





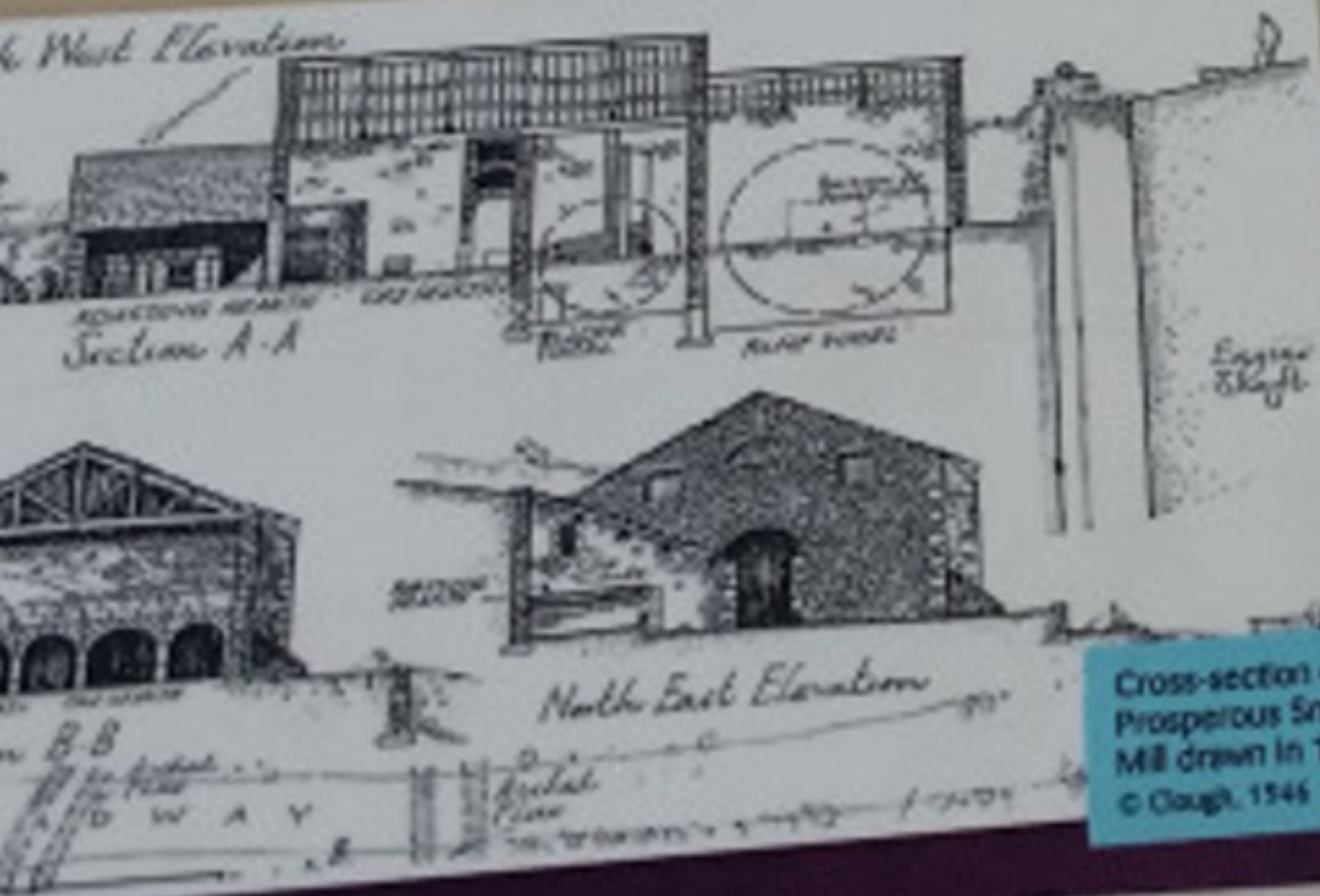


Prosperous Smelt Mill

In front of you stand the remains of a once noisy, smelly and busy smelt mill. For over 100 years the mill processed lead ore dug from mineral veins that cross this landscape. The ore was heated in the smelt mill to extract the lead which could be sold for profit. By 1904 the mine is described as in ruins.

How did it work?

- | | |
|--------------|--|
| Wash | Raw ore was washed, using the waters of the nearby gill. |
| Crush | Washed ore was crushed using a stamp or grinding mill. |
| Sort | Crushed ore was sorted, or 'dressed', to separate the waste. |
| Roast | Dressed ore was heated to a high temperature in a furnace with air. |
| Melt | An air-starved furnace heated the roasted ore and molten lead sank to the bottom. Molten lead flowed out of the front of the furnace into moulds, where it solidified into ingots or 'pigs'. |



Cross-section of Prosperous Smelt Mill drawn in 1946.
© Clough, 1946



Resource alert: Drawing of the Prosperous Lead Mine and mill complex, as seen by Silverdale.

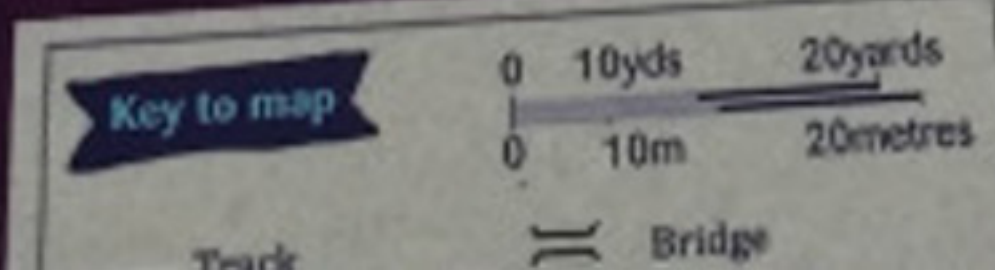
Did you know?

Miners were paid approximately \$100,000 to \$150,000 a year for the work, and the cost of the equipment was covered by the government. The miners were paid in advance, and the cost of the equipment was covered by the government. The miners were paid in advance, and the cost of the equipment was covered by the government.



Some of the author's previous
research was published in
the *Journal of Management*

- **Sewall Mill Shaft**
Originally fitted with a water wheel in 1818 to power the rollers of the *crude mill*. Later it powered the *adjacent dressing mill*.
- **Dressing Mill**
In here workers separated *valuable material* from the waste. The *waste or 'spoil'* was tipped outside.
- **Underground Flues**
Crooks of poisonous fumes off when the lead was roasted were *fanned away* to a *strong underground flue*.
- **Bellows**
Helped to heat the furnaces were powered by *animal power*.
- **Ore Hearths**
These were fired by *wood*.
- **Old 'Washings'**
Remains of old *mineral processing* techniques.



d mineral ores were locally as 'bouse'. It was a place called



































