

BRITISH MINING No.48

MEMOIRS 1993



Arx, R.v. 1993
"Wheal Lopes in Devon"
British Mining No.48, NMRS, pp.90-92

Published by the
THE NORTHERN MINE RESEARCH SOCIETY
SHEFFIELD U.K.

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ISSN 0309-2199

WHEAL LOPES IN DEVON.

by Rolf von Arx

The first lease for Wheal Lopes (NGR SX517634) is said to have been granted in 1760. However, very little is known about the working until the 1840s when the Plymouth & Dartmoor Mining Company acquired the sett situated in Vicarage Wood and Hole Bottom, about one mile north-west of Bickleigh Church. Some ore was raised but the proceeds could not cover costs and, in addition, the price of copper had fallen considerably. Serious financial difficulties set in - at least partly caused by mismanagement.

The plant was still standing on the property when a number of adventurers, mainly from Devon, decided to form a new company to work the mine again. It was registered on 31st December 1859 under the name of



and the shares were offered for sale in January 1860 and May 1861. The capital was £10,000 in shares of £1 each, a deposit of 5 shillings per share on application being required. The directors were William C. Buller of 10 Old Square, Lincoln's Inn and Pound, Tavistock; Theophilus Clive of Hampton Court; Charles H. Daw of Tavistock; James Mitchell of 8 Portugal Street, Grosvenor Square, London and Thomas Nicholls of Tavistock. The post of secretary was filled by W.S. Trotter with offices at 1 Great Winchester Street, London.

The adventurers had reliable information that the previous company had been raising substantial quantities of copper ore when the described difficulties cut short its efforts. It had pushed the sinking and driving to a sizable extent. The Main Shaft was down to the 81 Fathom Level and another shaft to 62 fathoms below adit, with various levels driven in different parts of the mine. It was judged that the exploration work already done was worth some £4,500. The whole plant and material for forking the water and crushing the ore was on the mine, with abundant water available from the river Plym at small rent. The mine was held by a lease from Sir Massey Lopes of Maristow House at dues of 1/15th for 21 years. The lode consisted of copper and blende; the latter, previously useless, could now be sold for some £3 per ton. The cost of mine and machinery to the new company was £3,000, of which £2,500 was taken in paid-up shares. Half of the cash payment was only due after 3000 shares had been subscribed. The directors "*ventured to anticipate*" that the shares would go at a premium.

Captain James Phillips of the profitable Bedford United Mines started his report of 27th October 1859 with an inventory of building and plant then on the mine:-

- One new and powerful waterwheel, 40 feet in diameter and 8 feet breast, with 3 balance bobs, double iron connection sweep rods with about 30 fathoms of 3-inch iron rods, 2 pendulums (wheel sufficient for all pumping purposes)
- One waterwheel of 38 feet diameter and 2 feet breast, with drawing machine and crusher complete, capstan and shears (erected), and 100 fathoms of 12-inch capstan rope, poppet heads, pullies etc.
- One double acting winch with 30 fathoms of 5/8th chain, very large set of double and treble purchase blocks.
- One 17-inch h. piece, windbore, doorpiece and door with matching piece, and 30 fathoms of new 15-inch pumps, plunger pole, case, stuffing box and gland, 12-inch main rods with strapping plates, bolts etc., all connected and ready for dropping. Flanch-pins, burs, clacks, seatings, in fact everything in order to complete the proposed plunger lift to the 30 fathom level.
- One patent weighing machine, mandril, smith's horse and a variety of articles of general mining use.
- 30 fathoms of 16 and 17-inch pumps fixed in the Engine Shaft, with 1st piece of 12-inch main rod, sett-off, yokes, bucket rods, buckets etc.
- One 16-inch windbore, doorpiece and door.
- One 15-inch working barrel.
- Large bearers, stays, casing and dividing from surface, as well as footway to the 30 fathom level, bearers put in and cistern fixed at the 30 for the plunger lift.
- Footway from surface to the 30 fathom level in the Footway Shaft.

He estimated that these materials had been purchased at a cost of more than £2,000, with carriage and labour adding another £1,000.

Phillips then described the mine. Driving on the South Lode, seen in the adit cross-cut, had been extended several fathoms; it was about one foot wide with rich copper ore interspersed. A winze had been sunk in the bottom of the level, both ends of which had been stoped away, but the depth or appearance of the lode in the bottom could not be ascertained on account of the water. The intersection point of the Caunter with the Main Lode westward and the South Lode eastward in the 14 and 26 Fathom Levels had yielded a valuable deposit of ore. On the Main Lode, which varied in size from 2 to 12 feet, an engine shaft had been sunk, perpendicular to the 60 Fathom Level, and it was calculated that it would be met with at the 100 Fathom Level. Boswarva's Shaft had been sunk 80 fathoms, the last 40 on the elvan course. Footway Shaft was down to the 30 and Hunter's Shaft to the 14 Fathom Level. The Adit Level west had been extended a considerable distance into the fast-rising hill and in the end the lode was

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two feet wide. The driving here cost £5 per fathom. Work on the 14 Fathom Level West had also progressed well, with a lot of ground taken away in the back for tin and copper ores. A lode of from 6 to 12 feet was found in the Adit Level East, where the backs had been stoped and extensive excavations made at surface for tin. A similar situation existed in the 14 Fathom Level East, but for copper. The 30 Fathom Level East had been lengthened and communicated with Boswarva's Shaft. Phillips reckoned that the blende alone would pay for the working here, the ground having been left standing during the former operations. From a conversation with the old mine manager some years previously, he had learned that the gossan was as fresh at the 60 and 70 Fathom Levels as at surface and the water warm and highly charged with mineral, which looked well for deeper levels.

At the 50 Fathom Level, a cross-cut had been driven on the cross-course for several fathoms toward South Lode and this should be continued when the water was out. The work here would require the "Hawling Machine Wheel", the work for which was in a forward state. Phillips proposed to start with a simple course: fork the water to the 30 Fathom Level, fix the plungers and then "drop the present lift to the bottom". As is usual in reports of this nature, Captain Phillips concluded that, with such masterly lodes, he knew "of no property better worth the attention of the Capitalist than Wheal Lopes". With all elements of success on hand, a productive and lasting concern could not be far.

Notwithstanding the marvellous prospects, it was impossible to find sufficient funds to work the mine in a proper way and, when some unscrupulous directors misappropriated urgently needed capital, the unhappy shareholders cut their misery short by voting to wind up the Company in 1868; it was finally struck from the register in 1882.

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