

SNAKE MINE - SOME RECENT FINDINGS

by A. J. Pearce

The history, geology and workings of the Snake Mine, Hoptonwood, have been previously described in articles by Gregory & Tune (1967) and Tune, Hurt & Ford (1968). A recent donation to the records of the Society by Mrs Z. Downs-Rose has been a reckoning book for Snake Mine covering the period 1863-88, with additional entries describing the freeing of veins and diallings. It came into her possession from her father, James Bark, who used to be a miner at Millclose Mine and who explored Snake Mine shortly after the Second World War with a view to re-working it. The book extends our knowledge of the history of the mine and answers some of the questions raised in the previous articles. The reckoning book will be added to the Society's collection at Matlock and will be available for consultation by members. This article attempts to give a precis of the additional information now available.

HISTORY

The earliest mention of working is 1828 but it appears that the mine was working prior to this. A list of freeings in the book appears below.

18/6/1828 - A founder vein was freed for new. The vein ranged N-S and was 45 yds east of engine shaft. Named Lee Vein.

13/6/1832 - a vein was viewed by 'the 24' (Barmote Jury). It was 8 meers north and 10 meers south of Snake Mine. In addition, a N-S ranging vein was freed for old. It appeared at the west end of the Founder vein.

31/1/1833 - an E-W ranging vein was freed for new. It was 12 yds north of Johns Vein and was named Mathews Vein.

16/6/1833 - 4 meers were viewed as takers on the vein. (Founder Vein?). Also 8 meers were viewed north on Lee Vein from the end of the King's half meer.

28/2/1843 - an E-W ranging vein was freed for new. It was 12 yds north of Mathews Vein.

5/4/1845 - the Founder Vein was freed for old, 40 yds west of Founder Shaft.

26/4/1845 - a N-S ranging vein was freed for new. It was 60 yds west of engine shaft and was named Pincher Vein.

8/4/1846 - 1 2nd taker meer was freed on the vein freed on 5/4/1845.

14/9/1846 - a 3rd taker meer was freed on the above vein.

6/3/1848 - a 4th taker meer was freed on the above vein.

17/4/1849 - a founder was freed for new on an E-W ranging vein. It was 110 yds west of old shaft and named Joint Vein.

12/4/1850 - a vein was freed for new, 7 yds west of new shaft. It was named Spar Vein.

20/7/1850 - a vein was freed for new. (No details given).

17/4/ - a founder vein was freed for old, ranging NE-SW. It was 12 yds north of Snake Vein and named Johns Vein.

24/9/1859 - a founder called Johns Vein was freed for new. It was 65 yds from drawing shaft and ranged East out of Pincher Vein.

8/8/1860 - a meer was freed for old. (No details given).

The above entries, according to a note in the book, were extracted from the Barmaster's Book of Anthony Alsop on 8/4/1872. In addition, a further note of freeing appears as follows:

31/3/1888 - a NE-SW ranging vein was freed for new. It was 26 yds south of engine shaft and was named Samuels Vein.

There is no note of the date that operations ceased but a copy of a letter refers to the dressing machinery being loaned in 1916 which may be the year that the family ceased operations at Snake Mine.

OWNERSHIP

The mine passed through the hands of several partners but it was predominantly worked by the Sheldon family.

1828-32 - John Sheldon and John Lee, half shares.

1832-42 - John Sheldon, Joseph Sheldon, John Redfern, Elias Knowles, quarter shares. The latter two relinquished their shares on 17/10/1842.

1842-72 - John Sheldon and possibly other members of his family as partners.

1872-75 - Samuel Joseph Sheldon 12/24.
James Brace 10/24.
Joseph Walker 2/24.

1878-88 - Samuel Joseph Sheldon 22/24.
Joseph Walker 2/24.

The latter probably continued until 1916. After this date the mine was worked by a Mr. Hodgson (Tune, 1968).

ORE MEASUREMENTS

Unfortunately several pages have been torn out of the book but detailed figures are given for a number of years. Every few months there is an entry for a reckoning. There are no entries for the periods 1876-78 and 1880-85 from which one would assume that the mine was not in work. However, the ore measurements are shown elsewhere (Tune, 1968) so this remains a mystery. The measurements are shown in loads and dishes (9 dishes to 1 load) and a useful entry is the prevalent price. The measurements are split between grove ore (dressed) and offal (buddled). The different prices for the two indicate perhaps the smelter's preference for the former. The Barmaster was paid 3d per load measured and a Robert Adams was paid 1 shilling (later 2 shillings) for drawing up the Reckoning. The figures are summarised as follows.

Year	Ore Measured		Av. price per load		Annual Profit
	Grove	Offal	Grove	Offal	
	Lds. Dis.	Lds. Dis.			
1863	36.8½	4.3¾	59/-	44/-	£54.11. 8d
1864	48.6½	8.2	61/-	50/-	£54.10. 7d
1865	71.1	6.7½	58/-	48/-	£85. 6. 1½d
1866	52.8	4.7¾	60/-	49/-	£55.13.11d
1867	66.6½	8.0	58/-	48/-	£74. 7. 0½d
1868 *	43.2	4.8	58/-	48/-	£50. 9. 0d
1869 *	21.2	2.1	58/-	47/-	£27.16.11d
1870 *	13.1	1.2	55/-	43/-	£ 8.12. 9d
1871 *	25.2½	-	53/-	-	£20.16. 7½d
1872	23.8¾	3.5	58/-	49/-	£11.17.10d
1873	52.5¾	4.4	61/-	51/-	£48. 6. 2d
1874	33.7¾	-	54/-	-	£ 4.11. 2d
1875 **	26.1½	3.4	58/-	43/-	£ 1.11. 6d
1879	19.0	-	35/-	-	LOSS £11.17.11d
1886	13.3	-	30/-	-	LOSS £25.18. 7d
1887	37.6½	-	37/-	-	LOSS £22.17. 7½d
1888	15.5½	6.2	35/-	18/-	LOSS £29.13. 5d

pages for later years missing.

* only part of year - pages missing.

** in 1875 16/- worth of calk (baryte) was also sold.

THE MINERS

In the 1860's the men working at Snake Mine were all members of the Sheldon family. During the period of greatest profit, 1865-68, the maximum number underground was only four. From this date on there were only two men underground, Samuel Sheldon and one other. Samuel appears to be a very common family name (no less than four are shown in the book) so it is not certain whether he was the partner or a relative. The miners were paid on a wage basis with the exception of two occasions when men were taken on for shaft sinking and paid per yard sunk. The miners' rate of pay varied from 2/- per day in 1863 to 3/- in 1878. In 1886 it had dropped to 2/6d when the mine was making a loss. In addition to qualified miners, occasional labourers were employed underground at a rate of 8d per day.

ORE DRESSING

The mine dressed its own ore and was able to employ a man on the surface solely to do this. Apart from a vat, sieve and shake pole the mine also possessed a grinder so that there was no need of hand dressing. The water needed for the figs and buddle would normally be drawn up the shaft but there are entries for carrying water to the mine, probably in times of drought when the water table dropped. Water and slabs, for the buddle and coe floors, were brought from the Hoptonwood Stone Co. who operated the nearby quarry.

WINDING

In the later period of working, Snake Mine used a horse gin for drawing ore to the surface. It was in position in 1913 when a photograph was taken (reproduced in Tune et al. 1968). This gin was bought in 1886 for £3.0.0d from Charles Seeley of Tibshelf. It cost 14/- to bring it to the mine partly by rail. The gin was probably second hand and only partly complete since there are other entries for the purchase of part of a drum, a new pitch pine beam, sole tree, girders and spurs. It is likely that this replaced a previous horse gin since there are entries to suggest this: in 1864 a new beam, 1872 pulley frames, 1873 wire rope, 1874 15/- to William Killer for repairing engine and 1875 new engine rope 61 fathoms. Up to 1886 the man

tending the gin was paid 3/- per shift but after this date the method of payment altered. The payment was then 3d for every 5 barrels raised to the surface.

SERVICES

The book is useful in that it gives details of the prevalent prices of goods bought from traders, etc. From these several conclusions can be drawn. The mine was too small to have its own blacksmith and joiner and work for these items was contracted out to Joshua Brooks and Joseph Killer respectively. From 1871 there are payments for oil, which perhaps suggests that oil lamps came into use at that time. There are payments for a number of years in respect of ale and food for the miners' holiday. They all occur in the reckoning period which includes Mayday so this is possibly a traditional miners' holiday.

GEOLOGY

In his article, Dr T. D. Ford(1968) included a section of strata of Snake Mine taken from the Geological Survey Memoir and attributed to "an old miner". The following section is at the front of the book and may be the original.

Depth of measures at Snake Mine

No		Fathoms	Feet	Inches
1	Bearing Clay			
2	Tumbling Clay	6	0	0
3	Ten Fathom Clay	10	0	0
4	Down to Black Beds		22	9
5	Two Beds		3	7
6	Black Beds		10	6
7	Under Black Beds		20	11
8	Two Beds		3	0
9	Holly Stone		4	8
10	" "		3	8
11	" "		6	6
12	" "		10	0
13	" "		7	6
14	" "		10	4½
15	Siding Beds		8	0
16	" "		2	2
17	" "		2	0
18	" "		18	0
19	" "		6	0
Total Depth		39	1	7½

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