

Recollections of Mill Close Mine, South Darley, near Matlock, Derbyshire

H. WOODHOUSE

From 1929 onwards was notable for the number of people out of work. The depression was country wide and the scrap steel trade in which I was engaged with my brother Joseph collapsed and I joined the band of unemployed. I was courting my present wife and used to chat with her father who spent leaves here from South Africa where he was a Mining Engineer. He had also previously had a spell down Mill Close Mine where he was a Contractor for heading and shaft work, consequently he was well acquainted with Mr. Williams - Manager, and also Jack Rhodes, Underground Manager. During our chats he asked if I would be interested in working down the mine. I said yes, so he agreed to take me to meet the Managers as they came out of the mine about lunchtime after their daily tour. During this time quite a number of men were waiting to see if there were any jobs available, and I did not think my chances would be very high. My father-in-law had a chat with the two men, then Jack Rhodes came across to me and said "start tonight, 10.00 shift". I was delighted, not so much my mother when I gave her the news, who did not like the thoughts of me working down a mine, as no one in our family to my knowledge had ever mined, and Mill Close had a reputation of wet working conditions and flooding. As one man said when I told him I was starting work that night, "what! down that rat hole". I duly went for the 10.00 night shift and was sent with a real oldtime lead miner named Jonathan Roose who lived at Elton and, as most at that time, walked to work and back from such places as Elton, Winster, Bonsal and Middleton. Jonathan was a real nice guy who was one of the old type miners who had worked for weeks without pay until they hit the main lode again which had been lost for quite a while.

My work was to load the ore which he blasted into a chute which was then collected by the trammers who used to push the tubs to the main road, then taken by the battery driven loco to the bottom of the 70 fathom shaft to be hoisted to the surface. This was in an area called Stope 10. This first shift of mine was my 19th birthday. I got on fine with old Jonathan except when I used to whistle. He got quite angry about this. I found that the old miners were really superstitious and, as Jonathan said, "I donna mind thee singing but tha munna whistle, tha'l whistle th'or awa". It took a bit of doing but I actually got on fine with him but didn't stay long as newcomers were shifted about.

Eventually, I went with a team of six tramping the tubs of ore to the loco run. At this time the water was pumped out of the mine by three Cornish Beam Pumps named Jumbo (the big one) and Alice and Baby, the two smaller ones. Periodically these needed repairs. When this happened, the water used to rise and the loco would have to be taken to the high end of the level and the team of trammers would be fetched to push the loaded tubs to the shaft bottom. As we were stretched out to push the tubs, the water used to come to our waists, icy cold too; this we would do until it became impossible to carry on. During this period with the trammers a favourite trick especially on the night shift during the food break, if anyone went to sleep he would have his private parts painted with the thick tarry substance used on the bearings of the tubs. After this period of tramping I was sent to different places as mate to a miner. I enjoyed the work, getting all the knowledge possible, learning drilling, timbering, blasting, rail laying and how to test rocks for safety.

After a while I was given a stope of my own and soon had a reputation for being able to blast enough ore for my shift and the next one too. During this period of tramping and mateing, the shaft was sunk from the end of the 70 level to 103 level, large deposits of good ore were found in the pilot shafts,

also more water, so much so, that one area was christened "Blackpool". The tonnage per week when I started was about 150 tons dressed ore, with the finding of big new deposits more miners were engaged, new stopes started, the 103 level was being driven to draw the ore from the 83 and 93 levels which were very rich. More water was being tapped and the decision was taken to do away with the beam pumps and instal electric centrifugal pumps throughout the mine, which now meant pumping the water from the 103 to the 70 level and then to the surface and to convert the Jumbo shaft into the main drawing shaft for the ore using the Lees shaft purely for men, timber, and other equipment. Production was booming about 600 tons in 1935. I was sent on my first shaft job putting in the conductors for the double cage in the Jumbo shaft. I found the work most interesting and when finished I was put on minor development, driving headings and rises off the main 103 level. Stopes were taken as high as 100 ft. vertical, sometimes higher and numerous cross veins were being found, some of which were still not worked out after working some years. The main lighting for the ore miners was a safety lamp which all parties had, but not relied on for light, five candles per man was the issue. These were stuck on the rock sides by means of clay; for the trammers the candle was stuck on the front of the tub also with clay. Development had battery lamps because of the difficulty in keeping the candles lit in a confined heading. On the higher levels, 40, 50 and 64, the highest points mined reached the shale beds and gas was encountered coming from the shale. One man named Laidlaw was killed by an explosion, but it was before my time at the mine. Two men were also injured by the explosion of gas on the 64's, Charlie Shimwell from Birchover and a man named Glossop. I was taken into these gas areas to be shown how to test for gas by our deputy, as I was being prepared for taking the spare deputy job at the weekends when the regular ones did not work. The lead went right into the shale. It looked like a silver streak against the black of the shale. This ore had to be left as the houses on Stanton Lees were getting vibrations from the shot firing. The main 103 level had reached its limit due to the dipping of the ore-bearing limestone and a new shaft was sunk from the 103 to the 144 level. When this was finished and the 144 level heading was started the water had to be pumped up the new shaft onto the 103 level and up from the 103 to the 70 level and then from the 70 to the surface. The amount of water now being pumped between 5000 and 6000 gallons per minute. My father-in-law who had now been retired with silicosis of the lungs, due to his work in the gold mines in Africa, spent many hours with me explaining his theories of how to put in a round of shots to get the full extent of rock out to the length of holes bored. I worked with this knowledge in mind and found his advice most beneficial. I became more proficient and was recommended many times by the Underground Manager. I put this down to listening to an expert's advice; after all, he had worked in the iron ore mines in Cumberland, mines in Vancouver, Russia and South Africa. Production was now up to its peak. The 144 level was about a half a mile forward and on the 129 level a big fault was discovered in the strata and the ore body extended into a huge flat working off line from the usual North-West bearing and deviated under a toadstone bed. The roof was about 100 feet across, about the same depth of ore and about 1,000 feet long. A big body of ore, not quite the quality of the usual ore, it was an expensive one to mine.

I was one of the parties engaged in working it, having Billie Horobin, my brother-in-law, as mate. Thousands of rail sleepers were used to build chocks to hold the roof which were successful up to a point, all the stone from the heading being used as back fill; when the weight came down the chocks would be squeezed and the sleepers would be an inch thick instead of five inches. A fatal accident occurred here in the next working to me. A fall of ore and rock killed Harold Mayhall and broke the leg of his mate, the only fatal accident during my eleven years down Mill Close. The main heading on the 144 level was now about $\frac{1}{2}$ mile from the shaft and a new round was being bored, water was pouring out and when blasted a great volume of water rushed down the level carrying silt and sludge and the pumps at the shaft bottom were drowned

and put out of action, consequently flooding the whole level and some of the lower workings. Production was stopped for seven weeks for the dewatering process which meant bringing in submersible pumps and enlarging the cundys (water channels) to take the water down the levels. I had seven weeks on night shift superintending this work before production resumed again. It was hoped that large deposits of ore would be found where the water had come from. When work resumed in the 144 heading the huge caverns were just lined by a thin coating of galena and calcite. The main heading team carried on forward following the leaders (thin ore veins). I was taken off the 129 level to take a rise up to the top of the caverns to ascertain if the ore was higher. This was done taking the rise hole at 45°. On the first stage there were twenty two, sixteen stave ladders laid on end, second stage sixteen ladders and then twisting and turning until we reached the height of the 70 fathom level, but still nothing found except for some foul smelling water which attacked the eyes and even turned silver coins in one's pocket black in a shift. I had numerous changes of mates during the making of this rise due to them being affected, temporary blindness with terrific irritation of the eyes. This venture was abandoned without producing any ore. By this time the main headers had started to sink another shaft at the far end of the 144 level. The shaft was down about 90 ft. when an accident occurred. The bucket became detached from the clip and crashed onto the men in the bottom. One man was seriously injured, the other not too bad. I was fetched to help carry the badly injured man to the nearest place where he would be put down on the loco to be taken to the surface.

When I reported for the next shift, the Underground Manager told me to take the sinking job in place of the injured man. We were expected to blast four feet down, with the shaft size about 8 ft x 6 ft, about 19 or 20 holes to each round to be bored, charged and fired in one half of the shift and clean out in the second. So it was darned hard work as we had at least one hour's walk from the Lees Shaft to get there and one hour back. A fortnight later another accident occurred in the shaft: the shift preceding ours was lighting the shots when one of the shots went off. Both men were hurt but they managed to get out before any more went off. We had air winches for getting out of the shaft and a rope ladder in case of air failure. We took the shaft to the 171 level and then proceeded to head off again. By this time, late 1939, production was falling fast as no new deposits had been found since the 129 level, and we were now heading the 171 level still following thin leaders but still no ore found. Numerous cross cuts were tried, also a small shaft about 6 fathoms was sunk which showed traces of copper and zinc. This was also abandoned and we continued with the heading; by now we were past the junction of the A6 road and the road to Youlgrave, Picory Corner. Signs of lead were coming in the roof of the heading and then there was dead ground again for some way. We decided to come back to try the place where the lead was showing in the roof. We started a rise and things were looking better than for a long time, but water was pouring out of the face and we had great difficulty charging the holes. Each firing looked better and better and we really thought another big deposit was about to be found. Then one morning we were visited by the Manager, also the Underground Manager and a Director from Consolidated Gold Mines named Dagenite. A few days later a notice was fastened to the head gear announcing the closure of the mine at the end of the week. All the miners were stopped except a few of the development staff including myself to salvage the pumps, winches and other equipment. This had to be done quickly as the water was rising fast as soon as the pumps were stopped. An air shaft on Stanton Lees had to be blown in; this was done by driving long pipes into the ground around the shaft, filling them with gelignite and exploding. Whilst we were doing this, May 1940, the air raid sirens went and a German plane flew over: we heard it was shot down over the East Coast. My last job was in the Jumbo Shaft with my friend Ben Walker, who was on one of the other shifts on my job. Our job was to recover cables in the shaft which were fastened by cleats bolted into the rock. All the cleats were supposed to have been taken out bar the last one which we were to fasten

the cable to blocks attached to the cage, undo the cleats and haul up to the surface. This we did, and signalled to the surface. The shaft was very wet and the mine was filling fast with water. All the levels were full of water to the 70 which by now had about 60 ft. of depth. We had to work off the top of the cage so we had about 2 ft square each to stand on, lamps in one hand, holding the cage rope with the other; the cage started to lift taking the strain of the cable, suddenly an almighty bang, the cage shot upwards about 10 ft, our lamps flew out of our hands as we desperately tried to hang on. The other half of the shaft was wide open as it was a double winding shaft, the cage was dancing up and down till it finally stopped. The winch driver at the top knew something was wrong and had stopped winding. We signalled again to draw up slowly and finally arrived at the surface, two badly shaken men but lucky to be alive. When we examined the blocks, the Block Chain was like a walking stick, stretched to the limit and then snapped. Thank goodness it was the chains that had broken and not something to do with the cage or rope. The fault was that the other cleats which by now were under water had never been undone, but we were two damned lucky fellows. This was my last days work at Mill Close, early June 1940: the war was just hotting up and I am sure the country could have done with the mine staying open at least during the war with even a reduced output. The episode in the shaft was probably the closest shave I had, but I had near things with rock falls on the 129 level when we were working under the toadstone bed which was the most treacherous rock I ever worked under. All in all, my work down Mill Close I consider the most enjoyable job I ever undertook. One particular period when on the lead stopes, the deputies would send men to me with bad reputations for not being good workers. 'Send them to Woodhouse' they used to say, 'he will make them work', but I used to get them really interested in the work, show them how to drill, timber, charge the holes, let them actually share the work which was really my job. Their task was chiefly to load the ore, but I used to help them and visa versa and it worked wonders with these people. The deputies could not weigh this up, when they left me they went with a good reputation. I think it was using psychology more than being a driver of men.

The cost of pumping such a volume of water to the surface, also raising the lead ore, meant the cost of production rose as the distance increased. In the last year work was started cleaning out an old lead miner's shaft near Hawley's Bridge, near the farm on the left over the River Bradford, with a view to making a winding and pumping shaft, that is, if sufficient ore was found under that area where we were developing. This we did not find, so the plan was abandoned. The name of the shaft was Dunockholes.

The closing of Mill Close put a few hundred men out of work, but quite a number went to the iron ore mines at Corby, some to the forces. Interesting to note how wages have changed since those days. Pay for underground workers was - trammers and fillers 9s.4d. per shift, miners that is. The men who were in charge of a stope responsible for safety, drilling and blasting, 10s.2d. per shift with a little more for developers, men who did the heading driving and shaft sinking. The head development team could earn £4-£5 per week (big money). Rates on the surface for men working on the dressing plant was just over 8s.0d a shift.

Up to about 1934/5 the ore was crushed down to $\frac{1}{2}$ ", then fed onto a series of jigs. The action of these was to separate the ore from the various minerals associated, such as limestone, calcite, shale, toadstone, barytes and fluor-spar which were the main impurities to be extracted. The separation process was worked by the density of the mineral, the heaviest sinking first into traps on the jig and tapped out, also a series of tables, vibrating ones which separated the fine sandy material. With production increase this method proved too slow and a new chemical flotation plant was installed. Underground, there were probably about thirty working stopes and heading parties needing two to three men to each, a number of trammers, timber men, pump men and fitting staff, two deputies to each shift, roughly a hundred men each shift which was continuous, that is 6-2 morning, 2-10 afternoon and 10-6 night shift, but the pump men were on duty all the time including the weekends. If

the developers were required to work through the weekend, as sometimes they were, the week of afternoons meant 2-10 Saturday afternoon, return for 6 o'clock Sunday morning till 2.00 p.m., then back again Sunday night 10 p.m.-6.00 a.m., which was pretty heavy going. Some very tired people returned home on Sunday morning! During the early part of Mill Close up to the early 1930's, all the power for running the Cornish pumps and plant was by coal-fired boilers. The coal was brought to the entrance of what is now the car park of Darley Dale Cricket Club, then taken by an aerial bucket flight over the River Derwent to the mine to save the longer journey by road. During the early years of Mill Close the lead ore was taken by horse and cart to Lea near Holloway to be smelted, but a new smelting plant was built at the side of the dressing plant and is still being operated today under the name of H.J. Enthoven whose main function is to recover lead from scrap batteries, cables and pipes, etc. The buildings which housed the Cornish pumps and other machinery have been rebuilt and are now used making high class aluminium alloys. The Lees Shaft area is now a factory producing precast stone for housing and other projects.

One interesting point about the wages paid to miners in the period between 1920 to the time of closure in 1940, was that they were the same rate through that time with no inflation compared with today's eruption in prices. The camaraderie was excellent between the miners, much more so than today in the industries I have been employed in since.

There were a few instances of lead poisoning in one certain area off the 103 level which had already been drained of water by the lower level being well advanced. The entrance to these workings was one 6ft x 4ft heading; at the end of the heading a big seam of ore was found which went in four directions. Four parties of miners were put in to work it which caused many fumes and millions of particles of lead floating in the air causing the miners to be laid off work. The recipe for recovery was plenty of milk and fat bacon. That was the only place where lead poisoning occurred, probably due to the normal dampness of conditions generally in the mine which tended to settle the lead dust very quickly.

In about the year 1920 a fire occurred in the area of the Cornish beam pumps doing great damage resulting in the flooding of the mine whose workings at that time were mainly on the 40, 50, 64 and 70 levels. Most of the miners were stopped until repairs had been carried out and the mines dewatered. Fire engines from Matlock and Chesterfield, at that time still horsedrawn, were engaged in fighting the fires.

The footwear of the miners was chiefly clogs or wellingtons, but no protection was worn on the head apart from the cloth cap so common at that time. I have recently obtained a photograph of miners ready to start their shift: I myself am on it and it just proves my statement about the clothing and equipment of that period.

Mill Close was the largest lead mine in the British Isles. Half a million tons being produced in its lifetime but there was no hope of it being re-opened due to the exorbitant cost of dewatering. If this could be overcome, I still think the possibilities of mining in the area beyond Mill Close towards Hawley's Bridge and Alport would justify the expense, but it would be a gamble which few would venture to undertake.

I myself have known some of the frustrations with which miners have to contend, but a more interesting one I have never known; this is confirmed by some of the people I have spoken to. "It gets in one's blood; once interested, always interested".

H. Woodhouse,
Darley Bridge
near Matlock