

BRITISH MINING No.95

**THOMAS SOPWITH Jnr.**

**LA TORTILLA AND HIS OTHER MINING VENTURES**

**AT LINARES, SPAIN**

by

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**MONOGRAPH  
OF THE  
NORTHERN MINE RESEARCH SOCIETY  
MAY 2013**

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## ACKNOWLEDGEMENTS

In Spain I would like to thank my very good friends in the Colectivo Proyecto Arrayanes, Linares for all the help they have given me in preparing this paper, particularly Antonio, Pepe, Danni and Paco. I would also like to thank the archivists at the Provincial Archives, Jaén and the librarians at the Instituto Geológico y Minero de España, Madrid, as well as the cartographical service of the Junta de Andalucía, Sevilla for information about mining concessions.

The Litoteca (IGME) at Peñarroya-Puebonuevo, Cordoba has been a valuable source of information. I would like to thank Francisco José Montero Caballero and José Javier Muñoz León for their assistance, and also to Miguel A. Pérez de Perceval Verde, Facultad de Economía y Empresa, Universidad de Murcia for bringing the archive to my attention; also a thank you to Juan Manuel Cano Sanchiz, Universidad de Cordoba for his help.

In England I would like to thank the archivists at the Northumberland Record Office, Woodhorn; the Hampshire Record Office, Winchester; and the Nottinghamshire Record Office, Nottingham, as well as the Librarians at the National Coal Mining Museum for England, Wakefield and the North of England Institute of Mining and Mechanical Engineers, Newcastle upon Tyne.

I would also like to acknowledge John Clarke, Brookwood Cemetery Ltd who provided information about the Sopwith grave and Robert Sopwith for answering an occasional query.

Last but not least, a big thank you to my wife, Margaret Vernon for her assistance in collecting the information and helping with the translation.

### Dedication

**This monograph is dedicated to my granddaughter Hazel Winifred Vernon.  
Perhaps one day she will also be inspired to write about her own research.**

## INTRODUCTION

*'From morning until night you hear nothing, see nothing but lead: lead at the railway station, lead-smoke (from the smelting works) in the air, lead on the donkeys' backs: plomo en gahipagos, plomo en plancha, plomo primero o segundo (lead in pigs, in sheets, lead of the first or second quality). Lead and money, varied by money and lead, it is depressing alike to soul and body; and, gentle reader, remember there is a proverb among us, "Andar con pies de plomo" (to proceed with leaden feet); and a disease among us which is called "being leaded," and makes a man's eye dull and his brain sleepy.'* So wrote the Reverend Hugh James Rose, Chaplain to the English, French and German Mining Companies of Linares in 1875 in his very descriptive work about his time there.<sup>1</sup>

The metal mines scattered around the towns of Linares and La Carolina were once recognised as some of the world's major lead producers. From the mid-19th to the beginning of the 20th centuries the larger mines were generating consistent outputs and profits, even when lead was at its lowest value on the world's metal markets. The concession of the Spanish state-run Arrayanes mine dominated the area but close behind followed a string of British companies, notably the Linares Lead Mining Company founded in 1849 and later managed by John Taylor and Sons, the internationally renowned firm of mining consultants based in London. Other successful British Companies were soon to follow, that included Fortuna and Alamillos, also formed and managed by the Taylors.<sup>2,3,4</sup>

In comparison, the Spanish Lead Company Limited was late on the scene. Established in 1864 and managed by Thomas Sopwith jnr., it was a private company financed by landowners and industrialists from the North of England as well as the City of London, that was formed to work the La Tortilla Mine to the west of Linares. The Company soon gained a reputation as a major lead producer. The Company was reformed, and refinanced, as T. Sopwith and Company Limited, in 1880, a move that led to the construction of substantial lead-works at La Tortilla. In the early 1900s, mining operations ceased and the smelting-works were taken over by the Peñarroya group. Notably, the name Sopwith was still associated with La Tortilla when the Compañia Sopwith operated the smelt works in the 1950s.<sup>4</sup>

Figure 2 is the only known photograph of Thomas Sopwith jnr. and was probably taken before his death in 1898.

Being a private limited company, very few original mining records survive for the years when Thomas Sopwith jnr., or Tom as he was referred to, was the manager and later director of La Tortilla. We are fortunate, however, that two contemporary accounts exist in the United Kingdom that describe the Sopwith years there. The first source, which charts the rise of the Company, are the diaries of Tom's father, Thomas Sopwith snr., who strongly supported his son's endeavours at Linares. Sources for the diaries include photocopies with the Colectivo proyecto arrayanes, Linares, Spain (1862 to 1868), microfilm at the Northumberland Record Office, Woodhorn, Northumberland (1868 to

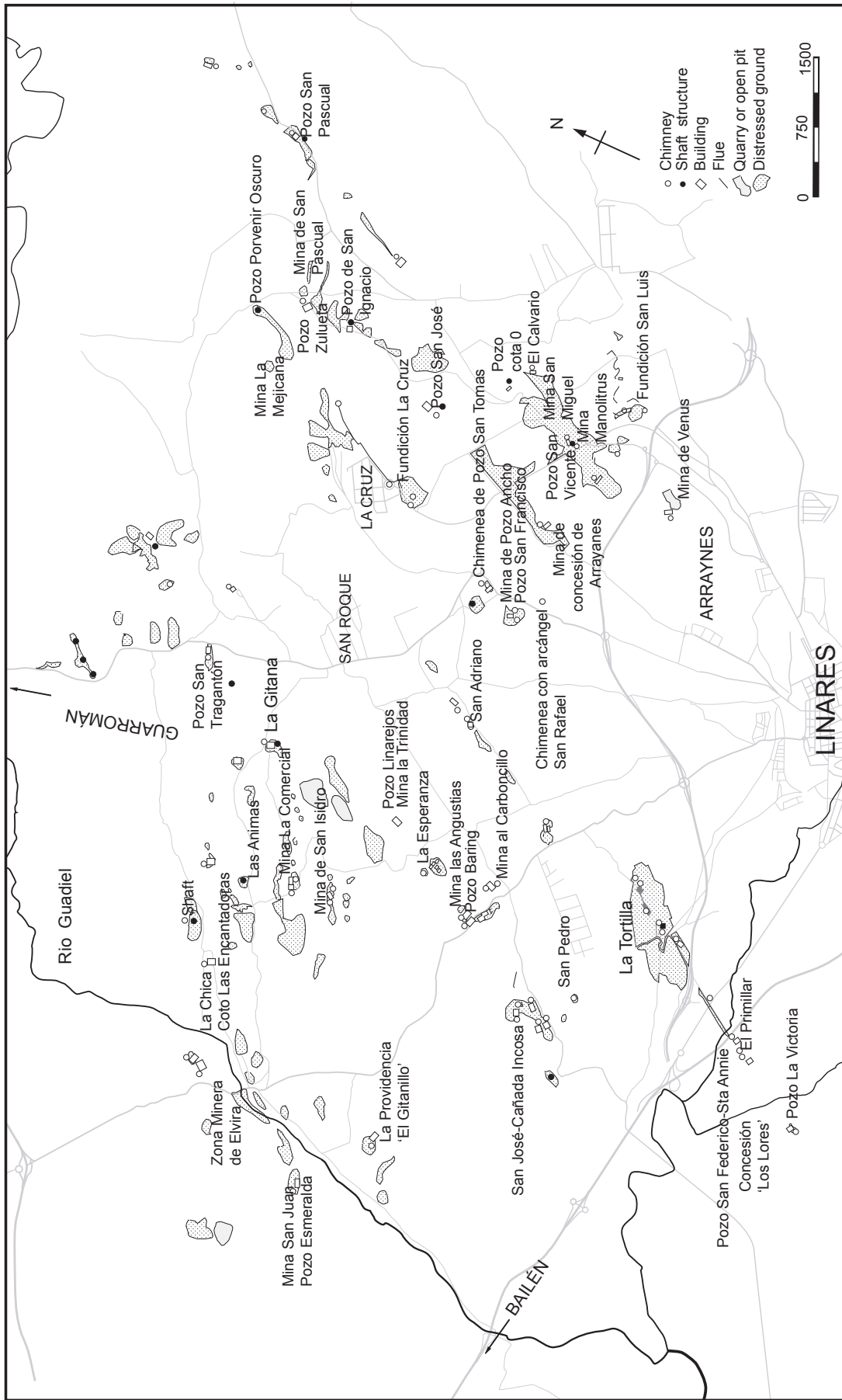


Figure 1. Sketch of the area around, showing chimneys, shaft buildings and other features identifiable from Google Earth. The Pozo Ancho mine, just to the north of Linares, operated by the Linares Lead Mining Company, has some of the oldest engine houses in the area. The first one was built in 1849. The Spanish Lead Company, who worked La Tortilla, was a relative newcomer to the area.



## THE SPANISH LEAD COMPANY LIMITED

By early 1864 Tom had returned to Linares. A company had been formed to take up four mining concessions or *pertenencias*: Dichosa y Buena Ventura, San Antonio, San Alonso and El Convenio, from Juan English and Henry Haselden, mine promoters and operators based in Linares.<sup>26</sup> In a later report Tom would explain what constituted a concession. *'In 1859 the mining grants were made in "pertenencias" of a rectangular form 300m long by 200m broad, say 60,000 square metres, or about 15 acres. Of these, two only could be asked for at a time by a private individual and four by a company.'* In 1868, this rule was abandoned and grants were made in squares of 100m, containing a hectare. The minimum number that could be asked for was four but no limit was fixed on the number that could be acquired. The acquisition of four mining concessions in 1864 was therefore the maximum that could be taken up under the then mining laws of Spain.<sup>27</sup>

Initial discussions indicated that the company would be called the 'Anglo Spanish Mining Company Limited', implying other minerals as well as lead would be worked as Beaumont considered that in the long term the company would expand into commercial dealings.<sup>28</sup> However, the name of the new company was ultimately registered as the 'The Spanish Lead Company Limited'.

The capital of the company was £60,000 divided up into 12,000 shares of £5 each of which 8,000 shares were to be allocated. It was intended to issue the remaining 4,000 shares after the first ordinary meeting of the company to be held in either May or June 1864. Other shareholders in 1864 included Tom with 200 shares as well as members of the Beaumont family.<sup>29</sup>

It was clear from the outset that share ownership was going to be for the select few; W.B. Beaumont and Thomas Sopwith snr. (Figure 8) were to purchase a fourth and a twelfth of the total shares, respectively and John Taylor, who operated three successful Linares mines (Linares Lead, La Fortuna, Alamillos) initially agreed to take 1,000 shares but then did not.<sup>29</sup>



Figure 8. Thomas Sopwith senior. [Richardson, B.W., 1891, 'Thomas Sopwith, M.A., O.E., F.R.S.', Longmans, Green and Company. London. - frontpiece].

By the end of February the required 8,000 shares had been allocated, realising sufficient

capital to commence mining. Mr Warington Smyth (Figure 9), a government geologist with considerable experience with metal mines and Thomas Sopwith snr. were the directors.<sup>29,30</sup> Early March saw the approval of the Articles of Association.

On 2 April 1864 the Spanish Lead Company Limited was formally registered with Companies' House in London, supported by seven subscribers, who also held shares in the company:<sup>29</sup>

Wentworth Blackett Beaumont	3,000 shares	Stewart Hodgson	400
Thomas Sopwith snr.	1,000	Charles Lloyd Norman	200
John Fowler	1,000	Henry Stuart Cunningham	200
Warington Wilkinson Smyth	200		

### A VISIT TO LA TORTILLA

Towards the end of April 1864 Thomas Sopwith snr. and Warington Smyth, accompanied by their wives and Tom, travelled to Linares to inspect the area and the

La Tortilla Mine.



Figure 9. Warington Wilkinson Smyth [*The Mining Journal*, London. 15th June 1889. p.679].

The 19 April found the group in Madrid. The next day they visited the Museum of Natural History to examine the mineral collection, and the School of Mines where they were introduced to the Director and inspected geological maps, especially a very beautiful map of the Linares mining district.<sup>31</sup> The following day saw them take a train south through La Mancha, 'a flat, very flat country and here and there some windmills on little knolls' to the foothills of the Sierra Morena, where they changed to carriages. Eventually the party arrived at Guarromán, just to the south of La Carolina, where they were met by Mr. English the mine agent, and manager of the San Roque Mine, with horses for the whole party to

travel to Linares. The journey had taken 22 hours. Thomas Sopwith snr. described this new experience as, '... a plenitude of enjoyment which I shall ever remember with delight and shall henceforth as long as I live think with deep interest of Madrid, La Mancha and Linares'.<sup>32</sup>



Despite acquiring additional reserves of ore in the Lord Salisbury concession immediately to the south of Lord Derby in 1878, the Company was undoubtedly still having financial difficulties due to the lead markets. Possibly as a result of these difficult circumstances it was decided to restructure the company, seemingly to attract more capital to develop the mine. It was also possible that Tom wanted to distance himself from the influence of the Beaumonts. The link to them via his father's respect for the family no longer existed. Equally likely was the fact that W.B. Beaumont was also having similar financial difficulties with his North Pennine mines and may have wanted to concentrate his efforts on his core business in England. So in November 1879 a resolution was passed to dissolve the Spanish Lead Mining Company.<sup>29</sup>

## **T. SOPWITH AND COMPANY LIMITED**

In 1880 the La Tortilla and Las Angustias Mines were taken over by a new company, T. Sopwith and Company, Limited.<sup>107</sup> There was no doubt about the statement being made by the company's name; Tom was no longer the manager of La Tortilla mine but the director. The share allocation was divided into 12,000 shares at £10 a share. Full subscription would realise a sum of £120,000. The initial seven subscribers to the new company required by company law were:

Thomas Sopwith	6, Great George Street, London.	Civil Engineer (3998)
Sir. W. J. Tyrone Power	25, Holland Park, London.	Lord (100)
Frederick Power	Franks Hall, Farningham, Kent.	Esquire. (5700)
G. Villiers	24, Cromwell Road, London.	Gentleman. (100)
Harold W. Power	2, Mandeville Place, London.	Esquire. (100)
George Seymour	6, Great George Street, London	Civil Engineer. (1)
W. Glendenning	6, Great George Street, London.	Clerk. (1)

(Shareholdings in 1881 shown in brackets)

The first directors of the company were Messrs. Sir William Power, Villiers and Tom. With the involvement of the Powers, Tom had got his new financial backers. The Powers were a well-connected family with their family seat in Tyrone, Ireland. Sir William Power was Knight Commissary General in Chief of the British Army and also a barrister. Frederick Power was a landowner in Kent, England and held £57,000 of shares in the company. Tom himself invested £39,980 in the enterprise.<sup>107</sup>

At some time in the past, Tom had purchased the Encarnacion Mine in the Linares area which he now sold on to the new company. In an agreement dated 4 December 1880, between himself and T. Sopwith and Company, the company purchased the Encarnacion Mine, together with all properties, plant, chattels for the sum of £30,000 paid in shares. In effect, the company took over Tom's financial liabilities in his mining operations.<sup>29, 107</sup>

The development of the mines during the 1880s and much of the 1890s remains unrecorded. However, there are several contemporary accounts that refer to the smelting works, for example. We do know that it was expanding to meet an increasing output from the mine. In 1880 it seems that ten lead crystallisers were being used in the desilvering works.<sup>108</sup> By 1885 this number had increased to twenty-two. In the same year there were also nine Scotch hearths and seven reverberatory furnaces. Figure 23 is a view



*Figure 23. La Tortilla: a view of the lead-works yard. A tramway connected the mine to the works, but donkey carts would have been used for transporting ore from outlying mines. [Author's collection].*

of the lead-works yard probably in the late 19th century. The English managerial staff numbered fourteen, a small number when compared to the four hundred workmen employed at the mine and smelting works.<sup>108</sup>

It is sometime suggested that at the time the British lead mining industry was in decline a large numbers of lead miners from the Pennines went to the Spain to work lead mines there. Certainly for La Tortilla, manpower statistics do not give this support. The workforce was mainly Spanish, with a small number of foreign staff in key managerial roles, as previously noted by Thomas Sopwith snr. This is perhaps a myth inspired by the novel 'Adam Brunskill', that describes a lead miner returning to the Pennines from Spain.<sup>109</sup> Other than the mine officials there is no evidence to suggest that any of the miners at La Tortilla came from the Pennine ore-fields.

The nature of the company was similar to the previous company; control remained in the close hands of a few wealthy individuals. Therefore, it was not necessary to keep updating a large following of shareholders on the mine's progress but possible to still comply with company law by filing the necessary annual returns. Clearly not all was satisfactory and the company must have felt the effect of falling lead prices in this period. In 1884 for example, the Company passed a resolution to borrow up to £40,000. However, always ready to use innovative ideas the Company inaugurated an electric lighting system 1895, which was used in the mine.<sup>110</sup>

The remaining history of La Tortilla's development is centred on the southern part of





*Figure 40. The upper deck of the roasting pots, possibly at La Tortilla, showing the offtake hoods with their charging and working ports. The ducts lead in to vertical rectangular chimneys which can be seen in the background [Colectivo proyecto arrayanes, Linares].*

38 and 40 show the process gave an agglomerated product which would have been suitable for charging into a blast furnace. Figure 40vshows what was probably a later arrangement with a two-storey building with offtake hoods and charging ports on the upper deck. Exposure to wind-blown dust throughout the shift and at the end of the cycle when pots were tipped would have been much reduced by this arrangement. The building may have had an earlier use; it is very similar to the Scotch hearth building in Figure 38 and the existing chimneys could have been used.

Figure 41 shows one of the roasting pots being tipped at the end of the cycle. The pot has a circular distributor plate covering the air inlet, which would have also helped to prevent blockage of the air nozzle. Close inspection of the photograph shows that the

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Sopwith, Thomas, junior.	8,33,47,67	Worthington-Simpson engine	19
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