

BACK O'TH'EDGE OR RITHEING LAKE MINE AND MAY SOUGH

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Abstract: A deep trial shaft, known as Back o'th'Edge Mine or Ritheing (Writheing) Lake, was sunk in the 1760s from the head of Bretton Clough, through a considerable thickness of shale, in order to re-discover a north west break vein, first worked in Eyam Liberty at Old Grove on the Hucklow Edge Vein. The Lords of the Manor would not permit the miners to trace, or work the vein through Grindlow Liberty, necessitating a deep trial shaft being sunk in Bretton Clough, within Hucklow Liberty, where the right of free search obtained. The vein was re-discovered, but few financial accounts have survived and as the venture lasted less than four years it must be presumed a failure. When Back o'th'Edge shaft was commenced it appears as though a rival company of miners began to extend May Sough toward Bretton Clough in the hope of discovering the vein first. Little is known of their venture and it too was probably a complete failure.

The Derbyshire lead miners bestowed many peculiar and poetic names on their mines and Ritheing Lake must rank as one of the oddest. The derivation of the name is not known, but the idea of a wave-tossed lake, deep beneath Bretton Clough does not appear feasible! Ritheing (or Writheing) Lake was the alternative name given to a working also known as Back o'th'Edge Mine.

Sometime between 1711, when the Hucklow Edge Vein was first worked into Eyam Liberty, and 1749, a break vein was discovered at Old Grove ranging north-west toward Grindlow Liberty. The partners at Silence Mine also held title to a part of the break (Nash, 1977), and in due course the vein was worked up to the Grindlow Liberty boundary. The latter was a private liberty, then belonging to Viscount Cullen and the usual lead mining laws relating to the right of search and mining did not apply. Mining was carried on only with the consent of the Lord of the Manor. On this occasion the miners were not permitted to pursue their new vein into Grindlow Liberty.

On the western side of Hucklow Edge, within both Hucklow Liberty and Hazlebadge Liberty, (the latter privately owned by the Duke of Rutland), by working Virgin Vein and Never Fear or May Sough Vein within the limestone outcrop in a east or north eastwardly direction, mining at both eventually progressed up to and then beneath the shale cover. Virgin Mine was at work in 1660, at which date a very large skull and a huge tooth were discovered in the mine (Evans, 1912). The remains were noted by Farey (1811), who also stated that native sulphur was found there in the toadstone. The occurrence of toadstone at Virgin Mine seems very unlikely, though Pilkington (1789) observed;

Moreover sulphur has been known now and then to occur in it (toadstone). A layer about an inch thick has been observed in the Virgin mines Haslebadge, so pure that it flamed when touched with a candle.

Elsewhere Pilkington stated that the layer was four inches in thickness. The Virgin Vein was pursued north eastwardly for several hundred yards beyond the shale/limestone boundary. The reason for eventual abandonment of the mine in that direction is not known, but whatever the the content, problems with drainage and, in particular, ventilation deep beneath the shale cover would have been considerable.

The origin of May Sough is more problematical. Driven in shale, it was probably intended to explore Never Fear Vein by means of sumps sunk below the sough into the underlying limestone. Some early geologists believed that beneath the surrounding shale and

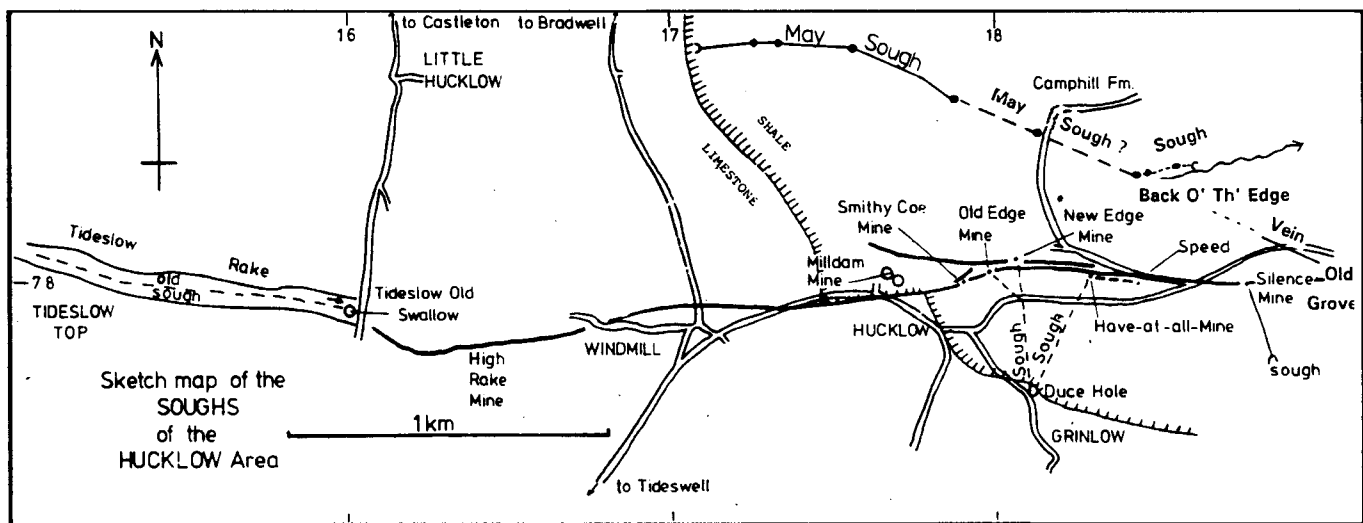
grit hills the limestone rose again, so maybe the sough was driven with a dual purpose in mind, to work Never Fear Vein, yet hoping to re-encounter limestone deep beneath Hucklow Edge. About 1757 or 1758, a partnership of adventurers, including Barker and Wilkinsons (Willies, 1983), decided to carry out a deep sinking very near the head of Bretton Clough, within Hucklow Liberty, in an attempt to locate the Old Grove-Silence north-west break vein, here buried beneath the shale cover. The date when sinking began is not accurately known, but the mine was active during the period 1759 to 1762. The vein was also sought and according to Green (1887) was worked from the Bradwell side of Hucklow Edge by means of May Sough.

Before proceeding further, it is important to understand the broad geological structure between Old Grove, the head of Bretton Clough and the limestone outcrop at May Sough tail and Virgin Mine. Unfortunately old mining records are incomplete, for example neither the depth of Back o'th'Edge shaft, nor the contour of the shale/limestone interface at the mine are known. Published geological information suggests that the inclination of the limestone where it passes under the shale, at May Sough tail and also at the eastern end of Great Hucklow village, is about 5 to 10 degrees. The outcrop of the limestone at May Sough tail and Virgin Mine is at 800 feet OD; taking a dip of between 5 degrees and 10 degrees south east at that location and a similar inclination, but towards the north east at the eastern end of Great Hucklow village, would place the top of the limestone at around 580 feet OD at Back o'th'Edge shaft. These figures are also consistent with a thickness of 560 feet to 575 feet for the Edale Shales (IGS, Sheet SK 17). The Old Grove shaft was sunk to a depth of 50 fathoms (300 feet), probably to the base of the shales.

Clearly, along the line of the Old Grove Break Vein, through Back o'th'Edge Mine, north-westwardly to May Sough, the upper surface of the limestone forms a shallow trough, the deepest joint probably coinciding with the location of the mine. In order to reach the limestone at Back o'th'Edge, the shaft must have been at least 500 feet in depth and possibly 550 feet. The hillocks are composed principally of shale, but fragments of limestone can be picked up, so obviously either the shaft, or yet deeper workings encountered that rock.

The known history of Back o'th'Edge Mine begins in 1759. From April to the end of November, the sum of £288-9-1 was spent (SCL, OD 1497) whilst by December at least seventeen men were employed.

A little later in April 1760, George Heyward, the mine agent,



Sketch map of the soughs of the Hucklow Area.

commented in a letter,

Ritheing Lake Sough Engine Shaft hath been a very wet one as ever I saw down to the Levill. I have gathered the water together at different levels by garland pairs and lauders into the Sough Levill and when had done had not so much watter to trouble at first, but when begining to sink which was April 14th, when about five feet deep had much watter which I believe was about four gallons a minute (SCL, OD 1504).

During July 1760 there are brief references to;

*when we fetched spindle
set pit gear up and
when we broke great Beam (SCL, Bag 517).*

From the above references it appears that the engine shaft had reached the level of the sough, maybe 100 feet to 120 feet beneath the surface, by April 1760 and sinking below the sough commenced on the 14th April. By July they had begun to assemble a large horse gin for winding. The latter part of Heyward's letter states that below the sough the shaft was sinking through a sequence of interbedded shale and greetstone, all being very hard.

A vein had been found at the mine during the late summer of 1761, William Bagshawe writing from Castleton observed that "wee have discovered one of ye veins wee were seeking for at ye back of Hucklow Edge" (SCL, OD 1504). The partners were wanting to drive into Abney Lordship, seeking new veins, but they presumed it was not within the Kingsfield and therefore needed to agree duties with the owner, Mr. Galliard. They were somewhat apprehensive as to whether he owned the lead mining dues, because he claimed the Lordship under a grant from the Crown. Bagshawe proposed that Galliard be offered a 20th of all ore mined, the same duty as that taken at the mines in Grindlow.

The short, shallow sough driven to the mine was known as Ritheing Lake Sough. It seems very likely that it was intended to merely act as a pumpway. The tail, now completely run-in, cannot be located; presumably it was situated on the north bank of the brook some 200 to 300 yards east of the main shaft. Two run-in air shafts on the line of the sough are still visible. The sough and associated air shafts were constructed within Abney Lordship, so presumably an agreement had been reached with Galliard in that matter.

The vein looked very promising and miners from Castleton were

employed at Back o'th'Edge

to expedite the discovery before Clay and Partners who are driving night and day for that purpose.

Presumably, Clay and Partners were driving, or more likely continuing, May Sough south eastwardly, deep beneath Burr Tor. Green (1887) noted that the vein at Back o'th'Edge was also worked in May Sough. A parallel vein lying south of the main vein was reached via a cross cut from Back o'th'Edge Mine, but nothing further is known about it. Presumably it was discovered at or near the shale/limestone interface.

The optimism must have been very short lived, because Back o'th'Edge Mine lost £300 in 1762; in 1765 it was said that Writheing Lake Mine was "so overloaded with water it will never be of any service".

At the latter date the recorded history of Back o'th'Edge Mine or Writheing Lake ceases.

Unfortunately, the whereabouts of the business records of the Clay family of Bridgehouses, Sheffield is not known. Consequently there exists a substantial gap in the history of the Bradwell and Hucklow mines, in many of which they were major shareholders. No references have survived to any work carried out by Mr. Clay at the mine.

Little is known about the history of May Sough. The earliest available date is 1766, but if Clay's miners were driving it by 1761 and by that date it was close enough to Back o'th'Edge Mine to cause concern to the partners there, then the sough-must be considerably older and may date from the 1730s. A mine proprietor by the name of Edward May was involved in several mines in the Hucklow and Wardlow areas during the 1730s.

There appear to be two possible locations for the tail. The first position lies in a marshy hollow about 700 to 750 feet south of Nether Water Farm. An open shaft a little to the south of the suspected tail may be an air shaft on the sough. The first part of the level is aligned along the eastern range of Never Fear Vein, the latter being worked eastwards from Little Hucklow village. The sough must have been driven entirely in shale and if driven from the suggested tail position then maybe originally it was continued above the line of Never Fear Vein, which could have been worked beneath the shale cover by means of sumps from the sough. Most probably the original section, from the tail to a shaft at SK 175 787, some 1700 feet in length, was driven previous to 1759. When the Bagshawe-Barker-Wilkinson partnership began

to sink at Back o'th'Edge, then Clay and partners began work at the old forefield of May Sough. From there to the mine is a little over 3200 feet and driving on three shifts, the sough could certainly have reached a point very close to the head of Bretton Clough by September, 1761. Another shaft, not examined by the writer, is situated within the landslipped area immediately beneath the face of Burr Tor. The shaft must have been very nearly 400 feet in depth to have reached the contour of May Sough; it was presumably sunk for both haulage and ventilation purposes.

There are local stories that a further shaft formerly existed immediately on the west side of the road and within the Camphill Gliding Field. No trace of a shaft now remains, but its position would be consistent with the spacing between the other known deep shafts.

The second postulated position for the tail is situated at SK 172 792. At this point, about 300 feet south of Quarters Farm, is a grassed channel leading from a run-in sough tail. A shaft mound lies a few yards behind the tail. There is a possibility that this presently unidentified sough may be the former entrance to May Sough. If so, then the level would have ranged south eastwardly, all in shale, crossing the line of Virgin Vein, reaching the beforementioned shaft at SK 175 787, some 1970 feet from the tail.

Both ventures, at Back o'th'Edge Mine and at May Sough, were very bold, the latter being a considerable feat of mining engineering. Despite this fact, the sough seems to have excited little comment in printed works. The complete story will probably never be known, but judging from the loss recorded in 1762, there seems every reason to assume that they were both financial failures.

ACKNOWLEDGEMENTS

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