines in many of the less well known areas.

In 1853 the price of pig lead had jumped from £17 15s 6d (£17.77) to £23 8s 0d (£23.40) per ton and eventually peaked at £24 in 1856. This increase had been generated by a buoyant domestic market and increased exports at a time when the effects of the Crimean War was reducing imports. Although prices fell back slowly after 1856, as imports again increased, they remained relatively high for a number of years. The consequent increase in the price paid for lead ores was to make a number of what had been regarded as poor or marginal mineral deposits appear as good investments, no more so than on the Carmarthen - Pembrokeshire border where the small Trelech lead mine appeared set to emulate its larger neighbour, Llanfyrnach.

A POOR FOUNDATION

Although undoubtedly the site of a much earlier working, the Trelech mine was opened up as Carmarthen United in about 1855/56 at the lead price peak. Leases of 30 years were taken on a sett encompassing the farms of Cwm and Cileynon, the latter being part of a larger holding, Gwndwn, with activity centred on the steep east side of the Afon Cynig, one and three quarter miles south west of Trelech village, at NGR SN263237.

The company formed to work the mine was probably a cost book company, later referred to as "*the old company*", under the direction of Messrs Williams, Hand and Harrison. An engine shaft (initially referred to as Harrison's) was sunk on the hillside close to the Cwm/Cileynon boundary. Down to the 7 fathom level by November 1857, it was initially drained by horse whim and kibbles, although a water wheel pit was in the course of construction. Stores and a house were also erected. The adit driving north was showing signs of lead ore, but the primary task was to get under old workings below adit, following an ore shoot dipping south of the engine shaft, on what was to be called the Main Lode.

In January 1858 the company was reformed as a limited liability company, The Carmarthen United Lead Mining Co. Ltd, with a nominal capital of \pounds 12,900 divided

into 2580 shares of £5 each. £4.50 per share was called up immediately, netting £11,610, the total of which was paid to the old company for the leases and the structure of the mine.

It was with this move that the mine's problems really began. Limited liability had been incorporated in the Companies Act of 1856 and had an advantage for the small investor over the earlier cost book and joint stock companies where any one shareholder could be sued for the total company debt. The amount of capital which could be raised, however, was set in the articles of association. It was not open ended as it had been with a cost book company.

Thus, having paid for the mine, the new Carmarthen United company was left with only £1290 as potential working capital. £1032 of this was called up, in four calls of 2s (10p) per share, within a few months to pay for a 24 foot pumping water-wheel and to settle outstanding wages to the end of May. By the middle of July, however, over £600 was due on merchants' bills and miners' wages for June, and little or no production had taken place.

There is little doubt that too much was paid to the old company for the mine, but it appears that the intention was to continue running the company along the lines of its predecessor, calling up capital as required, and the purchase price represented reimbursement of costs to the old shareholders who would be expected to take shares in the new company. Arrears of calls made by the old company, along with their cash balance, appear as assets in the accounts of the new, limited liability, company. Under the mistaken impression that the company could operate in that manner, yet have the full benefit of limited liability, they failed to make adequate provision for working capital.

Once the available capital had been realised, and there is evidence that shares were more than fully paid up with calls totalling £5.40 per share to February 1860, the company resorted to loans from individual shareholders and a mortgage on the mine. A total of £957 was raised in this way, supplementing the revenue from ore sales, but that was only sufficient to pay working costs to November 1859. From that date the company operated on merchants' credit and the miners went unpaid.

WITHDRAWAL OF LABOUR

The situation came to a head in March 1860 when the miners withdrew their labour. With no monies being forwarded by the company, their agent, Captain Robert Sanders, who was also manager at Llanfyrnach and resident there, had been advancing them money from his own pocket, but that proved insufficient even with a local shopkeeper, David Rees, allowing provisions on credit.

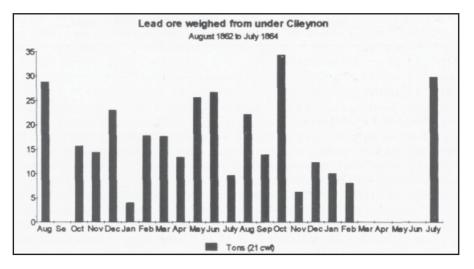
By this time, the engine shaft was down to the 32 fathom level, sunk on the underlay of the main lode of about $1\frac{1}{2}$ feet in the fathom, and now pumped by a new 34 foot water-wheel. Increased water in the workings had been beyond the capacity of the 24 foot wheel, which was relegated to working the crusher. By fortune or design, the company had made their leat at sufficient height to run water over the two wheels. The

new pumping wheel was installed directly down slope from the shaft collar, working a short run of flat rods to an angle bob fixed in a stone arched housing in the shaft head. Water from that wheel then ran directly onto the crusher wheel before exiting through a stone-arched tail race at river level. The masonry structures housing this arrangement still survive on the site.

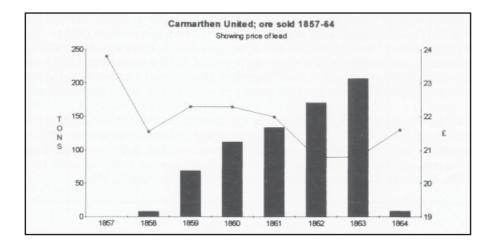
Nine partnerships had been engaged in deadwork and raising ore on tribute, along with 28 other persons working in the engine shaft, at surface and on the dressing floors, on day wages. In total they were owed over £750 for activities during the five months to mid March. Some of the men having appointed David Rees, the shopkeeper in Trelech, as their agent, a Carmarthen solicitor, J.B. Jefferies, was engaged to recover the monies due from the company (Appendix One).

Jefferies at first considered suing the company, but, once it was evident that their capital was more than called up, he, with the clandestine support of Captain Sanders who, as agent, was also owed a sizeable amount in salary, approached William Darling, the company secretary, who was trying to raise fresh capital. The mine had already been offered for sale by auction, but, as there was apparently no interest, it was withdrawn and in the early part of April a subscription of £1 per shareholder was negotiated. These funds were used to pay the miners up to the end of February and one of the directors made a personal guarantee for the March pay.

This got the miners back to work, and by the summer of 1860, the mine's prospects were quite good. Output of ore had risen to a point where the mine was virtually paying its way and, if sufficient capital had been available, that point might have been reached much sooner. As it was, break even was not achieved until June 1861, by which time it had been necessary to borrow another £1250.



In mid 1861 the mine was being worked at the 42 fathom level and, shortly afterwards, a rich ore body was cut at that level on the main lode north of the engine shaft. This discovery, lying under the Cileynon section of the mine, was to sustain the mine for the next three years. The ore body was cut in the 66 fathom level in July 1863, but progress beyond then is not known as reporting in the *Mining Journal* ceased. Dressing of ore at least continued until late February 1864, resuming again briefly in July of that year; by which time a new company, Trelech Lead Mining Co. Ltd, had been formed to take over the leases. One lot of ore, weighing 8 tons 9 cwt, was offered for sale on November 30th, but this no doubt represented the final dressing of material left on site and was not fresh mined. It is evident that this new company was not successful as it was replaced by another, Trelech Mines Ltd, in the following year. This was also unsuccessful. Further attempts to rework the mine in the 1870s came to nothing and in the period 1882 to 1891 it was in the hands of L H Evans, the lessee at Llanfyrnach, who no doubt investigated the site but apparently never worked it.



CONCLUSION

The reason for failure in 1864 are not known for certain, but the final report refers to a crosscourse which apparently cut off the lode. In this case, the lack of working capital would have seriously hampered any attempt to identify and regain the profitable ore body. Mining was, and remains, a speculative business and, without sight of ore, few would invest new money in a mine when the trend in lead prices was downward. Carmarthen United had produced over 692 tons of lead ore, dressed to 75% metal content, averaging about £13.50 per ton, plus at least 18½ tons of second grade ore, which realised around £3 less, the total being much higher than that credited to the mine in the official Mineral Statistics. As shown in the graph of ore sold, production was steadily increasing. Expectations must have been high and a better financed mine might have recovered.

The various claims for wages due (Appendix One) illustrate the casual nature of employment in a small mine. Apart from three or four of the partnerships, few of the miners were working at Trelech full time and only the female lead dressers put in a regular appearance. The few men who appear for March only perhaps replaced others who left, frustrated by non-payment of wages. Many of the miners were locally born and no doubt had access to alternative agricultural employment. For others, the nearby Llanfyrnach Mine offered a more stable future and, when Trelech did close, many moved on to that mine. Over the next three decades, fewer immigrant miners are in evidence and the larger mine could call on an indigenous workforce from the surrounding parishes.

References

Carmarthen Record Office, Acc 6420 DB/74	Public Record Office, Kew, BT31/319/1120				
National Library of Wales, G E Owen Box 54	Burt, R. <i>The British Lead Mining Industry</i> , (Redruth, Dyllansow Truran, 1984).				
Mining Journal	-				
-	University of Exeter, Department of Economic				
Hall, G W. The Metal Mines of Southern Wales,	History, unpublished abstracts from Mineral				
2nd edn. (Kington: The Author, 1993).	Statistics				

APPENDIX ONE

Amounts due to miners and surface workers for work carried out at Carmarthen United Mine, November 1859 to March 1860 inclusive.

John Reed and partners [in detail]			s		£	S	d
Nov. 1859 Sinking winze	1 fm 5 ft at £3 15s	6	17	6			
Sinking winze	2 fathoms at £3 3s	_6	6	0			
		13	3	6			
Deduct mine materia	ls	3	1	3	10	2	3
Feb. 1860 Raising lead ore 15	ton 7 cwt 1 q						
at £3 5s per ton	-	49	18	63/4			
Deduct mine materia	ls	11	14	6	38	4	$0^{3/4}$
Mar. 1860 Raising lead ore 6 to	on at £5 per ton	30	0	0			
Working at surface 1	*	1	15	0			
Deduct mine materia	ls	7	0	6½	24	14	6(sic)
					73	1	$0^{3}/_{4}$
John Andrews and partners [in p	precis thereafter]						
Dec. 1859 Sinking winze; hangi	• -	ing	stul	l			
Jan. 1860 Sinking winze; extra for holing winze; and stoping at 32.				48	0	8	
· ····································							
William Davies							
	work at 2/6 per day						
7 Feb. to 2 Apr. 1860 Eight wee	1 2	eek			8	2	6
/ 100. to 2 mpr. 1000 Light works work at all per work				0	-	č	

Thomas Rees and partners Nov. 1859 Driving 32 north; cutting barrow road;			£s	d
Dec. 1859 Jan. 1860	8 8,			
Jonah Thomas Dec. 1859 One day at 2/6 Jan. 1860 Two days at 2/6 Feb. 1860 Eight days at 2/6			1 7	6
James Mitch Feb. 1860				
Mar. 1860	and clearing Driving 22 n	orth; crosscutting west	12 1	9
David Jones Nov. 1859 to) Mar. 1860	Carrying parts 22 weeks at 2/-, 1 at 1/6	2 3	6
Margaret Mi Nov. 1859 to		111 days at 1/-	5 11	0
John Rees (b Nov. 1859 to		49 ³ / ₄ days at 8d	1 13	2
Wm. Edward Mar. 1860	ls	Ten days at 2/6	1 5	0
Elizabeth Da Nov. 1859 to		72 days at 1/-	3 12	0
Anna Evans Nov. 1859 to) Mar. 1860	114 ¹ ⁄ ₂ days at 9d	3 19	01/2
Sarah Thoma Nov. 1859 to		831/4 days at 9d and $24^{3/4}$ days at 10d	3 18	111⁄4
David Davie Nov. 1859 to		Filling kibble 39 ³ / ₄ days at 2/6	79	41⁄2
Anne Thoma Mar. 1860	S	22¼ days at 11d	1 0	43/4
Martha Evan Nov. 1859 to		96 days at 8d	3 4	0

Ann Pearce Nov. 1859 to		s 8	d 4		
John Jones (Crib) Nov. 1859 to Mar. 1860 Nine days at 2/6				6	
Henry John Mar. 1860	Eight days at 2/6	1	0	0	
Wm. Thoma Nov. 1859	s (Horse hire) Carriage of 22 cwt of coals at 4½d; 5 barrels of coals at load of slate; 11 tons of lead at 7/6.	: 1/-;			
Dec. 1859	Carriage of 11 barrels of coal; 18 cwt of coal; Carriage of lead from station, two days at 4/6; steel and bags to the mine.				
Jan. 1860	Carriage of 14 cwt coals; 11 barrels of coals; 12 tons of lead.				
Feb. 1860	 1860 Carriage of 14 cwt coals at 8/6 per ton; 9 cwt of coals at 7/6 per ton; 7½ barrels of coals at 1/2; powder and candles; powder from Glandwr; lead to vessel, one day; 2 tons of lead at 7/6; 4 tons of lead at 8/6. 				
Mar. 1860	4 barrels of coals at 14d; 21 cwt of coals at 4 ¹ / ₂ d; candles, oil &c. iron &c.	16	14	21/2	
Shem Evans Nov. 1859 to	10	10	6		
Thomas EvansNov. 1859 to Mar. 1860 653/4 days at 8d and 20 days at 9d22				10	
Henry Davies Nov. 1859 to Mar. 1860 Landing and masonry, 46 days at 2/6 and					
Henry Davie Mar. 1860		7	11	0	
David Davie Dec. 1859 to	s (carpenter) 9 Mar. 1860 64 ³ / ₄ days at 3/-	9	14	3	
William Hug Feb. 1860 to	1	16	6 ³ /4		

John Hughes Nov. 1859 to		Filling the kibble, $119^{3/4}$ days at 2/6.	£ 15		d 4½
John Jones Nov. 1859 to	Mar. 1860	Working machine, $125^{3/4}$ days at 2/6.	15	18	6½
Henry Thomas (farmer)Nov. 1859Carriage of 255 feet 4 inches of timber at 3½dJan. 1860Carriage of 14 qrs of lime at 1/6Feb. 1860Carriage of 135 feet of timber at 3½d			6	14	10
Ben James Mar. 1860		Eight and a half days at 7d		4	111/2
Henry Jones Jan. 1860 to	Mar. 1860	391/4 days at 2/- and 23 days at 1/8	5	18	10
John Jones (l Dec. 1859 to		53 days at 2/3; 24 days at 2/-; and 26 ¹ / ₂ days at 1/6.	10	7	6
John Jones (J Jan. 1860 to	,	36 days at 2/6	4	10	0
Richard Munday and partners Nov. 1859 Driving crosscut at 22 west 6 fms 4 ft 6 in Deduct mine materials					
Jan. 1860		aunter Lode at 22 6 fms 4 ft crosscutting 2ft 6 in materials	39	6	2
Richard Reynolds and partners Nov. 1859 Driving 22 north 8 fms 0ft 6in; crosscutting lode Deduct mine materials					
Dec. 1859	Driving 22 n Deduct mine	orth 5fms 3ft materials			
Jan. 1860	Driving 22 n Deduct mine	orth 3 fms 2ft 9in materials	51	8	41⁄2
 David Rees (Horse labour) Nov. 1859 Horse 2 days at 2/6 Dec. 1859 Horse 6 days at 2/6; bringing parcels from Carmarthen; 1 day going to William Howells. 					

Jan. 1860 Horse 2 days at 2/6 Feb. 1860 Horse 2 days at 2/6 Mar. 1860 Horse 2 days at 2/6					d
John Lewis and partners Nov. 1859 to Mar. 1860 Raising lead ores 11 tons 20 cwt 1 qr Sinking winze 3 fms 2 ft Deduct mine materials					4¼
Shem Davies Mar. 1860	s and partners Raising 1 ³ / ₄ t sawing one d	ons of lead; driving crosscut west 1 fm; ay.	9	12	0
James Mund Nov. 1859	clearing up fo	bed planking shaft; cutting plat in 32; ork and cistern; uth 2 fms 4ft 6in	22	3	5
Dec. 1859	Dec. 1859 Driving 32 south 5fms 2ft 3in; stoping 2fms 6ft 6 in; deduct mine materials.				8
Jan. 1860	Jan. 1860 Driving 32 south 5fms 3ft 3in; rising against winze 1 fm 0ft 6in; stoping back of plat. Deduct mine materials.				7
Feb. 1860 Sinking Engine Shaft 1fm 5ft 6in at £11 per fm.; cutting plat for and fixing cistern; putting in penthouse hanging tackle. Deduct mine materials.					10
Nov. 1859 to	Feb. 1860	James Munday pitwork, 4 months.	4	6	8
Nov. 1859 to	Feb. 1860	Watching, 4 months.	4	0	0
Mar. 1860	Sinking Engi Deduct mine Pitwork, 1 m Watching		24	16	6
Paper submitted - July 17th 1994: Peter F Claughton Blaenpant Morfil Rosebush Clynderwen Pembrokeshire Dyfed SA66 7RE					