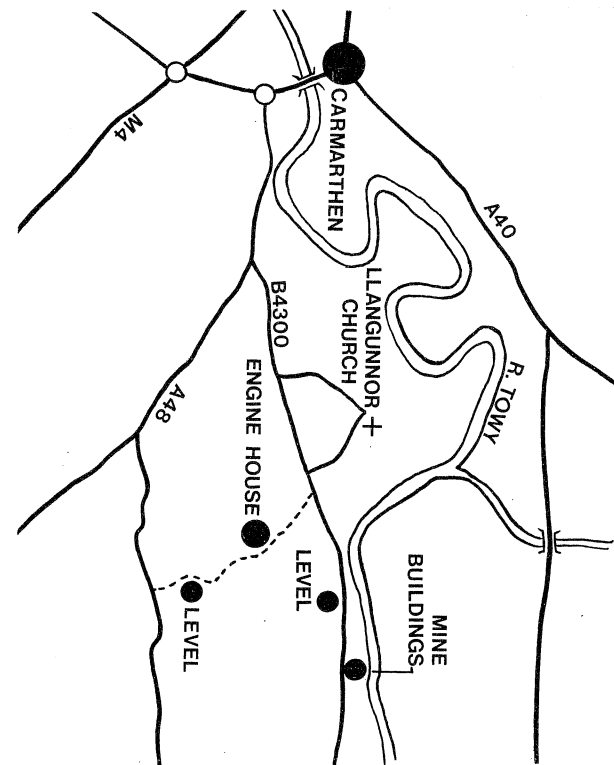
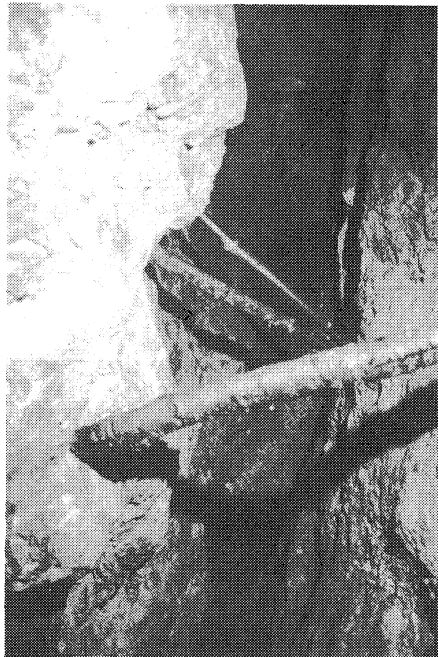


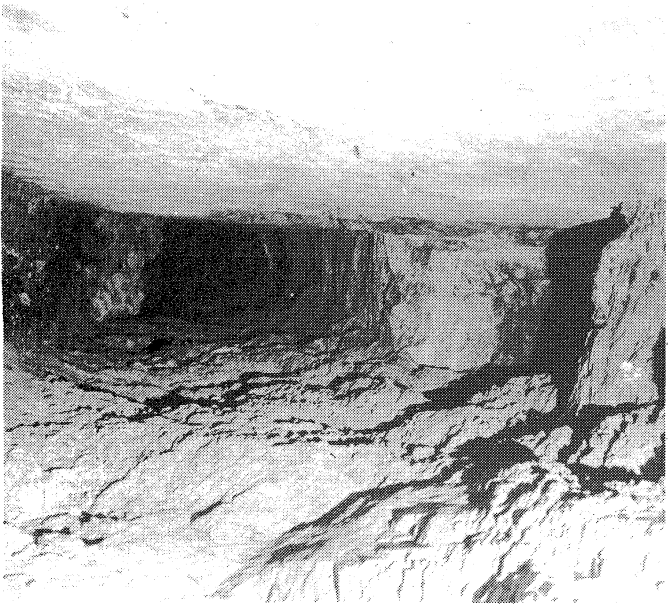
A rise and stulls



Sketch map showing location of the mines

Of all the shafts, levels and adits dug, few remain open today. The most accessible level is situated next to the main road, opposite a lay-by (grid ref. SN 441 202), and the 200ft. long passage contains examples of winze, rises, stulls and crosscuts.

On the numerous spoil heaps in the vicinity can be found specimens of **copper ore, galena, pyrites and quartz**; while the ivy grown ruins of the engine house remains as a suitable monument to this past industry.



A level in the western lodes

- ADIT** a tunnel or level dug at the lowest point of a mine to drain off water.
- CROSSCUT** a level driven at right angles to a lode in search of other lodes or branches.
- LEVEL** a horizontal tunnel
- RISE** a shaft connecting levels mined up along a lode.
- SHAFT** a vertical descending tunnel.
- STULL** supporting timbers.
- WINZE** a shaft connecting levels mined down a lode.

**GLOSSARY**

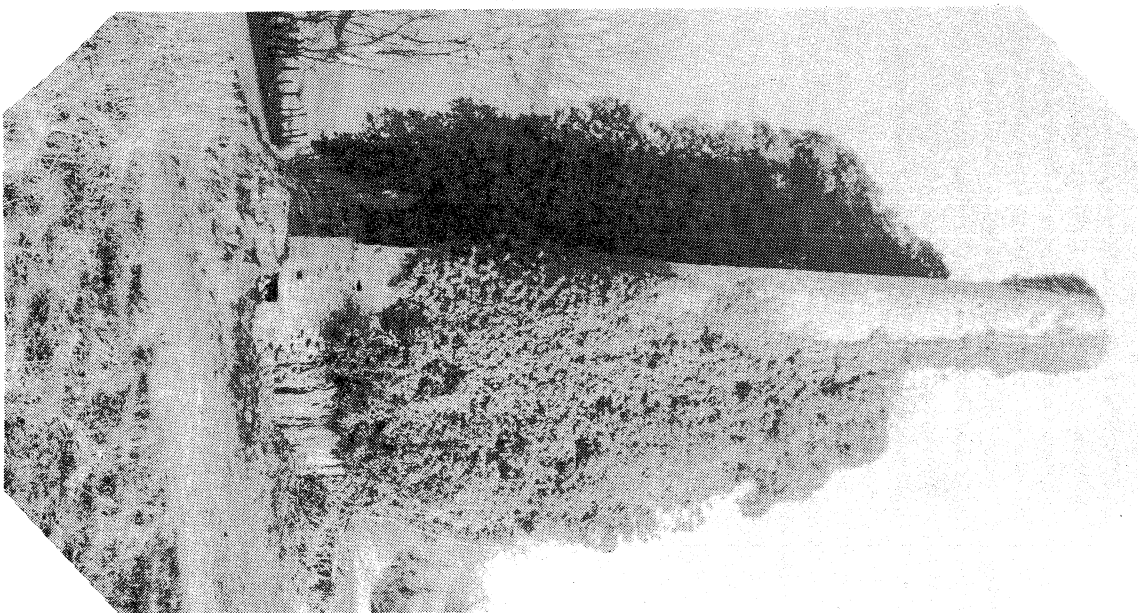
**REFERENCE:**

'Metal mines of southern Wales — G. W. Hall 'Geology of the South Wales coalfield' Vol. 10

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# LLANGUNNOR LEAD MINES 15p



**Carmarthen, Dyfed**

## HISTORY

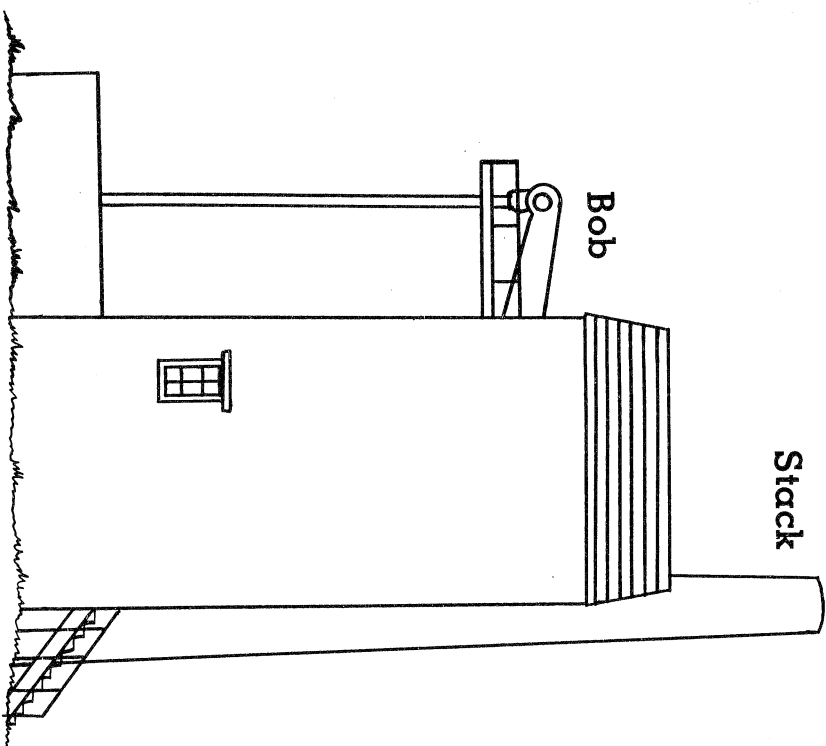
Two miles east of Carmarthen, in the hills south of the B4300 to Llandello lie the disused Llangunnor lead mines. The rich lodes of the hill were claimed to have been discovered in the 18th. century, but there is evidence of earlier workings, including the discovery of boreholes filled with lime (that may pre-date the use of gunpowder in the district). In 1852 Thomas Field formed the **Vale of Towry silver-lead Mining Company**, which sank four shafts — **Bonvilles'**, **Clays'**, **Fields' and Nant**, of which Clays' was the deepest (124 fathoms) though all have been filled in by today. In 1853-4, old workings south of Nant farm were re-explored under the name of **South Towry**. Little of value was discovered, but in 1861, due to failure of the main lode, the **Vale of Towry** took a lease on part of the property and dug an unsuccessful adit beneath 'an ancient mine' (pre-dating the 19th. century workings) known as **Pwll y plwm** ('the pit of lead').

Further east, the **North Towry and Cystanog United Lead Mines Company** began work on **Allt Cystanog** hill. Two adits and two shafts were dug in 1853, in a line south from the road. The finding of good ore led the Company to sink a shaft on the north side of the road. By 1856 this shaft had reached a depth of 28 fathoms, with levels extending beneath the river, but disappointing results ended in the auction and eventual sale of the mine to Thomas Field. Field restarted the mine in 1859, but what little work was carried out ceased the following year.

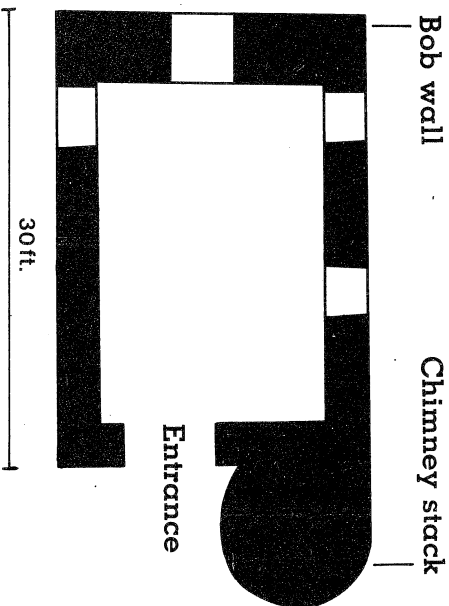
A decade later, when a rich lode was discovered in old workings near the hilltop, the property was acquired by Matthew Smith of Hexham, who formed the **Grand Duchess Silver-Lead & Barytes Mining Company**. But for some unclear reason (possibly because the company did not have the funds to extract ore at a greater depth once the shallow ores were exhausted), the property was ordered by the High Court to be sold by auction.

In 1889 the discovery of good ore by local people, led to the formation of the **Carmarthen Lead Mining Syndicate** which held the mines until closure in 1902.

During this successful venture a deep shaft was sunk (52 fathoms) linking with a level and adit. At this time the company employed around 50 men, as opposed to 150 during the heyday of **The Vale of Towry**.



Front cover: Clays' engine house  
Above: restored elevation (from the east)  
Below: plan of the engine house

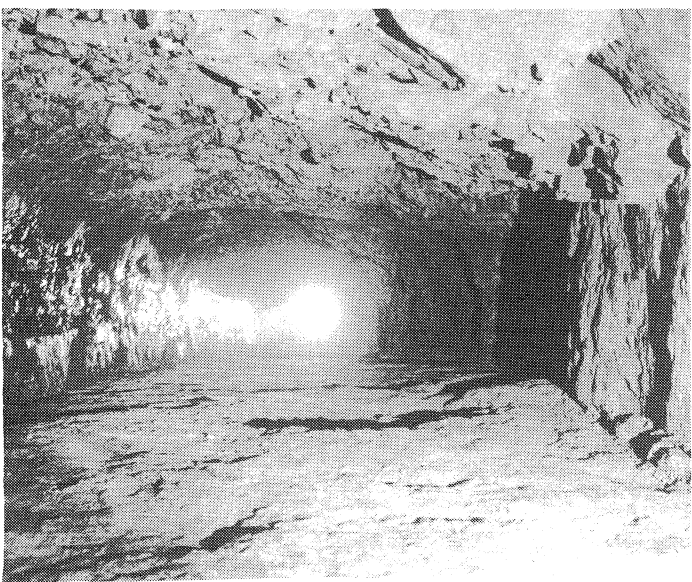


## THE ENGINE HOUSE (Grid ref. SN 437 197)

In order to work the lode below adit level in Clays' shaft, the **Vale of Towry** management erected a Cornish engine to pump water out of the mine.

The engine had a steam cylinder of 50inch diameter, which transmitted the slow power of a piston rod, to a pump rod in the shaft by means of a huge rocking beam (known in Cornwall as a **bob**). By the action of this vast 'see-saw', water was drawn up the shaft through a series of hollow plungers to adit level.

The structures built to contain these engines are an unmistakable and distinctive feature of the Cornish landscape, and Clays' engine house is a typical (though overgrown) example. The long tapering chimney is the most striking feature of the site, and it served a boiler house that provided steam for the pumping engine. The adjoining three storey block contained the engine, and from the top floor a wooden platform extended out around the bob, from which the mechanism and shaft could be inspected. In order to cope with the stresses of pumping, these engine houses were solidly built — the wall on which the bob rested is 4½ft. thick — and it is this inherently massive construction that has enabled these buildings to survive.



Looking down a level towards the entrance