

WORKING AT NEW DUNN MINE IN THE FOREST OF DEAN IN THE 1940s

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Towards the latter part of the (Second World) War, when overtaken by call-up, I was at the Royal School of Mines and, faced by the alternative of army or underground, chose the latter. The authorities were looking for coal miners but, by then being interested in metalliferous mining, I applied for that and was lucky enough to get a job at New Dunn Mine, near Coleford, in the Forest of Dean, only twenty-odd miles from my then home at Gloucester.

At the time the Ministry of Supply, for reasons not clear to me, had wrested control of the mine from the Watkins family, who had run it for three generations. This meant that a long ingrained knowledge of the ground, and inherited abilities for finding ore, were discarded, but not, owing to the circumstances of the time, replaced by the best modern technology.

Messrs. Watkins had always followed the water down in the summer, and retreated before it in winter, and one of the first innovations of the Ministry was to install a powerful electric pumping plant to keep the bottom levels dry all the year round. This was completed the Christmas before I went there, and under rather dramatic circumstances. Before all was ready the water indulged in a really purposeful advance and, in a mad scramble, with men working eight-hour shifts, and longer, the pumps were started with two or three inches of water already on the pump room floor. I was told that those on top were not quite ready, and the men about to attach the last pipe to the column were somewhat disconcerted by the sudden arrival, from below, of a great deal of water.

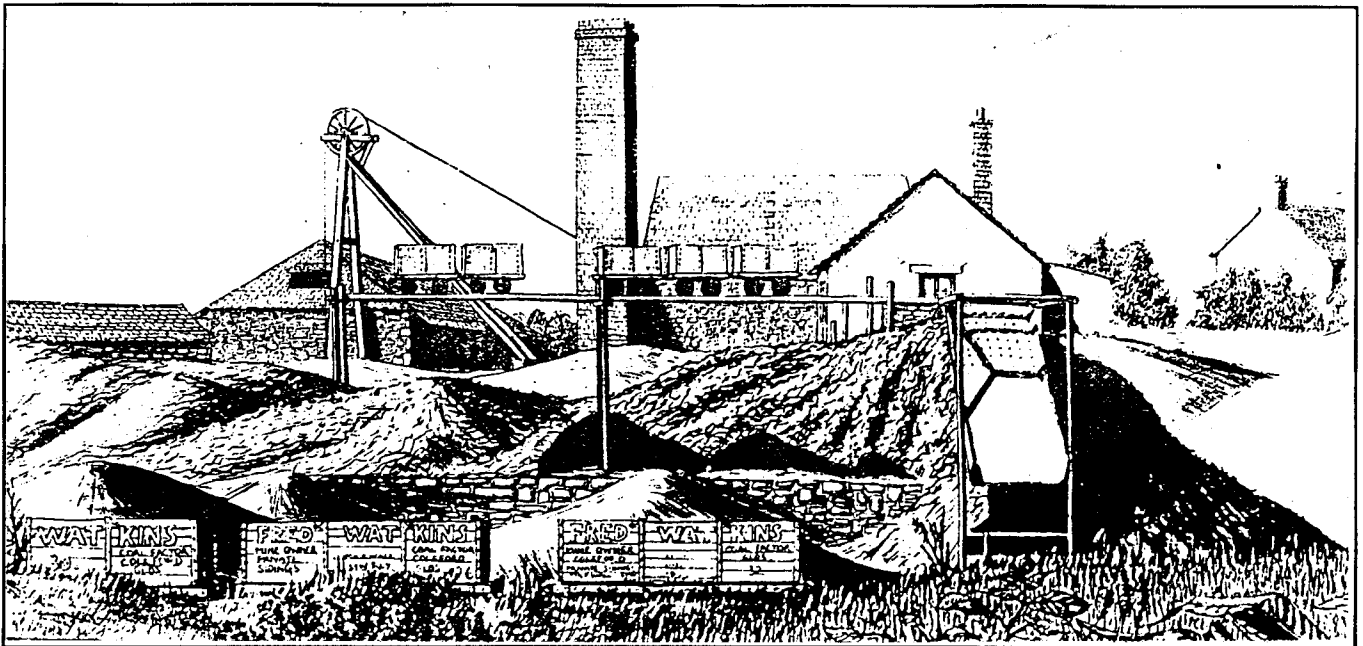
We, of course, went to work down the vertical shaft in Watkins' yard (now full of rubbish), which was connected with the three "landings". The deepest of these being 163 yards (150 metres) below shaft collar. We were supposed to know the "walking out" road, now much trodden by speleologists, as this was our only exit should any failure (such as the engine-man being incapacitated by ale) occur to the winding arrangements. I don't recollect, however, following it more than a couple of times and, of course, we were always working in the deeper parts of the mine which are now generally flooded, and gave very little thought to the older parts, which had been exploited long before living memory. I did hardly any exploring more than a few yards from our various working places, my only long expedition being to Sling Pit Bottom, then a straightforward walk.

Most of my time underground was spent tramming, an occupation I found quite congenial. All trams underground were shifted by hand, except where inclines necessitated the use of compressed air winches. In the longer levels we would have two or three trammers operating consecutive stretches of track. We received no bonuses. One cannot call tramming a complex and difficult art, but it requires some skills, the ones of positioning the body to get maximum power with least effort, and of pulling the tram round sharp bends and guiding it over bad joints in the line, being readily learnt. Not quite so easy is getting the knack of putting a full one back on the line, especially if no bar is handy, but it can be done alright, even in quite a narrow place, if you block the critical wheel and get your back to the job.

I early created a reputation for individuality, in the following way. Some twenty or thirty yards of track from pit bottom on the third landing was continually under several inches of running water (from the dipple pumps) and I soon discovered I did not care to get boots and trousers soaked straightaway and remain like it throughout the shift, including breadtime, and then ride home to Newland after, in the same state. I therefore adopted the, to me, logical course of coming to work with a pair of shorts under my trousers, and wearing these and a pair of plimsolls only for tramming, and bringing a towel to dry off putting on trousers and boots when out of the water. The more conventional Forest miners regarded this as quite mad and I found my feet got so hot that I was under the necessity of standing in the running water when not otherwise engaged to keep them cool.

On one occasion there was a sudden rush to get at a pocket of Colour, and also a face of Grey Ore, found to have been left by the old men on the Sling side of the first landing. This entailed a rather exciting piece of tramming as a good stretch of level was very closely timbered, full of bends and on a steep gradient. The tram would not in fact quite clear the timber all the way, and it required some trammers' arts to avoid knocking out a post or two on the journey. At the top of the hill we kept a few sprags to pop in the back wheel as we went by, but I well remember shooting one straight through. This was towards the end of a shift, and I had to descend brakeless and at alarmingly high speed, expecting every second to demolish half a dozen pairs of timber and bring down the roof, or at least derail the thing and block the level with rock, which I should then have had to reload pretty smartly. Actually I kept it on the line round a series of ultra-exciting corners, only to have it leap in the air on the flat by pit bottom, and come to rest with one corner securely on the toe of my boot.

The only time tramming turned sour was when an economy drive of alarming appearance put a stop to all hoisting on the night shift. This meant the unlucky trammer had to find some handy place underground into which to empty his full trams. This was quite easy at first but in a couple of weeks or so all convenient holes were filled and we started having to bank the stuff up and in a very short space of time we were faced with the prospect of shovelling the muck on top of six feet high walls. The men filling were working on bonus, so we had to tram to keep up with them, and unload under very much worse conditions than the when the trams were loaded, all at flat rate. I suffered some pretty desperately tough shifts under this system.



New Dunn Iron Mine pit head, c.1932 (after a faded print by J. Belcher, 1972).

Driving and stoping were carried out by "Companies", a group of two, four or six men, according to whether the position was required to be worked on one, two or three shifts. The two men on each shift comprised a driller and a mucker, the drillers receiving payment by contract from the management, and disbursing a modicum to their assistants, receiving bonuses for number of yards progress, or number of trams of ore filled. I never attained the rank of driller, although, of course, I ran a machine quite a lot in the ordinary course of events, so I do not know the top rank financial arrangements, but as a mucker I do know I sometimes received 1d. or 2d. "overplus", although occasionally attaining the giddy heights of 2/6d.

Speaking from experience I may assure you that the legendary 15 tons loaded in a shift is by no means difficult under the right conditions. That is, the ground must be broken on to steel plates, and the tram must be against the mucker's back. This could always be arranged when driving a heading, but in stoping it was not generally so good. I bitterly remember certain places where I had to shovel ore once, twice and even three times, before I could get it into the tram, and not always from very easy positions either. Such awkward, and indeed heart-breaking conditions came about by reason of the irregularity of the churns, and the difficulty of forecasting extensions, if any, so that one struggled on, reluctant to rip out barren limestone to make a road in case your ore ran out.

Drilling was done in those days with hand-held machines. True, we had a couple of bar set-ups, but they were too heavy and cumbersome to find favour. Holding the machine at about the level of the groin is easy and up to the shoulder and down to the knee is not bad. Low holes are awkward and top holes hard, although I have heard of men who could hold a machine in each hand, and drill at full stretch. Have you ever heard the noise of one of those things in a restricted heading, it certainly saves one thinking of anything to say! I always found it a quandary which was worst, drilling holes up or down. Going upwards is very hard, to force a bucking machine against gravity into the hard limestone, but on the other hand, few things can be more frustratingly agonising than trying to pull a machine up, out of a hole in which the drill is firmly stuck. The development of the airleg in recent years has, of course, taken most of the drudgery

out of this work.

The iron ores of the Forest occur, as local speleologists will know, in a great variety of types. There are three types of the highest grade, Colour, Flint-ore and Brush, The first is a soft clay, which should have no hard particles in it at all, and is found in a great variety of shades, from pink to violet. It fetched, I believe, the highest price, and was formerly quite plentiful at New Dunn, but there was little to be found during the time that I was there. Flint-ore is a very high grade hematite, grey in colour, and exceedingly hard, so as to cause a shower of sparks from the drill. Indeed, if the drill steel were not very carefully tempered, a few seconds application to flint-ore would render the two ends indistinguishable in appearance. Brush had something of the appearance of brown sugar, though was usually rather darker, and the best was equally friable, loosely filling the churns. I was told that not very long before I went to New Dunn, one party of men working on the Sling side of the pit filled trams steadily for eighteen months from the same pair of rails, the loose Brush running down all the time from above to replace that which had been removed, until a cavity finally appeared at the surface near the Orepool Inn.

Our mainstay, however, was Grey Ore, which I take to be a mixture of Brush and limestone in varying proportions, and so widely varying in grade of iron, from quite good, to a substance that the smelters firmly returned to us.

As suggested earlier, no very sensational discoveries of ore were made during my stay at New Dunn, though I would not agree that no more are possible. After installing the pumping plant at pit-bottom, no very determined attempt was made to get deeper. At this depth the inclination of the strata had taken the Crease Limestone some way east of the shaft, and in years before churns had been exploited down to this point. We carried two "dipples" down opposite the shaft, one I suppose going more or less north-east and the other south-east. Working conditions were not too good, the inflow of water being sometimes quite dramatic gushing out of small vughs in the side of the tunnels, particularly in the former, while the atmosphere became extremely humid in the latter. We had a small churn or two down this dipple, but exploration here was not, in the end,

pushed very far, chiefly, I think, because of the limited capacity of our compressed air pumps in the dipples and it became apparent we were draining more and more of the Forest. Previous miners, had however removed some pretty remarkable churns down to the third landing between New Dunn and Sling, and I always felt that deeper trials in this section might have been successful. What a pity that the most modern geophysical techniques have not been used down there.

Not very exotic techniques would, however, have saved one mistake. We started a new dipple from the third landing, on the Sling side of the pit, and after a few yards came into some quite good ore. The management were overjoyed, 100,000 tons at last. But chagrin soon followed, after one blast in the heading a small hole opened in the floor, and we could peer through into the top of an enormous churn, long stoped-away, and readily accessible from the third landing. Whether the natural waterways of the limestone are filling up, or not, I don't know, but these great churns were worked when naturally dry, but as far as I know no recent speleologists have been able to look through that little hole.

Although it was said that New Dunn's motto was "Nothing done by machinery that can be done by hand", and although I hated the system of changing shifts every week (too early to get up on morning shift, no time on evenings, no sleep on nights) yet there was a lot of pleasure and amusement to be got underground, but then I like mining anyway. Of course, it is most amusing and entertaining working with Foresters: how I wish I could remember all the stories, anecdotes and rhymes, though perhaps it's just as well I can't. (Forest young ladies used to lie in the bracken waiting for the afternoon shift to come on, and grab their ankles as they went by; unfortunately I cycled to work). Finally one of the great delights of working underground I found to be the consumption of a large bottle of cold sweet tea at bread-time, nectar then, but undrinkable on any other occasion. I can recall the taste of it now.

George Hall,