ARTHUR MOWBRAY - ADVENTURER OR ENTREPRENEUR? A NORTH-EAST BUSINESSMAN IN THE INDUSTRIAL REVOLUTION: PART 2, THE HETTON COAL COMPANY

1

The final twenty years of Arthur Mowbray's long life (1755-1840) are set in a period when North-East England was on the verge of great entrepreneurial achievements. Mowbray's historical importance is therefore that, after five years of business failure, he achieved entrepreneurial success by founding the first of the great coal companies which can be seen as the engine for much of the subsequent industrial development in the region.

As described in the previous article, Mowbray, a land agent and superintendent to a number of colliery estates, became bankrupt in 1815 following the failure of the bank which bore his name. After struggling for four years under the cloud of bankruptcy and with the frustrations of managing an estate governed by Chancery, he was dismissed as manager of the Vane-Tempest collieries when Lord Stewart (later 3rd Marquess of Londonderry) married the Vane-Tempest heiress, Lady Frances Ann.

One can only speculate on the effect this dismissal in favour of a younger protégé, John Buddle, 'King of the Coal Trade', had on Mowbray. It almost certainly left him without employment, albeit at an age, 64, when most people would contemplate retirement. Despite this setback he immediately embarked on a new project on his own doorstep and under the nose of his former employer. He organised a disparate group of relatives and business acquaintances to make a bid for an unproven, half-completed, coal-mine near his home at Hetton House.

Hetton le Hole was only a mile from Rainton and two miles from Penshaw where the Vane-Tempest collieries were located. Mowbray moved to Hetton House from Sherburn House shortly after his bankruptcy. A lease negotiated for the Shipperdson family of East Durham in 1816 is signed 'Arthur Mowbray, late of Sherburn, now of Hetton House'. It was not without significance for his future business life that his move took place at the time when the local landowner, John Lyon, son of the Countess of Strathmore, was seeking to lease the coal under his estate together with a partly-sunk colliery. An advertisement carried in the Durham Advertiser during 1815 states:

COAL MINES IN DURHAM TO LET

All these valuable COAL MINES and seams of coal under the estate of Hetton le Hole in the County of Durham containing 1000 acres or thereabouts. The workable seams consist of the Five Quarter, High Main, Maudlin, Low Main and Hutton Coal, these seams have proved of excellent quality in the Rainton Colliery adjoining and there is little doubt but that they will be found of like quality through the whole estate. The High Main Coal at Rainton Colliery, formerly called Old Ducks, was of the first quality and in great demand both at London and coast markets, particularly the port of Lynn. There is an engine pit 12 feet in diameter, already sunk to a depth of 21 fathoms secured by cast iron cylinders. There are also materials for a powerful engine, now upon the premises, which may be had at valuation, together with a quantity of timber well suited to colliery purposes. The depth of the main coal seam is supposed to be 80 fathoms. Mr. James, at Hetton, will show the premises, and further particulars may be known on application to W. Thomas at West Denton, near Newcastle upon Tyne, Feb. 28, 1815.

Early in 1816 Mowbray, with his usual eye for a new business opportunity, commissioned the viewers William Stobart, Edward Steel and John Watson to advise the Vane-Tempest estate on the terms for a lease of the Hetton coal. That nothing came of this initiative is not surprising in view of the decision-making difficulties the Vane-Tempest estate was suffering at the time. However, a Hetton venture would have been more than usually difficult for Mowbray to have pushed through the estate advisers and the Court of Chancery. Coal at Hetton lay below a thick layer of magnesian limestone, which, because of its permeability, made any shaft-sinking prone to flooding before the coal was reached. The necessary precautions against flooding were expensive, and Thomas Fenwick's attempt to sink a shaft for John Lyon in 1813 had cost £13,000 and ended in the latter's insolvency and the abandonment of the project. Steel and Buddle, who had advised Lyon and Fenwick on the scheme, estimated in 1813 that it would take a further £51,000 to complete the colliery.

There is evidence that Mowbray's knowledge of the geology of the Hetton area was based on information provided to him over a decade before the failure of John Lyon's project. Despite its failure Lyon's was not an unplanned adventure; as early as 1796 he had employed Messrs. Rawlings - 'the only respectable and professional borers in the North' - to test the Hetton site for coal. The shallowest seam was found at 160 metres (500 feet) and, interestingly, the results of the survey were purchased in 1801 by John Buddle senior on behalf of Mowbray, acting for the adjacent Vane-Tempest colliery interests. Clearly, if Lyon had successfully opened a new colliery at Hetton it would have been a significant rival to the Rainton and Penshaw collieries. The project's failure in 1813 presented an opportunity for Mowbray, acting for the Vane-Tempest estate, to take over this potential

business rival and nullify the threat of competition. However, with hindsight, it was perhaps lucky for Mowbray that no deal was struck (there is little real evidence of an attempt). Therefore, at the time of his dismissal as manager of the Vane-Tempest collieries in April 1819 the opportunity to develop the Hetton project was still open to all comers and, as events showed, Mowbray was well placed to get the scheme underway despite his apparently precarious financial position.

II

From correspondence with Lord Stewart in January 1820 it is clear that Buddle was aware of, and concerned about, his predecessor's commitment to the Hetton project. There is little detailed evidence of Mowbray's activities but, at some time in 1819, whether before or after his dismissal is not known, Mowbray joined forces with the viewers John Watson and John Wood to estimate the cost of completing the Hetton project. Their total figure of £60,000 included £22,000 for a waggonway to, and staithes at, Sunderland and £7,100 for the sinking of an additional pit. No doubt the figure for the cost of the waggon-way owed much to the then recent estimate made by George Stephenson, and commissioned by Mowbray, for a waggonway of similar length from Rainton and Penshaw collieries to the River It may never be possible to determine how much Mowbray based his proposals for setting up an independent Hetton project on work he undertook for the Vane-Tempest estate but, based on his interest in Hetton in 1816, when he commissioned Steel, Stobart and Watson, it seems likely to have been significant.

Buddle's interest in carrying out the Hetton development seems not only to have been a negative one, in stopping Mowbray competing, but also to have arisen from the pressure to find an alternative to the Rainton lease-renewal with the Dean and Chapter of Durham which had dogged Mowbray between 1812 and his dismissal. However, Buddle admitted to Lord Stewart on 22 January 1820 that:

My wishes in this respect have been in some degree disturbed by Mowbray's nibbling about the concern. For although I don't believe he has made any progress yet his festling about it has excited the attention of the public to the subject and (since) it is well known that Mr. Lyon is labouring under great pecuniary difficulties it is natural to expect that he must be inclined to listen to any terms that may be offered for the Mine and as an idea prevails that the coal is as good as the Rainton coal - immediately adjoining, it is equally probable that some monied adventurer may come forward and make him an offer for it.

Buddle went on to advise Stewart of detailed plans for bringing the Hetton coal under their control at a 'Certain Rent' of £1,000 a year for 21 years with the possibility of the first eighteen months or two years' rent-free to allow the colliery to be completed. Buddle estimated the costs of completing Hetton Colliery as £40,000 in total, but with £15,000 of this offset by combining waggonway-development with that planned at Rainton Colliery. However, Buddle's enthusiasm for the project was lukewarm, as his conclusion to a long letter demonstrates:

It is for consideration how far the report of your Lordship's being in negotiation for the Hetton Coal might not operate in our favour with the Dean & Chapter. They might easily be startled by an application for wayleave through Rainton Grounds (which, by-the-by, we could either do with or without) without seeming to aim it as a hostile movement. But at the same time it would without doubt put them on the qui vive.

Stewart's response has not survived, but by the time of Buddle's next letter it is clear that some negotiations had taken place with Mr. Thomas, Lyon's agent, which demonstrated that the Hetton project was not as straight-forward as Buddle had implied in his previous letter. Buddle somewhat naively introduces the complications thus:

Thomas had been with the Rev. Mr. Liddell (Lyon's trustee) on the business two days before and he assured me that, as far as it is in their power, they will give your Lordship the preference; but it appears that the coal does not entirely belong to Mr. Lyon. A Mr. Clutterbuck and others have an undivided Moiety of the coal under 120 acres of the estate and an undivided third of all the remainder. And it appears also, that there are a few patches of freehold, possessed in severalty by other persons, scattered through it. It seems that Mr. Lyon and his late Mother borrowed a Sum of Money of Everett and Co., Bankers, and gave them security on the Colliery and Binchester Estate. After Mr. Lyon expended all his money in an attempt to win the Colliery and got embarassed, Everett and Co. filed a Bill to compel him to sell the Binchester Estate, to pay them off what they had advanced on the Colliery.

It is perhaps surprising that Buddle did not know of these complications from his past experience of the Hetton project. It is a fair assumption that Mowbray knew of them and, indeed, Buddle's next set of revelations to Lord Stewart suggests that his predecessor had a head-start in the Hetton negotiations. The issue centred on the rôle of Lyon's London lawyer, a Mr. Tahourdin. Buddle continued:

Tahourdin happened to get hold of Mr. Lyon at Brussels, and it is said (but Mr. Liddell does not know it to be a fact) has purchased his life interest in the whole of his property. Tahourdin has been in this County and bought up several of the debts at 8/-

in the pound. And Mr. Liddell suspects it is to be his plan to satisfy Everett and Co. and get them to withdraw the Bill, and then get Mr. Liddell dismissed from the Trust, but as yet Mr. L. has not had the least communication from him on the subject.

Under these circumstances it is by no means improbable that Nowbray and Fryar's late Expedition to London may have been to lay some plan with Tahourdin.

However, amid these complex dealings, Buddle saw the opportunity of spoiling Mowbray's scheme. There was clearly little chance of his engineering a quick takeover of the Hetton project, about which he was in any case unenthusiastic. There was, however, the prospect of a long legal wrangle delaying the Hetton scheme and giving the Vane-Tempest/Stewart interest the time perceived was needed to recover from Mowbray's mismanagement. immediately reached a Buddle records that he therefore confidential verbal agreement with Clutterbuck's agent - a Major Johnson - to ensure that Lord Stewart's interests were brought into any negotiations over the Hetton coal. Buddle's view was that such an agreement would, if concluded, spoil Mowbray and Tahourdin's plan - 'for who in their senses would expound £40,000 in the Establishment of a Colliery without any clear title to the coal'. Probably realising that Lord Stewart might think himself included in this judgement, Buddle suggested that their case was different. Tahourdin was a 'mere adventurer', who would settle with Stewart so long as it achieved his object of financial gain.

Buddle also saw another tactic for foiling Mowbray's scheme. Buddle had 'information' that part of Mowbray's plan was to transport the Hetton coals via Nesham's waggonway, which ran to Sunderland from Nesham's collieries at Newbottle near Houghton-le-Spring. Buddle therefore proposed to Stewart that some of his coals be sent via Nesham's waggonway, which, together with Nesham's coals, would fully occupy the capacity of the waggonway leaving no room for Hetton coal. The Machiavellian Buddle also saw advantage in this tactic in respect of the renewal of the Rainton lease:

The complete occupancy of Nesham's railway would also militate greatly against the letting of Rainton Colliery to any one else than your Lordship as it would compel any person or party who might be disposed to compete with your Lordship in a Treaty with the Dean and Chapter to seek an entire new line of waggonway either to Sunderland or any other part of the River. And I think we are fully justified in adopting any measures of this kind, whenever the opportunity occurs, considering the late treatment we have experienced from the Revd. Boddy [sic].

These two letters of Buddle's have been dealt with in some detail since they demonstrate the seriousness with which Mowbray's Hetton proposals were being taken. Unfortunately nothing of Mowbray's response has been unearthed and Buddle's

correspondence for the rest of 1820 is fragmentary. Crucially, however, by December 1820 Buddle was informing Lord Stewart of the 'Names of the Several Persons constituting the firm of the owners of Hetton Colliery'. There were eleven of these 'persons' in all, and Mowbray, being a bankrupt, was not among them, although he had a strong family interest. Table 1 sets out the information on the Hetton shareholders which Buddle provided to Lord Stewart. The two major shareholders, respectively holding five and four shares of the total of 24 shares, were Richard Scruton, a Durham lawyer, and Archibald Cochrane, Mowbray's son-in-law. Buddle makes it clear that at some time prior to Buddle makes it clear that at some time prior to December 1820, with monies put up by Cochrane and Scruton (£600 and £300 respectively), Mowbray 'sapped' Tahourdin and got him to sign an agreement on behalf of John Lyon with the Hetton Coal Company. Buddle's tactic of taking an interest in Clutterbuck's coal did not work since the Hetton Coal Company made an agreement with another landowner, Gowland, and, abandoning the original, Lyon, shaft, sank a new shaft away from Clutterbuck territory 'in the most distant part of Mr Lyon's separate freehold'.

Buddle shrugged off this unwelcome news as giving him 'little concern' and labelled his new rivals as 'adventurers'. However, Lord Stewart, who was Ambassador in Vienna at the time, was clearly concerned. Writing to Iveson, Stewart's land agent at Wynyard, in April 1821, Buddle recognised this:

I am really sorry to find that the Hetton affair gives his Lordship so much concern but it cannot be helped and we have the satisfaction of knowing that we did our best to attain it. That we did not succeed is not our fault - it rose out of circumstances which we could not control."

It is evident, however, that Buddle was concerned about the effects of the Hetton project on two particular elements of the coal-business - negotiations with coal-fitters and retaining technical expertise at colliery level. He complained that two fitters, Hayton and Horn, who were partners in the Hetton Company, were 'certainly not treating us candidly to keep the affair snug until they got their quantities for this year fixed with us'', and that he was 'not disposed to be mealy mouthed with Hayton, as the Hetton people still keep carrying off our petty officers whenever they can'.' Nonetheless, despite these irritations, Buddle's reports to Lord Stewart in April 1821 stressed the Hetton Company's difficulties:

It is not unlikely that the whole pack may be swamped before ever they get a coal. They have been stopped several weeks past by a feeder of water and cannot advance an inch further until they get an engine. 25

and three weeks later :

they are sticking fast, 'till their Engine is ready - long may they stick is my prayer. 16

TABLE 1: BUDDLE'S 1820 ANALYSIS OF HETTON COAL COMPANY PARTNERS

o. of	Name	First Advance	Sum to be paid	Comment by J Buddle
		£	E	
5	Richard Scruton	300	950	An attorney, worth £15-20,000, little loose money
4	Hon Archibald Cochrane, Eppleton	600	400	Has the Langley Estate £10-12,000 £2,000 let out on a mortgage which has been called in to go to Hetton.
3	Alex Whalley Light, Durham		750	Worth £2-3,000, but no spare money.
2	Wm Hayton, Bishopwearmouth		500	His solvency is even questionable.
2	Thos Horn, Bishopwearmouth	LEK	500	All his money is embarked in business
2	John Dunn, Durham		500	An attorney worth E4-5,000 in property
2	Wm Stobart, Jnr Viewer, Picktree near Chester-le- Street		500	Has a pit taken of Mr Lambton to work and sell the coals; Has no money, married Hayton's daughter three months ago.
1	Hon Erskine Cochrane		250	Have no information respecting this Cochrane.
1	Robert Darnell, Bishopwearmouth		250	Mowbray's nephew, a brewer; has no money.
1	John Wood, Viewer to Grand Allies		250	Can have nothing but the savings out of his salary.
1	Mr Lynn Smart Trewhitt, Northumberland		250	A country esquire, no spare money

In the spring of 1821 the need for a pumping-engine for the Hetton project created not only technical problems but also organisational and financial ones. According to Buddle, two of the partners, the fitters Hayton and Horn, were ready to break ranks and pull out of the project. The largest shareholder, Scruton, was advertising for £22,000 to borrow on 'good security which it is well understood is to be applied to the winning of Hetton Colliery'. However, the fragmentary nature of Buddle's surviving correspondence for this period does not provide sufficient evidence as to how these difficulties were overcome. It is certain that the original £6,000 raised from the 24 shares in December 1820 was insufficient to carry out the project, even if a deferred rental of the kind Buddle was seeking had been agreed between the Helton Coal Company and Lyon. A completely new sinking operation for the shaft would clearly require additional working capital, to which none of the partners appear to have had access. There is, however, sufficient circumstantial evidence to suggest how Mowbray raised finance.

Mowbray, it can be suggested, used all his experience and contacts from past colliery and banking adventures to negotiate the necessary leases and commission the right kind of technical report predicting future profits when coal-production started, and then used these to raise substantial capital support for the project. Certainly 1821 saw the completion of thirteen leases providing for both colliery-development and waggonway-construction, as well as the production of a valuation-report by Edward Steel which estimated a profit of £62,000 on an annual vend of 100,000 chaldrons. Significantly the thirteenth lease, dated 13 October 1821, was signed by Arthur Mowbray 'for and on behalf of the Hetton Coal Company' - the first evidence that Mowbray was acting in an official capacity as a representative of the Company.

Even more significant, perhaps, is the detailed content of Steel's report, the key to impressing financial backers. Steel, who was viewer at Houghton Colliery, reported an expectation of 69 years profits at £62,000 per annum, giving a 'present value' of £258,111 11s. 7d. or £10,754 12s. 11d. per 'one twenty fourth share'. The justification for these findings was:

The Main Coal Seam has been proved by boring to exist in Perfection under a Bed or Stratum of Limestone 25 fathoms in thickness and therefore it may reasonably be presumed the Hutton Seam will be met with a similar state of perfection, but as a considerable tract of this Coal Field lies under a much thicker stratum than 25 fathoms of limestone I am inclined in Consideration of this Risk to allow a Purchaser £20 % coal per anno Interest for his purchase money and supposing the colliery to afford no Profit during the first year when opening out...

The assumption must be that, armed with the prospect of such riches, sufficient financial backing was secured to continue the project during 1822.

The all-important lease allowing coal working to take place under John Lyon's land was signed on 22 June 1822. This document provides some clues as to the improvement in the finances and organisation of the Company since the spring of 1821. Two partners, Hayton and his son-in-law, Stobart, had sold their four shares, and four new partners had each purchased a share. The new partners were William Charleton of Rotherhide (possibly in the London coal-trade), William Shotton of Bombay (probably in the East India trade), John Collingwood Tarleton (a Northumberland landowner) and Arthur Mowbray. Buddle suggests that Shotton, who was Scruton's new son-in-law, had made a fortune in the East Indies and that Mowbray was making much of the possibilities. Talking up the financial backing for the Hetton Company was clearly vital since, according to Buddle, in May 1822 they were 'very heavy in hand £54,000 have been advanced and the Chancellor of the Exchequer is exceedingly put to raise the supplies for carrying on the war'. By October 1822 Buddle's analysis was even more pointed:

Their sinking or swimming rests solely on the turning out of the quality of coal, on the opening of their present pits and this is a point which still continues in a state of the greatest uncertainty.

The late autumn of 1822 seems to have been a watershed in the progress of the Hetton Coal Company. Only weeks from success in raising coal, a power-struggle for control of the Company appears to have taken place. Mowbray's position was challenged by the largest shareholder, Scruton. Buddle dramatised the events:

Last week the flames of civil war broke out with great violence amongst the Hetton Co. Pistols were talked of, but most prudently, the wagging of tongues was preferred to the pulling of Triggers, and the elegant epithets of Scoundrel, Rascal etc. flew like Grape Shot. Capt. Cochrane and Scruton were the principal Gladiators on the occasion. After much hard fighting a party was beaten and the affair ended in the dismissal of the commander in chief - Old Arthur.

Buddle goes on to say that Scruton charged Mowbray with 'obstinacy' and 'extravagance'. However, the 'main cause of the fracas' was the difficulty many of the partners were having in raising money to carry on the works. The 'civil war' continued at a 'full meeting' of the Company held on 24 October 1822, from which Buddle's information was that the Company was £44,000 in debt - £107,000 had been expended and only £63,000 advanced.

The grand puzzle and cause of all their scrabbling is how to get the remaining £44,000 raised. Some of the partners refuse to advance any more money and the Lawyers are gaping for a job in Chancery on this occasion.

On 9 November 1822 Buddle reported that the 'great public cause of contention is whether Arthur is manager or not',, but by 23 November he was reporting that Mowbray had been reinstated because of Cochrane's intervention and because the rest of the partners disliked Scruton more than they did Mowbray.

Also contained in Buddle's letter to Lord Londonderry dated 23 November 1822 is news not perhaps unconnected with Mowbray's reinstatement - the first Hetton coals had been sent to Sunderland the previous week and a vessel was being loaded with the first cargo for London. The Hetton Coal Company was now a serious competitor and Buddle was starting to take the opposition seriously:

As we must always regard these Hetton people as a nest of Pirates, who will be constantly on the watch to plunder us, we must keep a sharp look out ahead to take care that they don't get to windward of us.

However, the New Year of 1823 brought further difficulties for Mowbray and Buddle's correspondence for that year provides a detailed insight into the Hetton Company's business position. The success in raising and shipping coals from Hetton had provided only a brief respite from the arguments within the Company. In February 1823 Buddle was reporting to Londonderry that, while coal from the Hutton seam was good enough to keep the Hetton Company 'afloat', it was 'quite a settled point' that Mowbray was to 'relinquish his command'. The Company was now capable of producing large amounts of coal and of competing for a share in the vend, but it had both financial and technical difficulties. Large debts were still owed on top of the capital raised by the partners and a large dyke underground was making it hard to reach the best coal.

Buddle identified two factions within the Company: firstly, 'Scruton's party', whom he saw as moderate, prepared to accept a limited vend and to support the price of coal fixed by the Coal Trade Committee; and secondly, 'Cochrane's party' - supporters of Mowbray -, who were pressing for a high vend and lower prices. The existence of these factions, and there being 'no head in the concern', resulted in rumours that Scruton's party would apply to Chancery for the appointment of a receiver. As a result of this 'anarchy' it was difficult for the Hetton Company to participate in the negotiations on the vend. Buddle recorded that on 13 March 1823 Scruton, Dunn and Mowbray attended a preliminary meeting of the Wear Coal Trade Committee held at Chester-le-Street, and commented that their 'good behaviour' was the result of their inability to agree to 'do mischief'. Mowbray and Scruton were not on speaking terms, and Mowbray left early whereas Scruton and Dunn stayed to dinner, 'waxing mellow' and declaring their moderation.

Scruton's party clearly had the upper hand in determining the Hetton Company's policy in their first Coal Trade Committee negotiations during the spring and summer of 1823. On 7 August the Company accepted a vend of 50,000 chaldrons for the year beginning 1 August 1823. His was half the 100,000 chaldrons for which 'Cochrane's party' was arguing and, although Scruton argued for a vend of this magnitude at a Wear Coal Trade meeting on 11 July (leading to an adjournment of the meeting), he seems to have given in under pressure from J.G. Lambton, who chaired the reconvened meeting on 21 July and who insisted on a Hetton Company vend of 50,000 chaldrons. Buddle records that Lambton was 'very severe' with Mowbray and that he had 'a good deal of conversation' with Scruton after the meeting, finding him 'in the minor key', which suggested to Buddle that the Hetton Company would agree to 50,000 chaldrons. In fact, Scruton was a spent force and by October Buddle was recording his business obituary:

The Hetton Concern has exhausted all his means and left him a long way minus.

It seems to have been more than monetary means in which Scruton was exhausted. Taking on Mowbray during 1823 seems to have affected Scruton physically. Indeed, the 'obstinacy' and 'extravagance' with which he charged Mowbray at the start of the Hetton Company's 'civil war' in October 1822 was borne out by the manner of his undoing. When things were going badly for Mowbray in the Hetton Company he sought new business strategies with which to achieve his objectives. Buddle puts it more patronisingly:

Like the 'Knight of the Woeful Visage' it is however I believe impossible for him to remain quiet. We may therefore shortly expect to hear his going on fresh adventures.

IV

Two of the 'adventures' with which Mowbray became embroiled in 1822 and 1823 are recorded in Buddle's correspondence. Firstly, in April 1822, before the Hetton 'civil war' broke out, an issue arose over the sale of Nesham's colliery at Newbottle, which the Lambton and Vane-Tempest interests were in competition to acquire. Mowbray, despite the precarious finances of the Hetton project, was prepared (according to Buddle) to force up the price for Nesham's colliery by 'knocking up' a subscription company to bid for it. The idea, which was perhaps based on using the supposed East Indies' wealth of the new Hetton partner, William Shotton, seems to have been quietly dropped when viewers' surveying the colliery for Mowbray had a 'very bad opinion of the concern'. Shortly afterwards J.G. Lambton acquired the colliery for £70,000.

However, the autumn of 1822 saw the seeds of a far larger project sown in Mowbray's mind. What Buddle called 'a new set of adventurers, of larger caliber in point of capital than the Hetton Co.', were proposing a major colliery undertaking at North Pittington (on Dean and Chapter of Durham land) with a railway either to a new harbour at Hawthorn Dean or to Stockton. The

partners in the venture - which Buddle termed 'the Braddyllian Coalition' - were mainly large landowners in the East Durham area and included: Colonel Braddyll, Rowland Burdon, Lord Howden, Richard and John Pemberton and Sir George Pocock. Buddle had a low opinion of the business and technical ability of these men, and suggested that the scheme would not be a success since they 'neither possess sufficient energy nor activity for such an undertaking - the only requisite they do possess is capital', although he was concerned that the scheme would damage Londonderry's colliery interests if efficient businessmen became involved.

Mowbray's motives for being involved in the 'Braddyllian Coalition' seem to have been related to the 'civil war' in the Hetton Company. By April 1823, when he had lost control of the Hetton Company's affairs, Mowbray seems to have taken technical control of the 'coalition' and had modified the original ideas for taking the coal to either Hawthorn Dene or Stockton by proposing a railway to a new harbour at Hartlepool. The new railway was planned to have collieries all along it, starting with a pit in George Baker's Elemore estate, next to Hetton. Buddle's report to Londonderry on 26 April 1823 demonstrates how heavily Mowbray was involved:

Arthur is still fussing about the Hartlepool scheme and I hear old Burdon is one of this concern. I have not heard that Arthur has yet advanced any further up the County than Braddyll's Haswell Estate, but the thing is making considerable noise in the County and is making all the Land Proprietors who have or imagine they have coal in their estates prick up their ears.

Mowbray's involvement in the Hartlepool railway project demonstrates some of the methods he used in attempting to gain support for development projects - something that is on the whole missing from the historical record in relation to the Hetton project. He canvassed support from the landowners along the line of the proposed railway by visiting them and providing them with written terms and conditions for compensation via colliery-rents rather than way-leaves, which would have the effect of tying landowners more closely to the development of collieries. Mowbray sought professional advice from John Watson (Lyon's viewer) as to the acceptability of these terms and conditions and began boring for coal in the areas along the proposed railway line.

Buddle took the 'Braddyllian' project very seriously since he saw it as competition for Lord Londonderry's Seaham Harbour project, which was then in its infancy. While pouring scorn on Mowbray's efforts in his letters to Londonderry, Buddle did take the trouble to visit some of the landowners himself - notably Richard Pemberton, whom, Buddle claims, he easily persuaded to pull out of the coalition since Mowbray's plan had dropped the idea of making a harbour on Pemberton's estate near Hawthorn. The official prospectus for the Hartlepool Railway scheme was, however, never published. At a meeting in Hartlepool in June 1823, which Mowbray attended together with some of the interested

landowners, two of the principal landowners, Sir George Pocock and Rowland Burdon dropped out. Braddyll was absent, and only Lord Howden supported Mowbray's scheme, despite the fact that, according to Buddle, he had no resources, rushing on 'neck or nothing like a desperate Knight Errant supported by Arthur as his Esquire'.' By August 1823 the scheme was dead, killed by the Treasury, whose response to Howden's petition to improve Hartlepool Harbour was that no response would be forthcoming unless the 'Projectors' raised half the capital. As Buddle commented:

This they cannot do nor have they even estimated the cost - so has burst the bubble.

However, despite this setback, remarkably Mowbray's personal 'bubble' was not burst. He seems to have used Scruton's financial collapse and the experiences gained during the 'Bradyllian Coalition' to regain control of the Hetton project for a few more crucial months. Buddle's correspondence of the autumn of 1823 is full of information about Hetton's financial plight. On 12 October he was suggesting that 'Friends in Sunderland have their leases in pawn with power to sell'; on 15 October that there were rumours of 'a gentleman of ample means' purchasing the colliery for £150,000 cash; on 19 October that Scruton and Light's shares were for sale; on 1 November that the Company had, as it was entitled to do under the deed of co-partnership, exercised its right to purchase the shares; and on 6 November that rumours that 'Lord Cochrane's doubloons' were backing the Company were absolute nonsense.

Buddle's view was that the 'friend' in Sunderland was Edward Backhouse of Backhouse & Company's Bank and indeed he had mentioned this in a letter to Londonderry in July 1823 when he described meeting Backhouse, who was also one of Londonderry's bankers:

I rubbed him up a little about his liberality to the Hetton Co. He denies that they have such an accommodation as is reported. It is he says far - very far - short of the accommodation granted to the Marquis of Londonderry. I have however, made out pretty distinctly I think that he has all their leases in pledge, and that in the want of their failure he has the power of selling the Colliery - stump and trump.

The extent of Backhouse's financial involvement in the Hetton Company is born out by the events of the turn of the year. In January 1824 Buddle reports that Backhouse had informed him 'entre nous' that George Baker of Elemore had purchased shares (there had been rumours of this from mid-November 1823) but that there were other shares available which Londonderry and Buddle himself should consider purchasing. His reportage is revealing of the business practice of the time:

But now comes the mystery. After an immense deal of whiffling, fishing, pumping and beating the bush - in a manner peculiar to friends, as to my real opinion with respect to the value of the Hetton Colliery, and having as he imagined prepared me for his purpose, he proceeded, hypothetically, in the following sort of way, as nearly as I can recollect:

'The Hetton Colliery ever being for sale as a whole concern is now entirely out of the question; but I have reason to believe that Shares may be had, and in due time all the obnoxious partners will be either quit of, or tied down in such a way, as not to be able to disturb the peace of the Co. I don't think of embarking on it myself but I think I know friends who would'.

At the end of the conversation Buddle admitted himself to be unclear whether Backhouse was seriously seeking Buddle's involvement in the Company, or was trying to wheedle out of him his opinion of the Company's value, or had some other purpose. However, both men were agreed on the need for good management at Hetton if new investment was to be attracted. The issue of whether Mowbray could provide such good management was openly being debated; so much so that in the summer of 1823 Mowbray had requested James Stephen, Master in Chancery, to give him a reference in respect of their dealings over the management of the Vane-Tempest collieries. Mowbray appears to have distributed widely Stephen's testimony:

... at the close of the business in my office my views of your conduct and character were such that if I had myself been owner of the colliery I should have certainly left it in your care.

How seriously Mowbray took the issue is suggested by the request from Thomas Wood, the accountant for the Hetton Coal Company, to John Watson that, 'if he had a convenient opportunity', he should show the opinion to 'any person who may have received an improper opinion from the criticism which led to it'. The source of this criticism is not named but there is the impression created in Buddle's correspondence that it was J.G. Lambton. At the meeting of the Coal Owners of the Wear which Lambton chaired in summer 1823 he was reported to have been 'very severe' with Mowbray. So severe in fact that Archibald Cochrane visited him to demand an explanation. According to Buddle Lambton immediately appologised and struck up a friendship with Cochrane', whom Buddle himself described later as bearing the 'reputation of a respectable man'.

Lambton's change of attitude was a watershed in the history of the Hetton Coal Company, coinciding with the purchase by George Baker, a 'particular friend of Mr Lambton', of shares in the Company and Baker's agreeing to a new pit being sunk at Elemore. Buddle immediately concluded that it was not to be expected that Lambton would 'again attend a Chester meeting to

beat the Hetton Company down'. Indeed, the alliance with Lambton and Baker marks the end of both Mowbray's adventures and the Hetton Coal Company as an adventure. Baker and Lambton's support seems to have endowed the Company with some respectability. No doubt the support of such powerful landowners was, in turn, due to the Company's success in raising coals and Joining the Vend. Henceforward their negotiating strength grew, and with this the ageing Mowbray's influence, while still apparent for another decade, gradually faded away. The Company was at last organising itself, as Buddle recorded in March 1824 on first opening direct negotiations with Mowbray over dividing the coal under Clutterbuck's land between Rainton and Hetton:

I have written to Mowbray, but as the subject will require grave consideration by the whole Company, I don't expect an answer for some time. Our proposition is a likely thing to strike Arthur's fancy but others of the Company may pause upon it.

V

That the establishment of the Hetton Coal Company was Mowbray's achievement is beyond doubt, despite the patchiness and complexity of the historical record. The foregoing narrative has, of necessity, placed Mowbray only in a context provided by Buddle, a business rival. However, to conclude this first account of Mowbray's life, and in order to establish properly Mowbray's position as a significant entrepreneur, weight needs to be given to other evidence. Such evidence is limited. For example, Mowbray's rôle in the Hetton Company was not recognised in contemporary newspapers; the Newcastle Chronicle merely mentions briefly Stephenson's achievements in using his 'patent travelling engines' to transport the first Hetton coals. The only contemporary publicity referring to Mowbray is an engraving which has all the hallmarks of a piece of self-publicity by Mowbray. The full text is set out below and, as will be noted, there is no reference to any of the other Hetton partners.

HETTON COLLIERY IN THE COUNTY OF DURHAM.

PERSPECTIVE VIEW of the WORKS of the COLLIERY, the HORIZONTAL, INCLINED and SELF-ACTING PLANES with the LOCO MOTIVE and other ENGINES used on the RAIL WAY and the STAITHES and SELF DISCHARGING DEPOT on the BANKS OF THE RIVER WEAR near SUNDERLAND.

The colliery was begun on the 19th December 1820 and for the space of three months there were pumped from the Pits, by the main and machine engines 5000 gallons of water per minute from the depth of 60 yards. The Main Coal Seam was sunk to on 3rd Septr.1822, Twenty months from the commencement, & THE HUTTON or WALLSEND SEAM on the 6th June 1823. The former at a depth of 248 yards and the latter of 296 yards.

The winning of this Colliery forms a new era in the History of Mines and of Geological Science. The opinions of Mineralogists as well as the majority of the scientific professional gentlemen were that Coal did not exist or, if it did exist, that it deteriorated both in quality and thickness under the magnesian Limestone but this Colliery has been sunk thro' a Bed of this stone 58 yards in thickness and so far from deteriorated, the Coal in superior both in its quality and the thickness of the seams.

ARTHUR MOWBRAY ESQ. PROJECTOR & MANAGER, THOMAS WOOD ACCOMPTANT, ROBERT STEPHENSON ENGINEER to whom the manager owes many obligations for fixing and improving the machinery and for his skill and attention in the sinking as also to Mr Wood for his diligence and accuracy not only as an Accomptant but for assisting in the levelling and arranging of the waggonways for the self acting planes etc.

To John Hopper Assistant Viewer, Wm Elliott Master Forgeman & Smith, George Jowsey Master Sinker, Thomas Naisbitt Master Wright, Ralph Day Master Mason, Mattw Stainton Master Foundryman and to all the other Men employed in the Colliery for their skill and attention in many difficulties and for their general good conduct.

This evidence corroborates the view that Mowbray successfully managed the Hetton Coal Company in the critical time (1820-1823) when the Colliery was being development. The next piece of evidence demonstrates his rôle in raising finance and again comes from the Buddle/Londonderry correspondence but this time from Lord Londonderry himself. Writing to Buddle in 1828, when his major preoccupation was the success of the Seaham Harbour project, Londonderry exhorts Buddle to seek Mowbray's advice on raising finance:

It has occured to me from Your new and now intimate Relations with Old Mowbray whether you might not make use of him as a tool to support our proceedings. You know by dint of prowling round the Royal Exchange and Stock Market he completely got Hetton under weigh in London. This Old Fox has contrived to give to many a notion of his experience and ability. His sentiments on the advantage and certainty of the undertaking might produce greater Confidence and I am persuaded by managing ... [Mowbray] ... you might find the way better paved for your raising some ways and means when you go to town in the spring. I have said enough on the subject to make you understand clearly what I mean.

Neither of these two sources can be said to be neutral, so perhaps it is fitting to end this analysis of Mowbray's achievements with the only known near-contemporary published account which mentions his character. John Proctor's judgement, written in 1851 for his Supplement to the History of Hartlepool, is a fair one when considered in the light of the evidence discussed above. Proctor, referring to the Hartlepool railway and colliery scheme of 1823, cites Nowbray as the projector of the acheme and concludes:

Amid much that was good and practicable, in the plan then propounded, there was, as was invariably the case, in all plans emanating from the same party, a great deal that was wild and nonsensical.

This must serve as Mowbray's obituary since no such evidence has been unearthed relating to his death at Hurworth (near his birthplace) in 1840. Nevertheless, in an age where the ability to 'talk up' business opportunities has attracted political favour, our contemporary experience could, no doubt, provide a few similar relevant examples. It is, however, perhaps best in an article of this nature, where the subject himself has only occasionally left first-hand evidence, to end by referring to his will. 63 In that Mowbray left his 'houses, lands, tengments and real estate' to his daughter Hannah Jane Cochrane and his 'Colliery interest' in trust to his friend Thomas Foster, the viewer of Haswell Colliery. He also left £1,000 to his grand-daughter, Caroline Elizabeth Wiggin (née Cochrane), on condition that she and her husband 'discontinue the surname and arms of Wiggin and take and use the Surname and Arms of Mowhray only'. This desire for the name of Mowbray to live on is perhaps another example from the Industrial Revolution which proves the point made by Adam Smith writing at the beginning of Mowbray's life:

To what purpose is all the toil and bustle of the world? ... It is our vanity which urges us on ... It is not wealth that men desire, but the consideration and good opinion that wait upon riches.

NOTES

- See Part 1 of this article on Arthur Mowbray in Durham County Local History Society Bulletin 48, May 1992, pp.27-47.
- Durham University Library, Archives and Special Collections (DUL ASC): Shipperdson Papers, 2638 and 2639.
- Durham Advertiser, various editions during 1815, starting with 4 March 1815, Durham County Record Office (DCRO): M/1/1.
- Northumberland Record Office (NCRO): Watson Collection, volume 45 (1): 'Terms Wm. Stobart, Edward Steel and John Watson advise Lady Frances Ann Vane Tempest to lease John Lyon's coal mines at Hetton, 20 April 1816'.

5 . DCRO: Londonderry Papers, D/Lo/C142. See Buddle's account of Lyon's scheme given to Lord Stewart in January 1820. In addition, papers in the Buddle Collection, vol.6: 28-38, 68-74, 148-151, NCRO, show Buddle's involvement between 1813 and 1816 in advising Lyon and his trustee (the Revd. H.G. Liddell on the problems of sinking the colliery. In particular, vol.6, 70-77 : Buddle and Steel's estimate of the 'Expense of completing the winning of Hetton Colliery belonging to John Lyon, Esq. '. However, despite his role as a consultant. Buddle does not appear to have had much confidence in the project's viability. For example, as late as October 1822 he was questioning the geological theory put forward by William Smith (the father of English Geology) that workable coal could be found under the magnesian limestone despite the facts that the first coal was soon to be drawn from Hetton Colliery and that coal had been worked under the magnesian limestone in Yorkshire in the 1780s* :

> I have not heard anything more of the grand coalition, except that the scheme was sprung by a person of the name of Smith - the same I believe who has published a Geological Map of England. He has found out, according to the Wernirian [sic] Theory, that the Magnesian Limestone, being of more recent formation than the independent coal formation, and being superincumbent on it, cannot affect the thickness, or quality of the seam of coal et irgo [sic], the coal must be in perfection in Col. Braddyll's Limestone Estate of Haswell etc. and I hope he will include Seaham also. This is all might scientific and tickles the Ears of those who known no better and wish it to be so. In reply to all this theorizing (as I cannot just now find out scientific reasons on which to argue against it! I can only oppose a homely North Country Proverb viz. that 'Steel is not found in a Stags-Head'.

Londonderry Papers, D/Lo/C142: Buddle to Lord Londonderry, 12 October 1822. For information on William Smith see: A.G. Davis, 'William Smith, Civil Engineer, Geologist (1769-1839)', Transactions of the Newcomen Society, 23, 1942/43.

*I am indebted to Mr. John Goodchild of Wakefield for pointing this out in his talk to the Durham County Local History Society, 14 March 1992 on 'Hard Days at Rainton Colliery: The Notebook of John Robson, 1823-1827'.

- NCRO: Buddle Collection, vol.26/100 and 101: 'Log' book of Hetton Estate Borings, 4 May 1796 - 7 January 1797.
- 7. Ibid, vol.26/1 and vol.52/1 and la.
- 8. DCRO: Londonderry Papers, D/Lo/C142.

- 9. NCRO: Watson Collection, vol.45 (1) 23.
- DCRO: Londonderry Papers, D/Lo/B47: letter from Arthur Mowbray to Lord Stewart, 30 April 1819.
- 11. DCRO: Londonderry Papers, D/Lo/C142: 11 February 1820.
- 12. DCRO: Londonderry Papers, D/Lo/C142.
- 13. NCRO: Watson Collection, vol.45 (1) 2. A Mr. Tahourdin drew up the indenture dated 31 December 1783 between Thomas Lyon and William Hutchinson relating to land at Hetton, so this may well have been a longstanding family - law firm relationship.
- 14. DCRO: Londonderry Papers, D/Lo/C142: 11 February 1820.
- 18. Ibid. In his letter to Lord Stewart of 11 February 1820 Buddle defines the terms of this verbal agreement as follows:
 - 1. That he (Johnson) will treat for the letting or sale of Messrs. Clutterbuck and partners Interest in the mine independently or, and without reference to Mr Lyon's interest in the same;
 - 2, that he will treat for the letting of those individual shares of the Coal, on the usual principle of a Certain and Tentale Rent, to be agreed upon - according to the ordinary custom of the Coal Trade;
 - 3. or he will agree for the sale of the shares in the coal, to be valued on the above principle. To be paid for by extended Installments bearing interest;
 - 4. a certain limited time (to be agreed upon) to be allowed for taking way-leaves and winning the colliery;
 - 5. if way-leave cannot be procured on eligible terms, Lord Stewart in that case to be exonerated from the proposed agreement.
- 16. DCRO: Londonderry Papers, D/Lo/B309 (8): 'Eye Plan of a part of the River Wear showing the line of Messrs. Nesham & Co's Railway to Sunderland and the lines by which it is proposed to connect Lord Stewart's Railways from Rainton and Penshaw with the same. John Buddle, Colliery Office Pensher, 11 February 1820'.
- 17. DCRO: Londonderry Papers, D/Lo/C142: 11 February 1820.
- 18. DCRO: Londonderry Papers, D/Lo/B309 (19).

- 19. DCRO: M42/468: Pittington parish register records that on 11 January 1812 the Honorable Archibald Cochrane of Portman Square, Middlesex, Captain R.N., married Hanna [sic] J. Mowbray in the presence of Arthur Mowbray and Hannah Mowbray. Cochrane was the fourth son of the 9th Earl of Dundonald (1749-1831), who had wide business interests in the Scottish coal-industry, tar-works and soda-works. This involved Dundonald in investment in chemical works in North-East England (see: Dictionary of National Biography, vol.XI (1887), pp.160-161; L.F. Haber, The Chemical Industry in the Nineteenth Century (1958); and A. & N.L. Clow, Lord Dundonald', Economic History Review, 1st series, vol.12, 1942.
- 20. DCRO: Londonderry Papers, D/Lo/C142: Buddle to Lord Stewart, 18 February 1821. 'To sap' means to undermine (as in 'sapper') or, figuratively, to get one's way in a stealthy or insidious manner (Shorter Oxford English Dictionary).
- 21. Ibid. See also DCRO: Londonderry Papers, D/Lo/B309 (14): Buddle's 'Eye Plan' of the landownership at Hetton le Hole dated 18 September 1820. For more information on landownership at Hetton see: M. Sill, 'Landownership and the landscape a study of the evolution of the colliery landscape of Hetton le Hole, County Durham', Bulletin of the Durham County Local History Society, no.23, August 1979, and 'Landownership and Industry the East Durham Coalfield in the Nineteenth Century', Northern History, 1984.
- DCRO: Londonderry Papers, D/Lo/C333: Buddle to Iveson, 10 April 1821.
- DCRO: Londonderry Papers, D/Lo/C333: Buddle to Iveson, 17 March 1821.
- DCRO: Londonderry Papers, D/Lo/C333: Buddle to Iveson, 31 March 1821.
- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Stewart, 7 April 1821.
- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Stewart, 29 April 1821.
- 27. Op.cit.: DCRO: Londonderry Papers, D/Lo/C142, 7 April 1821.
- 28. DCRO: NCB/4/9: Hetton agreements.
- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry,
 January 1823. The valuation is dated 14 December 1821.
- DCRO: NCB/4/9: Hetton agreements. The lease was with Richard and John Pemberton for a way-leave for part of the waggonway to Sunderland.

- 11. DCRO: Londonderry Papers: D/Lo/C412, 5 January 1823.
- 32. DCRO: NCB/4/9:32. Hetton agreements.
- DCRO: Londonderry Papers, D/Lo/C142 : Buddle to Lord Stewart, 27 April 1822.
- DCRO: Londonderry Papers, D/Lo/C142 : Buddle to Lord Stewart, 30 May 1822.
- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 12 October 1822.
- 36. Ibid ...
- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 25 October 1822.
- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 9 November 1822.
- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 23 November 1822.
- 40. Ibid ..
- 41. DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 2 and 15 February 1823.
- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 2 March 1823.
- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 26 April 1823.
- 44. DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 7 and 12 August 1823. The full list of the Wear Vend is as follows:

THE BASIS OF THE RIVER WEAR FOR ONE YEAR FROM 1st AUGUST 1823

ist Addosi ides		
	000	CHALDRONS
Lord Ravensworth & Partners		28
M.J. Davison, Esq.		26
J.G. Lambton, Esq.		120
" for Newbottle		50
Marquess of Londonderry		120
Mr. H. Lamb		28
Mr. W. Stobart		20
W. Russell, Esq. & Co.		24
Mr. John Humble		18
The Hetton Co.		50
TOTAL		484

- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 12 October 1823.
- 47. J. Proctor, Supplement to the History of Hartlepool (1851), pp.4-5 refers obliquely to this as follows:

In the midst of these preparations an event occurred which, ultimately leading to the death of one of the partners in the [Hetton] company ... changed entirely the policy and course of proceedings of the others.

- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 15 February 1823.
- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Lord Stewart, 21 April, 27 April and 30 May 1822.
- Op.cit.: DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 12 October 1822.
- 51. DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 27 September 1822 and 26 April 1823.
- 52. (i) NCRO: Watson Collection, vol.45, 1/15, 1/16.
 - (ii) DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 3 and 9 May 1823.
 - (iii) J. Proctor, Supplement to the History of Hartlepool (1851), pp.4-5. Proctor comments (albeit with the advantage of hindsight) on Mowbray's proposed method of compensating landowners:

It was intended to make the Railway by subscriptions, private upon the permission, or Way leave plan; but the compensation to the landowner was not to be by way leave rents, but by sinking pits in his estate, and working his coal. The scheme, therefore, involved the necessity of providing capital to sink a series of collieries over a space of country fourteen miles in extent, wholely untried as a mineral district, and, as it turned out, over a considerable portion of it not containing valuable coal seams.

- Op.cit.: DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 3 May 1823.
- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 4 June 1823.
- 55. DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 1 August 1823. Interestingly Buddle records that his information came from Burdon via George Silvertop, another East Durham landowner.

- 66. DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 12, 15, 19 October and 1, 6, November 1823.
- 57. DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 17 July 1823.
- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 4 January 1824.
- NCRO: Watson Collection, vol.45, 1/20 and 1/21: James Stephen to Arthur Mowbray, 9 August 1823.
- 60. Ibid., 1/19: Thomas Wood to John Watson, 2 September 1823.
- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 8, 22 and 31 January 1824.
- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 1 May 1824.
- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry, 31 January 1824.
- DCRO: Londonderry Papers, D/Lo/C142: Buddle to Londonderry,
 March 1824.
- 16. Newcastle Chronicle, 23 November 1822.
- 66. NCRO: Watson Collection, 31/34: engraving of 'Hetton Colliery in the County of Durham' by Robson of Sunderland, c.1823, reprinted in:
 - (i) J.G.H. Warren, A Century of Locomotive Building by Robert Stephenson and Company, 1823-1923 (1923), p.33.
 - (ii) I. Ayris, 'Elemore Colliery and the Hetton Coal Company', Industrial Archaeology Review, vol.IV, no.1, Winter 1979/80, p.10.
- DCRO: Buddle Papers, NCB/1/JB 1516: Londonderry to Buddle, 13 September 1828.
- 68. Op.cit., J. Proctor, Supplement to the History of Hartlepool (1851), pp.4-5.
- 69. DUL ASC: Durham Probate Records: 1840, will of Arthur Mowbray, Esq., of Hurworth House in the County of Durham made on 5 October 1835, with a codicil made on 15 June 1839, sworn on 20 February 1840, the testator having died on 27 January 1840.
- 70. Archibald Cochrane, 'one of the proprietors of Hetton Colliery', died in Paris on 6 August 1829 (Northern Yearbook, 1829). His shares passed to his wife (see Hetton Colliery share-ownership lists in NCRO: Buddle memorandum book 19 [pp.350-360].

71. This colliery interest was defined in the will as:

One thirtieth part or share in a certain colliery called the Hetton Colliery in the county of Durham and carried on by the owners thereof under the style or firm of the Hetton Coal Company and of and in all the Messuages Buildings Lands Hereditaments Mines Seams of Coal Engines Machinery and other Chattels and effects all which are by the articles of copartnership of the same colliery declared to be personal Estate in the several Copartners.

- 72. Archibald Cochrane and Hannah Mowbray had five children four boys (the fourth named Arthur Mowbray Cochrane) and one girl (Caroline Elizabeth) see Burke's Peerage (1858 edition).
- 73. Adam Smith, The Theory of Moral Sentiments (1759), quoted by H. Perkin in The Origins of Modern English Society (1969), p.85. Perkin goes on to say:

In the last resort the ultimate motivation of the industrialists, as for most rising men before them, was a dynastic one: to found a family, to endow them splendidly enough to last for ever, and to enjoy a vicarious eternal life in the seed of one's loins.

JOHN BANHAM

Tudhoe