

BRITISH MINING No.53

THE ARKENGARTHDALE MINES



by

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THE BATHURST FAMILY (1635-1740)

DR JOHN BATHURST

Dr John Bathurst of Blackfriars in London was Oliver Cromwell's "*Doctor of Phiseike*". He married Elizabeth, the daughter and heiress of Brian Willance of Clints near Richmond, in 1635. By this marriage Bathurst got the Manor of Clints, with its smelt mill, and some property in Richmond.¹

On September 18th 1654, acting through his friend Maulger Norton of St Nicholas, Richmond, Bathurst got a lease for all the lead and coal mines in Arkengarthdale and New Forest from the Citizens of London.² This was for 21 years with £24 10s annual rent. There is evidence, however, that he was leasing the mines prior to this date as, in 1651, he paid £10 10s rent for the mines "*for the use of the Commonwealth*".³ It is possible that he took the mines after Ambrose Pudsay's lease expired.

Two years later, on May 30th 1656, again acting through Norton (whose daughter, Mary, married John Yorke of Bewerley, Nidderdale in 1660), Dr Bathurst purchased outright the Manors of Arkengarthdale, New Forest, East and West Hope and other lands in Yorkshire and Durham from the relieved citizens for £2100. The mineral rights were reserved in the sale.⁴ The Commissioners sent to view the estate had valued them at £2500, but Norton argued successfully for a reduction of £400. The annual value of Arkengarthdale rents at this time was £56 18s 6d.⁵

Now that he had control over the manor, Bathurst set about recouping his purchase money by granting 1000 and 2000 year leases to his tenants. The ancient rents would stand, but the alienation fines were to be increased. Most of the tenants resented the increases and their objections appear to have tried the Doctor's patience as he threatened to send them to "*Barbados or Virginia to plant*" for their intransigence. His endeavour succeeded, however, for the annual value rose to over £500 a year.⁶

More philanthropically, he founded three schools for the children of his tenants – one in Arkengarthdale, one in Marske and another in New Forest. He also founded charities in Richmond to send two poor scholars from Richmond to Cambridge "*until they be Master of Arts*".⁷ He represented Richmond in the Parliament called by Oliver Cromwell in 1656 and in that of 1658 called by Richard Cromwell.⁸

An account book for the year from August 1st 1657 to the end of September 1658 gives us an insight into the mines in the mid-17th century.⁹ At this time, Bathurst's agent for the mines was Benjamin Purchas, whose annual salary was £20 with a further £30 allowed for expenses. The land agent was John Place who received an annual salary of £4, plus £2 for expenses for the upkeep of his horse etc.

The main workings, which were on Windegg, included the following shafts:- the First and Second Whitegang, High Windegg, Eastfield and Lowfield Groves, Eastmist, and, on the opposite side of the dale, the "*Mouldersit New trial*". Thirteen men and one widow worked at the various shafts. They dressed their own ore and were paid 19 shillings per horse load. The ore was raised in "*poke sacks*" made from sail cloth.

towards Wetshaw Shaft. At Gladding Shaft, they had driven 12 yards of a crosscut for Wetshaw Vein, with 20 yards to go. The three shafts on Friarfold Vein were watered out and at the fourth shaft they were working around the clock with 16 men to keep it going. Punchard was very poor, but they were sinking another shaft, at a cost of £350, which was 39 fathoms in depth.

Anthony Peacock died on the morning of February 27th 1760. His son, James, whom Fryer described as a sober, diligent man who had worked for 20 years in the mines, was appointed to the post on April 15th. In contrast, Peacock's other son was very unpopular in the neighbourhood and, having been *struck with the gravel*, was unable to work.

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| 2 Gill, M.C. "Yorkshire Smelt Mills, Part | 3 CROC. D/Lons/L1/3/17. |

THE ARKENGARTHDALE MINERAL LORDS (1778-1800)

In January 1778 a resolution was drawn up between Charles Turner, William Sleigh and William Foster (on behalf of his father Charles Francis Foster) to work the Arkengarthdale mines.¹ Charles Turner of Kirkleatham Hall near Stockton, who was created Sir Charles in 1782, was a member of an influential Cleveland family and became the most influential of the partners.²

Each partner contributed one third of the mines' running costs and, in return, would receive a third share of the profits in pig lead. Share-outs took place in May and November at the Low Mill, with each partner being free to dispose of his own share at whatever market and whatever price he chose. However, the partnership got off to what turned out to be a very poor start in their choice of agents.

The head agent was Thomas Simpson of Reeth at an annual salary of £60. He was responsible for holding the Manor Court, collecting rents, getting the money for the mine pays and purchasing mine timber and candles. To guard against misappropriation by virtue of his position, he was required to put up a bond of £2000. His father-in-law, Thomas Elliott of Fremington (who had been field agent to the two Charles Bathursts), helped him with this.

James Alderson of Fremington was the agent responsible for keeping the accounts and ensuring the smooth running of the mines and mills and he also got a salary of £60 p.a. He received the money for the six-monthly pays from Simpson and supervised the division of the partners' lead. The main office for the mines and estate was at Scar House and Alderson lived there rent free.

THE 19TH CENTURY

EASTERBY HALL & COMPANY

Easterby Hall & Co. signed separate leases with Sir Charles Turner and William Sleigh for their one-third shares in the mines and estate on December 8th 1801. The lease was to begin on January 1st 1802 for the term of 19 years.¹ What arrangements the Foster family made for its third share is unknown, but they were probably similar to those of the other partners.

Sir Charles Turner was to receive an annual rent of £1400, payable quarterly, for his share, while William Sleigh was to get an annual rent of £1200 for the first eight years. After this it was to be reduced to £1000, payable quarterly and free of all taxes and deductions. On December 24th 1820 he, or his heirs, were to receive a lump sum payment of £2200.²

Two days after signing the lease, William Sleigh reached another agreement with the company. In the light of later events, this was a wise move on his part. It was agreed that, should any of the partners be declared bankrupt during the period of the lease, the other partners would ensure he still received his full rent. For his part, he gave up his right of re-entry on his one-third share.³

The lease, which was extremely unusual for the area, was negotiated when the price of lead was inflated by the Napoleonic Wars and a rising domestic demand from a growing chemical industry. The optimism generated by these prices enabled the company to offer a payment which was high enough to induce the Lords to go against all the advice offered by their agents and others and to accept a certain rent without any duty payment.⁴

Aubone Surtees, John Surtees, George Doubleday, Anthony Easterby, Walter Hall and Frederick Hall, who was to be mine manager, signed the lease for Easterby Hall, and the company went about its involvement in the mining industry with enthusiasm, eventually taking up leases for mines at Hunstanworth, Newbigin, Blanchland and Alan Shields.⁵

A steam winding engine was purchased from Messrs Boulton & Watt and delivered to Easterby Hall, at Reeth, in July 1801, but unfortunately, it is not known where this engine was used.⁶

Frederick Hall had already begun the reorganisation of the Arkengarthdale Mines before the lease was signed. He moved into Scar House and, by contemporary accounts, was by far the most dominant of the partners. Mathew Wadeson described Walter Hall as "*gentlemanly and pleasant*", whereas of Frederick he remarks "*I have met with some reverse traits*".⁷

Sadly, nothing has been found which gives any information of the company's mining activities or ore production. Apart from various glimpses, the

narrative of necessity becomes rather sketchy, but there can be little doubt that large quantities of ore were won. Easterby Hall was the first company to exploit the lower bearing beds in the Low Moulds area and this gave it full reign over an area of practically virgin ground.

The first task was to drive Moulds Level in order to exploit the Undersets and make the winning and movement of ore cheaper and more efficient. Dressing floors were built at the level mouth to crush the ore, and another near Moor Intake Farm to deal with the final dressing. Dams were built to store water for these floors and a leat was dug to bring water from Punchard Gill.

In a letter to Lord Bolton, written in November 1800, William Sadler (a solicitor from Thoraby) notes that *"the company are doing things in Arkendale which amaze everybody, and are said to have ten levels going forward underground at this time"*. A further letter, dated December 5th 1800, remarks *"that Mr Hall is said to be driving no fewer than nine horse levels and spending £300 per week"*.⁸ Fortunate indeed that the Surtees brothers were partners in a bank.

In 1802 Easterby Hall proposed to John Lowther that the lead tithe be changed to a cash payment, or a modus, rather than having the ore riddled at the level mouths. The latter method delayed getting the ore to the dressing floors and must have proved irksome to Hall. Lowther commissioned Robert Clarke of Stockton to make a report and consider the proposal.⁹



PLATE II. The Octagon Smelt Mill. (J.L. Barker Collection).

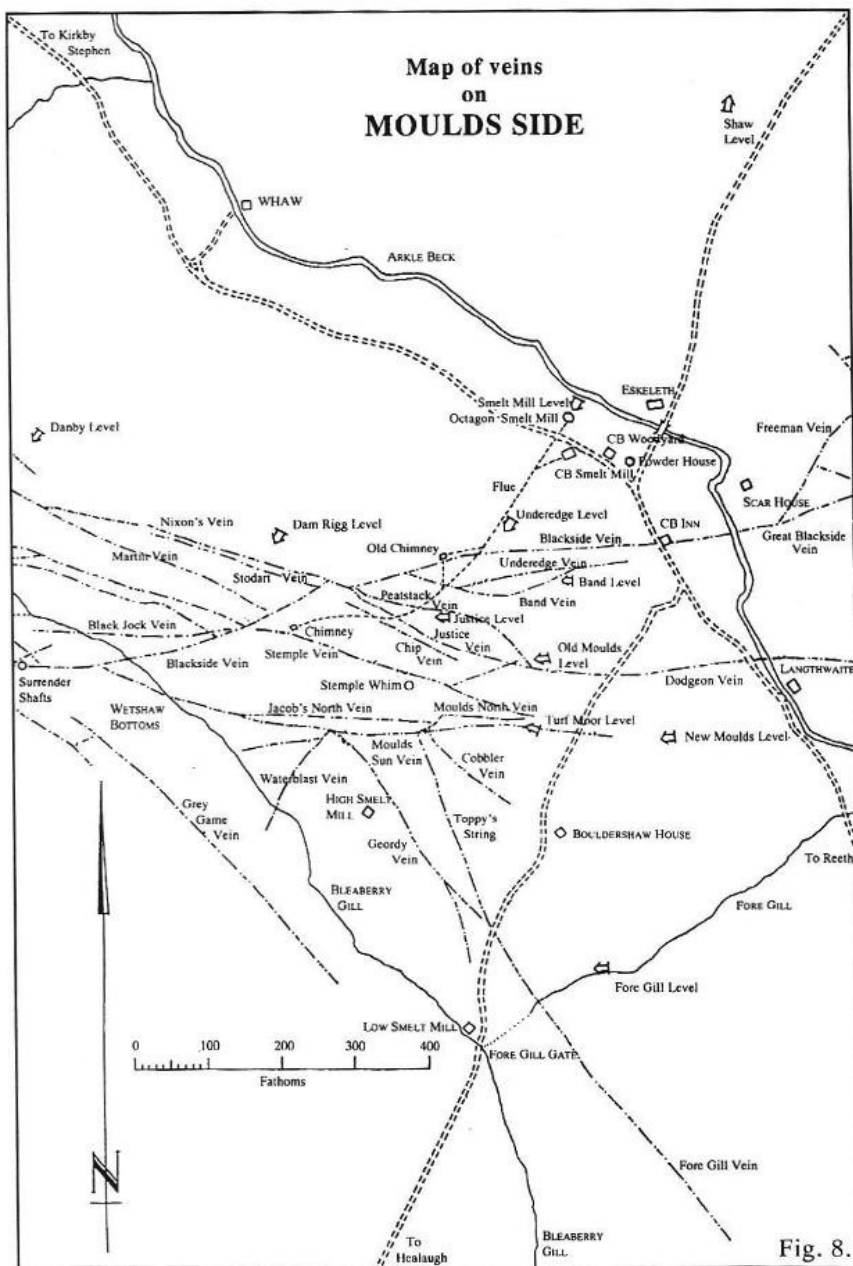


Fig. 8.

THE TWENTIETH CENTURY

TWO NEW COMPANIES

Things looked up when, on March 25th 1907, G.T. Gilpin Brown granted a take note, with a 21 year lease option, to James Backhouse, the first Dales mining historian, and John Edmund Jones and Harold Mark Carter, both of Scarborough. This note gave them prospecting rights over the manors of Arkengarthdale, New Forest and Hope.

In October they proposed setting up the C.B. Lead Mines Ltd, to work the ground south-west of Arkle Beck, and the Stang & Cleasby Lead Mines Ltd, to work on the north-east side of the beck.^{1,2} In return for transferring their take note to the companies, the three were each to be allotted 2000 shares in C.B. Lead Mines and 4000 in Stang & Cleasby. In consideration of their interest in the mines and plant, valued at £14,000, on October 29th they were allotted shares to the value of £12,000 and a balance of £2000 paid in cash.

Both companies were registered on October 26th 1907. C.B. Lead Mines had a capital of £7500 in £1 shares, while Stang & Cleasby's capital was £20,000 in £1 shares and 5000 shares were to be offered to friends of the vendors. Backhouse was the chairman and also a director of both companies. The other three directors were Jones, Carter and Edwin Gray. Thomas Harker, of Yew Tree House, was manager for both companies at an annual salary of



PLATE VI. A rake of horse-drawn waggons about to enter Stang Level, c1908. Stang House and the Barnard Castle Road in background. (Raistrick Collection).

CHERT MINING (1922-1950)

Chert was mined at two sites in Arkengarthdale from 1905 to around 1953. The first site was at Fremington Edge, above Reeth, where mining started in 1905 (see British Mining No.51 for further details), and the second was on Moulds Side, where mining started in 1922.

The chert was used as part of the crushing equipment in mills, such as that at Cheddleton near Leek in Staffordshire, which supplied crushed flint for the white paste base used in the manufacture of porcelain and white pottery. As chert, like flint, is silica based, any wear during the crushing process merely added to the silica content of the paste. The chert blocks provided the base stones which formed the floor of the crushing mill and were known as "Pavers", and also the "Runners" which performed the actual crushing as they were pushed round by wooden arms.¹⁶

Work began at Moulds Side when a licence was granted by the C.B. Estates office to J.S. Wagstaff of Reeth.¹⁷ The licence, granted in 1922, was originally to last till April 6th 1923, a renewal being dependant on the quality of the stone. Before this, Wagstaff had been manager for the Boulder Flint Co., which worked the Fremington Edge Chert Mines, and he had also worked the Cragg End Stone Mines.¹⁸

After several trials, work began on extracting chert from inside Moulds Level, which the *List of Mines* records as Low Level. Wagstaff worked here till 1932 when attention turned to the Crow Chert beds, high on Moulds Side, and the operation became known as Hungry Chert Quarries.

The chert was first quarried at its exposure above Stodart's Hush. To get a better quality stone, and probably to escape the weather, two levels were driven into the hill, cutting through the smelt mill flues. A third level was driven as the distance inbye increased and the ground became more unstable.

Natural joints which separated the chert bed into large blocks were exploited by the men when extracting the stone. The method of working was to cut away the overlying limestone, or "Bearing", until a cross joint was reached. Each band of the chert was then split away, using plugs and feathers. The top layer, which was of a pinkish hue, was the best quality and it was from here that the "Runners" were obtained. The size of these was not critical, but a weight of 30 cwt was usually aimed for. The middle bed, with a bluish hue, provided the "Pavers" which had to be 12, 14 or 16 inches long. The lower beds were cut lengthways to obtain the required size. (See diagram).

As much separation and dressing as possible was done underground to avoid unnecessary carrying and to allow the deads to be used for packing the voids. The blocks were pushed out on flat bogies, which ran on rails taken from the old lead mines, and the final dressing put a smooth face on the base of the runner and on one end of the paver.¹⁹