

## **1991** **Old Engine Shaft**

As reported in the December Newsletter, some deterioration has occurred in the Old Engine Shaft at Coniston and I proposed that CATMHS carried out some conservation work. Our committee voted £50 towards the cost and a grant of a further £50 was obtained from the Northern Mines Research society. The initial part of the work has now been completed.

The shaft was sunk about 1850 to provide both pumping and winding below the Deep level. The head gear is 310 feet above Deep Level at the top of an 8 foot square rock shaft with a wooden partition. One side was used for winding and the other carries the ladders and the pump rods. Power was provide by a 100 HP water wheel of 45 feet diameter and the leat, the wheel pit and the stone pillars which carried the launder are still intact. The head of the shaft is underground and the original 1850 headgear and winding wheel are still in place, as are some 200 feet of the 6 inch square timber pump rods which now hang in the shaft, suspended from a catchwing some 40 feet below the bob plat.

A major supporting beam some 10 inches square and ten feet long has dropped out from the head gear, so that the seven foot diameter sheave winding wheel had partially collapsed to lean against the side of the shaft. The first job was to fix ropes to gain safe access to the wheel, below which is a 310 foot drop down to Deep Level. When we examined the structure the remaining timbers where found to be complete and in reasonable condition and the original iron pins driven into the rock, which were used to hoist the wheel into position, were still in place. Before disturbing anything the wheel was secured to these pins with steel rope to make it safe. The next stage was to obtain a replacement for the missing support, which had been some 10" square by 113" long. This was made up by laminating three 10 x 3 timbers which were supplied by the 'Furness Adventurers' Anton C-P-Thomas and Paul Timewell. The wheel was then winched upright and the new timbers located in the old rock niches. Whilst this was being done one of the bearers for the wheel gave out alarming cracking sounds, for it had been located beneath a small drip from the roof and had rotted down to a third of its original girth. A fifth visit was mad to support this beam by inserting a prop from a large stemple a few feet beneath it. The conservation of the headgear is now complete and we will inspect it again in a few weeks when it has settled and if all is well we shall then remove the working ropes, leaving a single wire strop fixing the wheel to the roof as a safety precaution. A notice, which was kindly supplied by Clive Barrow, was fixed to the wall out of reach of the public and reads "This 19<sup>th</sup> Century winding wheel was restored by CAT Mining History Society. Please do not throw anything into the shaft."

About 200 feet of wooden Victorian pump rods remain in the shaft. They are made from pitch pine which was especially imported from Canada. We estimate them to weigh about three tons and they are supported by a catch wing in the Bonsor East crosscut. This is also deteriorating and in the course of time the rods will plunge down the shaft to their destruction. We propose to attach them to the rock at intervals down the shaft using galvanised wire rope and 10mm rock bolts. Now that the structure above is safe this work can commence and it is hoped that it will be completed in the Autumn. Anyone who has not yet been involved but would like to

participate should contact Ian Matheson. There is to be a CATMHS meet on January 25<sup>th</sup> in the Bonsor Stope and there will be an opportunity then to do the 310' abseil down the Old Engine Shaft and to see what has been achieved.

Ian Matheson