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COAL AND IRON WORKING IN UPPER AIREDALE

by

J.M. Dickinson & J.E. Holding

The area under consideration is a narrow belt running from Skipton to Shipley, Yorkshire, in the valley of the River Aire, extending on either side of the valley for between three and five miles.

Coal mining in this area, now at a standstill, was formerly an important [42] industry and no doubt contributed in no small measure to the industrial growth of Bradford and other towns in the valley, at least before the coming of the Railways.

The workings were small by modern standards but the coal was exploited all over the area. The main seams, which were of a reasonably good quality and readily accessible, are now practically worked out. They were the Crow Coal, Black Bed, Better Bed, Hard Bed and the Soft Bed.

The Millstone Grits contain thin seams of coal and some have been worked locally.

The 'Bradley Coal' was worked from the Skipton Pits on the moor above the village of Bradley near Skipton. Its outcrop can be traced for more than a mile on High Bradley Moor where it was worked by shallow pits. The seam had an apparent dip of 20 to 30 degrees S.E. and was worked by a drift on Low Bradley Moor, being some 30 inches thick. One and a half miles further down the Valley at Cononley, a 15 inch seam of coal was worked from the Good Hope Shaft of the Cononley Lead Mines at Pismire, around 1878.

At Sutton-in-Craven at the head of Lumb Clough (known locally as Sutton Clough) a small trial level has been driven in a thick shale. Traces of iron stone are to be found in the mine, although no mineral worth working can be seen.

Above Keighley a coal seam in the Kinderscout Grit Group has been worked at Morton Banks and at West Riddlesden, both at its outcrop and from shallow shafts, its thickness being from three to five feet. At Rough Holden near Rivock Edge, a little below, the Guiseley Grit coal has been worked on a small scale. A report of its finding appeared in the 'Keighley News' March 8th 1873:- "A new bed of coal about two feet thick has just been discovered on the property of Sir William Tufton, about 3 miles from Keighley and about two miles from Silsden. The bed crops out of the hillside below what is known as Rivock Hill, at the west end of Morton Banks. Should this prove as productive as expected, it will no doubt prove a great advantage to the surrounding district".

In 1921 a small company started prospecting for coal among the old workings on Rivock Edge and at Morton Banks. Most of these old workings were 'Day Holes' Drifts into the hillside. Some shafts had been sunk onto the coal at the top of the hill where the seam is deeper. The Morton Banks coal field was being worked in 1836 by the Howden Park Coal Company and the Morton Banks Colliery. The mined coal was sold as engine coal at 8d. to 9d. per ton. In 1838 288 tons were sold by the Howden Park Company to Milnes, Stansfield and Co. of Morton Banks at 8d per ton. In 1854 however an account shows that 71 tons 9 cwt was sold for 6s. 6d. per ton.

The Morton Banks pit was worked until 1856. Although the seam was six feet thick, the lessee could not find sufficient capital to enable him to clear it from water. The impurities of the Morton Banks Coal prevented [43] its use as a steam coal. The cinder and ash that remained after combustion was almost equal to the unburnt coal.

The 1921 company spent 8 years in trying to gain easy access to the seams. An old drift near the Marton to Silsden Road at the junction of the road to Riddlesden was re-opened, this working was followed after many roof falls had been cleared, for a considerable distance to the foot of an old shaft. Due to the difficulty of keeping the drift open, this shaft (19 yards deep) was cleaned out, and a head gear erected over it. From this shaft a working was followed to another shaft on Rivock Edge, which was cleaned out to a depth of 60 yds. A head gear was erected and a steam pump and winding gear installed. From this shaft the coal face was reached. At one time they had to cope with 18 inches of water in the workings but this was due entirely to surface seepage.

It is said that there were pits at Sandbeds, in the valley bottom opposite Morton, which worked a seam 7ft 6ins. thick but were abandoned owing to water. On the south edge of Holden Gill., there are two large mounds near the track to Rivock Edge. Externally, signs point to iron and coal being got out together (probably in the form of ironstone nodules). A section cut through one of the mounds by the Keighley Naturalist Society, disclosed one foot of soil and charcoal under the sod, one. foot of slag, one foot of pure charcoal on the subsoil. A piece of coal seems to justify the suspicion that iron was got with coal. Pieces of potsherd have been dated to within 200 years of 1400.

On the South side of the River Aire at Keighley a 9 inch seam was worked from drifts along the flank of Thwaites Brow and there are old shafts to it on the south side of the Brow. Another seam from 5 to 12 inches thick has been worked at the eastern end of Stanbury Moor.

The Hard Bed Coal is only hard by comparison with the Soft Bed. In spite of its poor quality it has been mined Wherever it was easily accessible. The seam is found in a faulted outlier to the south of Cullingworth and is 12 inches thick. In the 1800s the hard and soft coal were worked by Messrs

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Townend who owned a large Woollen Mill at Cullingworth. They worked the Dean Brow, Hazel Crook and Holling Hall Pits, which employed about 200 men and boys. These collieries supplied both mill and village in house and engine coal. At Holling Hall Colliery (SE 067335) 530 yds WNW of Denholme church the Hard coal was 24 inches thick with a 6 inch ganister floor underlain by 3 feet of fire clay, and the same is recorded as being 26 inches thick at Heaton and Shipley Moor Colliery (SE 120 356) at Chellow Heights. In some parts of the Hard Bed seam, quantities of Iron Pyrites were found and the process of converting these into Sulphuric Acid was carried out at Denholme.

The manufacture of sulphate of iron, or copperas, from this pyrites was a major industry. The pyrites, when freed from its matrix, was laid in a large bed, about 9 ft. thick, the ground being previously prepared, by having drains laid through it, all converging to the same point. The [44] natural rain fall was then allowed to sink slowly through the bed of pyrites, the resulting liquid draining into a large tank. From this tank the liquid was fed into a lead evaporating pan, where it was greatly reduced in bulk. Quantities of waste iron wire were then added. When the acid had taken up all the iron, it was run into coolers, and forked sticks were hung in the coolers around which large masses of crystals formed, each stick averaging 10-20 pounds weight. After the crystallisation had ceased, the spent liquor was returned to the evaporating pan. The sulphate of iron was used principally for the dyeing of black or dark brown in the woollen industry.

Fire clay has also been worked from this bed; known technically as 'Black Pottery' or locally as 'Denholme China' it was used for the production of flower pots, pitchers and bowls etc. The manorial rights during the working period were held by Messrs. J. Knowles, W.S. Stanhope and M. Stocks.

The Soft Bed Coal is described as being of a fair quality. It has been worked along its outcrop from Oxenhope to Shipley, also at Thornton and in the outliers at Manywells and Baildon. The seam is recorded as being 20 inches thick at the Holling Hall Colliery, Denholme, but it thins eastwards and at Laisterdyke Colliery (SE 194332) there was only 1 ft. of coal on 2 ft. of clay. Towards Shipley the seam has been worked from shallow pits to the south of Nab Wood, but about this point its outcrop is cut off by a large South Fault. Deeper workings lie under much of the ground, between Shay Farm and this Fault. Heaton Royde Colliery (SE 141362) reached the bed at a depth of 95 feet.

It appears that the mining of coal and ironstone has been carried on in the Keighley to Shipley area from quite early times. The mining and smelting of iron ores by the Cistercians of Rievaulx Abbey were not only extensive, but in successive localities long sustained. Their great benefactor in this respect in the 12th century was Adam Fitz Piers, and we hear of him granting them the exclusive mining and smelting rights with sufficient wood for fuel in

Halton (Hageltona), Shipley (Sceppeleia) Heaton (Heton) and at Chellow Grange (Chelleslaeia), one site of the iron works being described as “the 10 acres” at the western part, Where Halton Beck falls into the River Aire. Halton is now reckoned in with Harden, but Harden was apparently outside Halton Township in the middle of the 12th century and it is perhaps doubtful whether the original grant extended to Harden Wood. If this was not the case, the omission was remedied by John de Birkin, son of Adam, who, during the reign of King John, granted the monks exclusive smelting rights in Harden Wood. The site is described as 6 acres of land for forges measured by the perch of 20 feet on the water called Harden Brook (Hardenbroc) from the Wilsden road, towards the east of the said stream, viz from the site called Mosisic on the said water, 40 perches in length to the east and 20 perches in breadth to the south. The Bingley registers a record of “Thoms Illingworth, of Cottingley, who dyed in a colepitt at Norre, with a damp, Aug. 1594”.

Another early reference to coal mining in this district appears on the Ovenden Court Rolls held on the 20th July 1609 when it was found “That John [45] Stocks bath digged and sunke a pitt ‘proacquisitune carbonum’ on the Lords wastes near a place called Soyle Hill End”. He was fined 39 shillings.

On the North side of the valley, in one of the outliers of the Soft Bed Coal, pits were sunk between Eldwick and Baildon. These workings had ceased in King Charles I time, leaving many surface holes which were a danger to stock. In 1638 a plan was laid at Pontefract that “Sir Richard Hawkesworth, Kt. William Vavasour Esq. and George Tempest Esq. should sufficiently fill upp the colepitts upon the wastes of Baildon and Baildon Moore” but as the said wastes were declared to be within the liberties of the Archbishop of York, the defendants were exonerated.

In 1767 a Mr. John Ramsden of Jumpsles payed £2-0-0 for 140 pack-horse loads of coal from the Clues Pit.

Of the mines around Wilsden and Bingley some were still being worked in 1876, both at Norr Hill and Pudding Hill by an Isaac Wood and son.

The well known Yorkshire historian H. Speight tells of a reminiscence of early coal mining days in a jingle sung by fathers to their children in the early 20th century:-

“Little man in coal pit goes knock,
Knock, Knock,
And When he’s done his work,
He peeps out o’ t’ top.

The Crow coal has only been worked at Bunkers Hill Colliery (SE 172333) and Fagley Colliery (SE 187347). It is described as being of a good quality, and was used as a house and gas coal.

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The Black Bed has been worked under the small areas where it occurs around Bradford, in conjunction with the iron stone measures in its roof, the coal seam being from 20 to 28 inches thick.

The Better Bed Coal has been worked immediately south of Bradford in connection with the Old Bowling, Farnley and Low Moor iron smelting industries.

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