

## THE DOVEGANG PLOT: LEGAL AND OTHER PRELIMINARIES TO THE DRIVING OF VERMUYDEN'S SOUGH

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**Abstract:** An account of the events and participants in the acquisition of the Dovegang area of Wirksworth in the 1620s and 1630s, preparatory to the construction of a sough to drain the mines there.

The story of the seizure of the mines of the Dovegang by Sir Robert Heath and of their draining by a sough constructed by his partner Sir Cornelius Vermuyden, has been told in summary by Dias (1981). It is a story unique in lead mining history. A detailed examination of the documents, which record the series of extraordinary events of which it consists, reveal a cast of robust and enterprising characters, prepared to be ruthless wherever they judged it necessary. Their actions proved crucial to the development of the lead industry.

The origin of Vermuyden's Sough, the first mining sough in England, lies in the absolutist aspirations of the Stuart kings and the resistance they met from Parliament. Parliament claimed the exclusive right to raise taxes and was largely successful in thwarting Charles I's attempts to do so. The king was able, however, to draw revenue from the lead mines because the Crown, operating through the Duchy of Lancaster, a Crown possession, had the right to certain dues on all lead ore. In addition to "cope", which was 6d on every load (about 540 lb), the Crown received every thirteenth "dish" (about 60 lb) of lead ore, a tax known as "lot". This revenue was in practice farmed out. In return for sole right to lot and cope the King's farmer paid £110, plus an annual payment of £72, and a further £1-6-8d for the office of barmaster, the official who ran the industry. The farmer also acted as Steward. In this capacity he presided at the twice-yearly meetings of the Great Barmote Court, with its jury of twenty-four, which adjudicated breaches of the industry's rules, and either he or a deputy at Small Barmote Courts, where juries of twelve settled ownership disputes. The farmer during Charles I's reign was Thomas Parker, who had inherited it from his father Robert (DRO D258/56/21). Robert Parker had taken a thirty-one year lease in 1623 and had died eighteen months later.

Among the Royal money-raising schemes involving the Wirksworth area were a sell-off of most of the manors of the Duchy of Lancaster (PRO E317 Derb 29) and an extra tax of 20/- placed by both Charles I and his predecessor on every "fodder" (22½ cwt) of smelted lead (PRO E101/280/18). In 1627 the King's Attorney General began to involve himself in the affairs of the lead miners of the Wirksworth Wapentake. The Attorney, Sir Robert Heath, promised Charles that the mines were capable of yielding much more than the lease of lot and cope. Heath, who had held his powerful position since October 1625, began an attempt to preempt the miners' ore, that is to instruct them to sell to the King at a fixed price. There was in fact no chance that he could succeed in this scheme, since the mining rules about the sale of ore made it clear that cope was paid to the Crown by ore-buyers in return for the miners' right to sell to whomsoever they wished. Heath may well have known that his promise could never be carried out. From his subsequent actions it seems likely that the preemption moves were the first moves in a campaign to make money for himself rather than for the King. In any event they were the first steps in the process that led to the arrival in Derbyshire of Sir Cornelius Vermuyden, and the draining of the Dovegang veins.

### PREEMPTION

The miners' case against the Royal demand for "preemption of all Ore at a Rate certain" was put to a Royal Commission by thirteen representatives on 25th September 1627 (BM Add MSS 6686 f58). There were four representatives each from the High Peak and from the Wirksworth Wapentake, the Wirksworth men being Richard Senior, William Hopkinson, Thomas Hardinge and George Addam. Resting their case on the provisions of the Quo Warranto of Edward I, the miners maintained that

although the king might buy their ore, he should pay "soe much as itt may be sould for unto another so as the Myners bargaines & debts be first paid . . . and for that liberty the buyers pay cope to the Kinge". They described the system of credit given by merchants to buyers and by buyers to the miners, a system which depended on trust and which was essential to enable the miners to work. They pointed out the variation in the quality of different ores and the consequent variation in price, and the fact that as the mines became deeper it became more expensive to extract the ore.

The Wirksworth miners were summoned on October 1st to hear "many speeches & pswasions" to change their minds. However, they expressed confidence in their representatives and refused to budge. In what sounds like a fairly desperate ploy a witness was produced in November to swear that the Wirksworth miners "were soe terrified by Mr Carrier" (of whom more later) that they would be willing to accept "a reasonable rate as they might live by itt" in return for protection against Carrier.

The attempt to preempt their ore, and the number of times they had been summoned to general meetings during the attempt, alarmed the miners. Both preemption and the unprecedented general meetings were contrary to the jealously guarded customs of the mines, and the miners took action to confirm the customs, fearing that a general attack on them was intended by the King and his agents. They petitioned the Duchy Court on January 24th 1628 (BM Add MSS 6686 ff59-60). The Court confirmed that there should be no change to the customs and that there should be only the two traditional full meetings of the Barmote Court at Easter and Michaelmas, plus special meetings to be attended only by those involved in the proceedings. The Court further ordered that the barmaster should not "intermeddle wth the choosing of them" (the Barmote jury), a clear indication that Heath or, in this case, his agent, had been putting his own men in place. This decision was overthrown at Heath's request on May 17th and largely reinstated later in the year. The final decision was that the barmaster should only fill the places on the jury left vacant by absence or sickness.

### FLOODING

At the beginning of his campaign, then, Heath had suffered two setbacks. One, however, the failure to gain preemption, was unlikely to have been a genuine setback and Heath "neglected your majesty's service of preemption, aiming only at his own profit", in the words of a disgruntled agent of his in 1636 (BM Add MSS 6686 ff160d-161). As far as the Barmote Court was concerned Heath was later able to manipulate it sufficiently to

get favourable decisions about the ownership of the mines in which he was interested. Heath's interest in the mines of the Wirksworth area arose from their known potential. There were hundreds of shafts and the miners knew that there were great amounts of ore waiting to be claimed. Their problem was that most of the mines had reached the water table and the technology of the early seventeenth century was inadequate to pump or drain the flooded veins. The richest vein, flooded for many years, was the Dovegang. It ran for more than 600 yards, from near Black Rocks, between Cromford and Wirksworth, across Cromford Moor, to Middleton. With its tributary veins it covered an area of about two hundred acres. Intensively mined over many years, there were by one account at least three hundred mines (BM Add MSS 6678 ff131-138) and by another twenty-eight owners (PRO DL30/54/669A) by the time Heath cast his eyes on them.

The Dovegang owners included a group led by the Earl of Dover who had intermittently since 1615 been attempting to drain the Dovegang, at first by "engines", or pumps, and latterly by a sough (BM Add MSS 6678 ff131-138). In 1615 a George Sayers made an arrangement with the mine owners. Sayers would drain the mines and be rewarded by half of the ore thus freed. He found the cost of the venture beyond his purse and brought in partners - Sir Abraham Dawes, Sir Robert Sharpey (or Sharpeigh) and Thomas Wright. According to their own account, in a later lawsuit before the court of the Duchy of Lancaster, they sank a shaft for their pump 240 feet deep and drained the mine. This cost them £8,000 and their success did not last, as the water rose again and they could not mine enough ore to cover their costs. During this time the partners employed a Dutch and an Italian engineer and a succession of others, including two "captains" (BM Add MSS 6681 f387). In 1628 or 1629 they engaged their ninth engineer, John Bartholomewe. He, known as John the Devisor, was a servant of the Earl of Dover, who joined the partnership and financed Bartholomewe's work. John the Devisor claimed that his soughing was on the verge of success when Heath interrupted the work. It is an unlikely claim. Vermuyden was to take almost twenty years over the job.

### THE CARRIER CASE

While Heath's plans met with no opposition from such local magnates as John Gell of Hopton, and while he proved himself easily able to dispossess the mine owners in the Dovegang, using a mixture of intimidation, bribery and manipulation of the industry's legal machinery, he had more trouble from Richard Carrier, vicar of Wirksworth and husband of Thomas

Parker's daughter Jennett (BM Add MSS 6668 f105). Parker lived in Yorkshire and deputed Jennett to collect lot and cope and to oversee the operation of the Wirksworth Wapentake mines (BM Add MSS 6678 ff139-144). Carrier was a zealous enforcer of every right to which he considered himself entitled. These rights included tithe within the parish of Wirksworth, derived from the office of Vicar, and lot and cope within the Wapentake by virtue of holding, via Jennett, the defacto office of Barmaster. He and Jennett were also mine owners and Carrier was likely to be a formidable barrier to any attempt to take either mines or mining dues. Tithe was always disputed by miners and Carrier fought legal suits to establish his right to it. In addition he claimed an unofficial tax called "gifter ore" and he and the deputy barmasters were accused of using all legal and illegal means to extract every due including refusing to "measure" the miners' ore until tithe and gifter ore were paid. Since the ore could not legally be sold until the barmaster had measured it and taken lot and cope, this was bitterly resented by the miners.

On June 6th 1627, after a complaint from the miners, Heath obtained an injunction in the Duchy court instructing Carrier and his deputies to measure ore on request, without prior demand for tithe and gifter ore (BM Add MSS 6682 f146). The Court named three officials who were to ensure Carrier's compliance with this order. Carrier had in 1621 established his right to tithe, although in practice this tax proved difficult to collect. Six days after the Duchy Court order the Exchequer Court ruled that Carrier, Parker and their deputy barmasters should continue to carry out the duties of barmaster as far as lot and cope were concerned, but forbade them to collect tithe or gifter ore, pending the outcome of a case brought against them. Meanwhile their actions were to be overseen by commissioners, who would appoint John Ferne to supersede them if they abused their office. John Ferne, of Hopton, had been one of three men ordered on the 6th to report on Carrier's observance of the Duchy order. He was an associate of the Gells of Hopton and in fact presided at the Barmote Court meetings until 1630. It was Ferne who was instructed by the Duchy Court later in the year to observe the customs of the mine and to "geve securitie nott to defraude the Kings farmer of his lot & cope" (BM Add MSS 6686 f62). He was clearly, at that time, an agent of Heath. Carrier was a combative churchman and refused to give up his claim to tithe. A letter, from one Edmund Franke to Thomas Gell speaks of Mrs Carrier's proceedings against "us", says that "they" have called a meeting of the Barmote Court to decide on the "Barmaster's duty to the parson" and protests that it had never been the custom for the Barmaster to have anything to do with tithe. Franke

may have been the "Capn Franck" who was employed by the Dovegang miners during the 1620s to drain the flooded mines (BM Add MSS 6681 f387). Thomas Gell was John Gell's younger brother and his representative with the authorities in London. Carrier won his case in 1628 and in the following year the Duchy Court instructed Ephraim Ferne, Richard Wigley, Anthony Coates and William Debanks to pay tithes to the Vicar (BM Add MSS 6678 ff1-8).

It cannot be coincidence that it was 1627, the year in which Heath began his efforts to preempt the lead ore, that also saw the beginning of legal proceedings against Carrier, Jennett and the deputies. A note written by one of Carrier's enemies in 1632 makes it clear that Carrier was a focus of opposition to Heath. It names fifteen miners who had formed "a confederacy & a practice wth Carrier ... to destroy the kings revenewe in the preemption [sic]" (BM Add MSS 6682 f147). Heath brought measures against them in the Star Chamber, which set up a commission to investigate the charges. The commissioners were Henry Grigson, William Hopkinson, John Woodhouse and George Birds, gent. They held their sittings at Wirksworth during 1627 and 1628 and at least one of them, Hopkinson, was a local mine-owner. Like Gell and Ferne he was clearly assisting Heath at this stage, though he was later to be accused of assisting Carrier (DRO D258/56/21).

There were charges against Carrier and the deputies of using intimidation against miners and Barmote Court juries. Jennett and others were accused of unlawful assembly at Stainsborough, near Hopton, and of using threatening behaviour to seize a share of a mine there. The Vicar's wife was a mine owner and continued to own shares in mines until the 1650s, though she said "that shee never did worke in anye grove as a myner but ... hath hiered workemen for triall to get leade oare as is usuallie accostomed for married gentlewomen of the beste qualitie". Jennett was clearly outraged at the accusations made against her. One, sensationally, was that she "drew forth a long knife, and said shee would take a short course wth them, & being desired to put up her knife shee said it was but a hanging matter if she killed one of them" (RGO 33). Jennett's explanation for the knife was that the deputy barmaster had lent it to her to make notches on a stick used in "reckoning" ore during the measuring procedure. She and some of the others also denied any need for intimidation, citing the price she had paid for her eighth share and the Barmote Court decision which confirmed her ownership.

While Jennett and the others testified that Carrier himself was never present at Stainsborough their accusers reported him

as not only being present but as taking the lead in threats and saying that "hee was Barmaster, Judge, Justice, & Lord of the Mine, & whosoever resisted hee would set them in the stocks by the Neck, Middle, or Legg" (RGO 33). Against this picture was set one of wisdom and moderation in another dispute, where "Mr Carrier desyringe and charginge all in his Ma(jes)t(ie)s name and in the feare of God to keepe the peace in meeke and peaceable manner went away" (DRO D258/56/21).

The accusation that Carrier terrified the miners is pursued in a letter written by Ferne to Thomas Gell (DRO D258/56/52i). The letter is dated November 17th 1631 and Ferne refers to the "great deal of paines for a little substance" that he has taken. He names some of Carrier's witnesses, including William Hopkinson, revealing that Carrier had the support of a considerable part of the mining community. However, he alleges that the "vulger sorte" are frightened of Carrier and expect him to win his case and thereafter "torment them that either say or doe agt him that they dare not openly be seene to doe any thinge for I ptest I thinke that many heere stand more afraid of him then they doe either of you or the kinge". Ferne asks Gell to make sure "the greate ones" know what Carrier is doing, and do his best to get rid of "such an yll member especially for Divinity". Carrier was clearly proving a difficult obstacle to surmount and, whatever the truth of the allegations made against him, they were denied not only by himself and his wife but also by the deputy barmasters and by most of the local mining interest. One indication of local opinion can be gleaned from the reference in the miners' case in 1627 to an instruction from the Duchy Court that Ferne should not "defraude the Kings farmer of his lot & cope" (BM Add MSS 6686 f62).

Ferne's letter of 1631 has, on the reverse, notes of barmote court cases heard between October 1629 and October 1631, detailing the sums of money paid into the court by the parties in dispute. Ferne notes in one instance that Carrier was in court during the proceedings and in another that the plaintiff, having paid 4/6d to the barmaster "could neither have tryall nor his money againe through Mr Carrier's meanes". Ferne and Carrier were both, it seems, still carrying out some of the barmaster's functions at that time. In the more important matter of meetings of the Great Barmote Court, however, Heath moved to ensure that his own men made the decisions. He came to an agreement with Carrier and Parker, who was still the legal holder of the barmaster's office, that while Carrier should continue to collect lot and cope, the Great Barmote Court should be held with a temporary Steward and Barmaster in charge. This deal was contemptuously described later by the Dover group as a "comp(ositio)n with

Rich Caryer the then Barmr and a delinquent in the star ch(ambe)r" (BM Add MSS 6686 f163).

According to Ferne's letter Carrier's last appearance in the Barmote Court was on August 26th 1631. In the following month the Duchy Court made a provisional judgement which effectively ended his career. "For the Riots & forceable taking of Guifter oare" Carrier, Jennett, Noton, Wright and two others were committed to the Fleet Prison. Carrier was fined the enormous sum of £500, Jennett £100, Noton 100 marks (£66.13.4d), Wright £50 and the other two £20 each. Carrier was disqualified from holding the office of Barmaster and his continued holding of the position of Justice of the Peace was referred for the Lord Keeper's consideration (RGO 33). Carrier was replaced as Vicar of Wirksworth by Robert Topham in 1633. The final Star Chamber judgement was delivered in 1634 (Dias, 1981). Carrier's removal from public office did not, however, prevent him from joining his father-in-law in a claim before the Duchy Court to the lot and cope in the Dovegang (BM Add MSS 6678 ff139-144). This claim, and a simultaneous one from Topham to tithe; were dismissed but the strength of their case and the anxiety of the Heath faction to counter it are suggested by a letter of January 26th 1633 from Ferne to Thomas Gell (DRO D258/56/52h). He says that Parker had sworn that the lease of lot and cope was his and advises that one William Tofte, one of Carrier's former deputies, should be given protection, presumably from prosecution for the same charges as those successfully levelled at Carrier, so that he could come from Ireland and give evidence.

The possession of the lease of lot and cope had been complicated by its grant to David Ramsey in 1631, this lease to begin at the expiration of Parker's in 1654. However, Parker's lease was conveyed to Thomas Coke in 1637, and Coke then sold the Dovegang part of his lease to Vermuyden for £200 thus completing the separation of the Dovegang and confirming Heath and Vermuden in its possession. Coke later assigned his lease in the rest of the Wirksworth Wapentake to John Gell and John Millward (BM Add MSS 6686 ff132-135).

### TAKING THE MINES

Once he had successfully used his position of influence with the King, and his authority as Attorney General, to initiate legal moves to subvert the customs of the industry and remove its chief officers in the Wirksworth Wapentake, Heath achieved the decisive coup in his attempts to seize the mines of the Dovegang. In December 1629 he was granted a lease of the mines for an annual payment of £1000 (BM Add MSS 6678

ff139-144). The probable method employed by Heath to achieve the grant was later described in a petition by the Dover group, who alleged that it was done "By undue information of his majesty that his service in the point of preemption of lead ore was concerned in his design . . . (though he knew well that his majesty had neither right to mine nor soil there)". They further alleged that Heath abandoned any attempt at preemption once he had the mines and never paid the £1000 rent (BM Add MSS 6686 ff163).

Having obtained his lease in 1629 Heath used the Duchy Court to commission a local mine-owner, Anthony Coates, to take possession of the mines and appoint a Derbyshire lawyer called Thomas Allsop as temporary Steward and Barmaster (BM Add MSS 6686 ff163). Coates had been the agent of the Dover group. Among his duties had been that of ensuring that his employers' "stoces" ("stowes" or windlasses), the traditional mark of ownership, were maintained on their mines. Having transferred his allegiance, allegedly for the promise of a weekly wage, Coates removed the stowes and allowed Heath's workmen into the mines. He and others used threats and bribes, as appropriate, to dispossess other owners. One of Heath's chief instruments in the actual removal of the miners was a Derbyshire ore-buyer called William Rowland. Heath had written to Rowland on August 28th 1629 asking him to prepare himself to buy ore preempted for the Crown (BM Add MSS 6686 ff160). In a petition seven years later Rowland complained to the King that he had spent time and money carrying out Heath's wishes, only to be told by Heath that the preemption could not proceed until the miners at present in possession of the Dovegang mines were removed. Rowland then, he said, removed the "true owners", naming the Earl of Dover as one of them (BM Add MSS 6686 ff160d-161).

Heath used the undoubted fact of flooding as his main argument. At a meeting of the Barmote Court in April 1630, with Thomas Allsop in the chair, the jury ordered that all those miners who had mines in the Dovegang, "or anie rake lieing in the way of draying or souging the same" should come forward and claim them within ten days "else it shall be lawfull for the right worshipfull Mr Robert Heath, Knight, the kings Ma(jes)t(ie) Attorney generall to take and worke them to his beste proffitt and advantage, ten day warning to be given by the Barmaster or his Deputie" (PRO DL30/54/669A). This meeting was the first step in the formal transfer of ownership of the mines. At a second meeting of Allsop's Barmote Court, held on July 8th, Coates and John Allsop, described as deputy barmasters, reported that they had warned twenty-eight mine-owners, whom they named, of the decision of the previous court (PRO

DL30/54/669A). Among the names was "John the Deviser". Only four men of the twenty-eight were reported to have come forward, Edward Lowe, George Columbello, John Ferne and Anthony Ferne, all gentlemen. A further notice of Heath's intent to claim the mines and drain them was given and, at a meeting on October 15th, the mines were declared forfeit and Heath was given permission to drain them.

Fifteen of the jury which validated this blatant misuse of the industry's governing machinery later disavowed it. In a certificate to Parliament they denied that they had consented to the dispossessing of any Dovegang owners. They cited the "Custom of the Myne" that only a special jury of twelve could decide ownership after the mine in dispute had been "arrested" by the Barmaster. Furthermore "if any one bee other wayes put out of possession from his groove or myne it is a wrong unto him" (BM Add MSS 6678 f39). Heath was strongly resisted by the dispossessed owners. A striking impression of how strongly is given by a deposition in the Duchy Court by William Rowland, at the time that he was acting for Heath in taking over the Dovegang mines (BM Add MSS 6686 ff159-160). Rowland described John Bartholomew coming to the Dovegang in the autumn of 1630 and, in "foul and disgraceful speeches", denying Heath's right to the mines. Bartholomew assured the miners that he would himself drain the Dovegang "and content them for their interest therein". This, of course, was the traditional bargain between drainers and miners, and was the procedure followed in nearly every sough subsequent to Vermuyden's.

In 1632 Heath installed a second temporary barmaster, Walter Vernon (Dias, 1981), and the Duchy court, at Heath's request, set up a commission, led by John Gell, to survey the Dovegang mines and identify their owners (BM Add MSS 6686 ff156-157). The commissioners, Gell, Edward Revell and William Hampes, who was later to be barmaster for the Dovegang mines, met five deputy barmasters and the twenty-four jurymen of the Barmote Court at the Dovegang on June 4th. It can be assumed that Vernon's jurymen were of Heath's persuasion. They were described as "divers ignorant and inexperienced men" (Dias, 1981), though six of them were to be listed as mine owners in lot and cope accounts for 1639, one, George Tompson, was an ore buyer and smelter and all had surnames familiar from barmasters' lists. They were certainly local men and it is unlikely that they were ignorant of mining matters. Neither they nor their predecessors in the 1630 jury are likely to have been informed and committed supporters of Heath's seizure of the Dovegang. Three of the 1630 jury and six of the jury of 1632 were later to

give evidence against Heath in the Duchy Court (BM Add MSS 6678 ff131-138). More plausible is the allegation that Gell put pressure upon them to approve the Commission's findings, which included a very generous definition of the Dovegang.

The Commissioners' report was accompanied by a survey plan. They found that "from the great gin pit made upon the great rake called the Dovegang", which was presumably the "engine pit" sunk by Sayers and his associates, westward, there were thirty-three mines, "every groove containing nine and twenty yards of assize", or one meer. The discrepancy between the figure of thirty-three mines and later claims of two or three hundred may be explained by a confusion between "shaft" and "mine". Each of the Gell commission's mines may have had several shafts. All of these mines were, according to the commission's report, flooded to the extent that none had made any profit for six years, most for longer and some "not in the memory of any man living". The area was defined as having a boundary running from the Steeple area of Wirksworth west to Middleton, north to Newclose, northeast to Dean Wood and Dean Wall and from there to the highway from Cromford back to the Steeple. The starting point of this boundary, in the Steeple, was described as being 286 yards from the gin pit, which was at the eastern end of the Dovegang rake. The "plott" extended about six hundred yards to the north of the gin pit. It covered an area of two hundred acres, with a circumference of two miles. Heath was credited with thirteen of the thirty-three mines. The only other owners who "have come before us & pretend to have title to grooves within the compass of the ground protracted in the plat herewith certified" were Jennett Carrier, with shares in four of the mines, and five men who had been named at the Barmote Court in 1630 as owners who had not claimed their mines - Robert Flinte, who claimed a share in one mine, Robert Buntinge, Robert Fielding and Henry Twigge (one mine jointly) and William Kempe (a share in one mine).

Heath still had the King's confidence and had been promoted to Lord Chief Justice on October 26th 1631 (Dictionary of National Biography). In the same month he had taken Sir Cornelius Vermuyden as his partner (Fisher, 1952). In choosing Vermuyden Heath had brought in the man most likely to succeed where so many had failed in draining the flooded mines of the Dovegang. Vermuyden had come from the Netherlands in 1621 to drain the East Anglian fens and his success in this venture had earned him his knighthood in 1628. It is a measure of Vermuyden's importance to Heath's enterprise that the agreement between the partners gave Heath a third of the profits of the Dovegang mines and Vermuyden two

thirds (BM Add MSS 6677 ff142-143). The King issued an order on July 2nd 1632 confirming Heath's and Vermuyden's rights to the mines in the Dovegang "accordinge to the boundaries and limitts distinguished and sett forth by a mapp lately made by vertue of a comission out of our said courte of duchie." Anthony and John Ferne, Columbello, Richard Wingfield, Bartholomew, Dorothy Ferne "and the other unknown psons menconed in an information preferred into our said courte of duchie" by Heath and Vermuyden, presumably being the others listed in the Barmote Court proceedings, were instructed to allow Heath and Vermuyden full possession of the Dovegang mines, under the pain of a £500 fine (BM Add MSS 6686 ff158-159).

## THE OPPOSITION

By 1632, then, Heath and Vermuyden had a Royal lease of the Dovegang, with a map defining its area, Barmote Court decisions that they owned all the mines within the area, and an instruction from the King to all other claimants to relinquish them. The way in which they enforced these decisions was outlined in the legal proceedings which followed. Rowland had been persuaded to help in removing the Earl of Dover's group by Heath's assurances that once he had obtained possession of the mines, Rowland would be made Royal Commissioner entrusted with buying the King's preempted ore. In 1636 Rowland's petition to the King complained that in fact, once the previous owners had been removed, Heath simply pocketed the profits himself (BM Add MSS 6686 ff160d-161). Rowland was particularly aggrieved that, while Heath spent nothing, he had spent £300 on buying up ore which he had been assured was preempted for the king and £300 more on dispossessing the Earl of Dover, his associates and others. Some of this last was probably spent on buying out those miners who could be tempted. Rowland characterised himself as "an unskilful young man", deluded by Heath's "fair words and promises", and said that Heath had tried to buy his silence by an offer of "three score & four half crowns" (£8).

That the proceedings of the 1630 Barmote Courts were fraudulent is clear from the opposition, practical and legal, which Heath encountered from the miners who had supposedly failed to claim their mines. The twenty-eight brought a case in the Duchy Court against Heath and Vermuyden (BM Add MSS 6686 f62). They stated that the area defined by Gell's commission was much greater than the Dovegang itself, though they themselves exaggerated the area marked out by Gell - "a plot of ground . . . of about 3 myles in compasse wch they call the gang plott". The miners, referring to "prtence of a sough", "misinformacons & miscarriages",

affirmed their ancient right to prospect for lead ore anywhere, a right now denied to them in the Dovegang "plott" and pointed out that if the Dovegang could be closed to them so could any other flooded area - "there may be plott after plott till they be barred out of the whole Wap(entake)". They rehearsed the profit to the King from the normal operation of the mines, including lot and cope and customs charges on exported lead, which they said amounted to half the value of all ore mined. This regular income is contrasted with the annual £1000 which they say has been promised the King from the Dovegang and which has not yet been paid - "There is 5 years past & they have yet paid never a penny". They contrasted their exclusion by Heath and Vermuyden with the cooperative attitude of the Earl of Dover and his associates. Given the power and influence of their antagonists, the miners had no chance of success. The course of their efforts was later described in a petition by the Dover group, who accused Heath of using the Duchy Court and, during the time he was Attorney General, the Star Chamber "wherein 28 indigent miners were made defts [defendants], at once, who being wearied with delays and worn out with attendances, were forced to quit their rights on what terms Sir Robt Heath pleased, to the great oppression & utter undoing of many of these people" (BM Add MSS 6686 f163). It does not detract from the plausibility of this picture that the twenty-eight were not all poor men. Some, perhaps most, of them were. Witnesses at the Duchy Court during the hearing of a case brought by the Dover group against Heath in 1637 testified that one of them had had to pawn his clothes to raise money to defend his claim, while another, bizarrely, had pawned his winding sheet (BM ADD MSS 6678 ff131-138).

The 1637 action in the Duchy Court named Heath, Vermuyden, Allsop, Coates and John Molanus, a Dutchman in Vermuyden's service. In addition to Dawes, Sharpey, Wright, Sayers's widow and son and Bartholomew, Dover was joined in his complaint by Sir John Curzon and Carrier, who seem to have been the only two local gentry to have opposed Heath. There was an impressive list of thirty-four local men giving evidence against Heath, who had only seventeen. Surprisingly, there were only four of the mine owners dispossessed by the Barmote Court in 1630 among Dover's witnesses. They were outnumbered by the three from the jury which dispossessed them and six from the 1632 jury which validated the creation of the Dovegang "plott". We have seen that fifteen of the 1630 jury protested that they had never consented to the seizure of the Dovegang mines. These men must either have acted out of ignorance or fear in 1630 and 1632 or have changed their minds by 1637. The impression of confusion in local minds,

which was presumably one reason for Heath's success, is accentuated by the fact that six men gave evidence in favour of both Dover and Heath and that one of Heath's chief witnesses was Richard Wigley, one of the fifteen jurymen of 1630 who later denied agreeing to the Dovegang seizures. This confusion is exemplified by one witness, Anthony Wood, who was named as a Dovegang mine owner and dispossessed in 1630, was a member of the 1632 jury which validated the report of Gell's commission, and spoke for both Dover and Heath in 1637.

Dover's "bill" outlined the history of Sayer's attempts to drain the Dovegang, including a claim that the group spent over £8000 before Dover himself became involved and Bartholomew started his work. It was asserted that Bartholomew "had undoubtedly long since effected" the sough had he not been interrupted by Heath's seizure of the Dovegang. The deals between Carrier and Heath which allowed the temporary appointments of Allsop and Vernon to the Barmastership and which were presumably accepted by Carrier only because of his precarious legal position at the time were admitted. William Rowland testified that Heath had told him that "Alsoppe was a man for his purpose, to gaine him the Dovegange." The jury which dispossessed the owners at Allsop's Court was described as "formrly fitted for the purpose" and Coates was named, along with Thomas Buxton and others, as the men who removed stowes and replaced them with Heath's. Coates's weekly wage of 6/- from the Dover group was said to have been increased to 10/- and promised for life. Buxton seems to have had misgivings about the proceedings. He testified for the Dover group that he had told Heath what he had done and Heath had replied "Act yo(u)r pts belowe, and I will act my pte above". It was Buxton whom Jennett Carrier had been accused of threatening with a knife, and his involvement in the forcible removal of the Dovegang owners, who included Jennett and her husband, supports the suggestion that the Carrier trial was part of Heath's grand design.

On the vital matter of whether due warning was given by the deputy barmasters, the Dover group quoted the mining custom of "nicking" - "The Barmaster must come to ye myne and their nicke the spindle of the stoes to give warninge to ye mynrs . . . And this must bee done three sevrall tymes at the end of three sevrall weekes". This procedure was not carried out and in any case, they claimed, mines could not be lost when the reason for their being unworked was that they were "troubled wth water or want of wynd". There were many examples of flooded mines being left many years without their ownership being prejudiced. Several witnesses agreed with the statement made by the fifteen members of

Alsoppe's Barmote Court jury, that ownership of mines could only be decided by a small Barmote Court with a jury of twelve. It was stated that juries of twenty-four dealt with "offences and misdemeanrs" only,

The lease of the Dovegang by the King was invalid, it was claimed, because "in truth the dovegange and all the other forsaid mynes are not, nor are any of them in his Maties soile, but they are all in the soile of Sr William Karman". The rent, given here as £500 per annum, had never been paid and Heath had "nevr issued forth of his purse one peny". When the threats and forced purchases of mines had failed to persuade the Dover group to part with theirs, Heath and Vermuyden had for a time put them off with "dilatorye answeres", until they at length took their grievance to the Privy Council in 1635, where they were promised a "faire and Indiferent tryall". It was unfortunate for them that the trial was left to the Duchy Court, always favourable to Heath and Vermuyden.

In his reply Heath conceded the history of Sayers's and others' attempts to drain the Dovegang, but maintained that the mines had been deserted at the time that he obtained the Court's permission to seize them, which fact invalidated the Dover group's title. He had himself "conceaved that by a sough the same might be drayned" and had taken Vermuyden into partnership to construct one. The worke had "evr since constantly proceeded therein". Heath and Vermuyden denied the existence of the "nicking" custom, and said that ample warning had been given. They denied any malpractice either in obtaining the lease of the Dovegang or in taking possession of the mines there. The deals with Carrier had been made because he, Heath, thought that as Carrier owned mines in the Dovegang "hee conceaved him noe fitt man to be trusted in that business". Allsop pleaded that he had merely been carrying out the orders of the Duchy Court and the Barmote Court jury. Molanus, whom several witnesses said had threatened the Dovegang mine owners, said that he was Vermuyden's trusted servant, and Coates, probably the main mover in the physical dispossession of the Dovegang miners, put in a sixty-six-page paper denying all the charges made against him and supporting the claims of Heath and Vermuyden.

The evidence that the Dover group had followed mining custom and that their titles had been illegally overturned seems certain. However, this fact and the fact that Heath seems to have lost the King's confidence to the extent that Charles had in 1635 promised a fair trial was not sufficient in 1637 to persuade the Duchy Court to reverse its earlier decisions. Though Heath had been dismissed from his post of Lord Chief Justice in September 1635, suspected, according to

the Dictionary of National Biography, of "a secret sympathy with protestantism", he and Vermuyden had enough influence with the Duchy Court to make it impossible for the Dover group to win. By 1637 Heath and Vermuyden were in possession, and the Dovegang sough was being successfully driven. The case was rejected.

This was not quite the end of the affair. The sense of injustice, and the amount of money involved, induced the Earl of Dover and his partners to petition Parliament in 1638 (BM Add MSS 6686 162d-164). They accused the Duchy Court of granting all Heath's demands with "no bill then depending, nor party interes(t)ed called to answer, or speak for themselves". The petitioners recalled ruefully that their case in the Privy Council in 1635 had been referred to the Duchy Court "where in effect they had been prejudiced before they were heard to speak for themselves". This petition was as unsuccessful as every other effort to undo Heath's work. An attempt by Sharpey and Sayers to petition the Star Chamber met with a brusque response. Sayers was threatened and forced to flee for his life and Sharpey was thrown into the Fleet Prison. Dover made a last attempt in a petition to the King of about 1640. He argued that Heath was entitled only to those mines which would be drained by his sough and that in previous appearances before the Duchy Court Heath's malpractices had not been sufficiently stressed by the Dover group's lawyers. Notes on the case in Thomas Gell's hand indicate that that by 1640 the Gells had changed sides. Gell refers to the "evil and cunninge" of Heath's methods and repeats the case made earlier by the miners, albeit with his own family's interest uppermost - "the moare lead is Gelles the more benefit to his maiestie: and this order restraining the miners from workinge will by consequence over throw the whole customes thear, and ... destroy the mines utterly".

In a note (BM Add MSS 6681 ff386-387) which can be dated from internal evidence to about 1640, a writer who, while anonymous, is clearly one of the local mining community, set out the rules concerning mine ownership and the bargain the miners had made with Sayers and his partners. He listed the "undertakers" who had attempted to drain the Dovegang and the time each was engaged in the work. His last paragraph summarised the activities of Sir Robert Heath and expressed the sense of loss and bewilderment evidently felt by the local miners - "In this tyme Sr R H came in or neere there abouts Hee gott a Jure off 24 & a verdict in the yeare ... & gott possession without the triall off the 12 men off the Ginpitt grooff at first onely Hee gott orders & Injunctions out off the Dutchie Court without Bill or Informations and kepte possessions without

triall at the Barmote Court by the 12 men the owners put in their Bill many off them solde their grooffs & the rest could not gett relief but had a verdict against them".

A few years later the outbreak of the Civil War saw the Gells and Heath on opposite sides. While Heath joined the King the Gells were Parliamentarians and John Gell, who had ironically been given a baronetcy in 1642 for his zeal in collecting Ship Money for the King, was the leading Parliamentary commander in Derbyshire. One of his officers, with the rank of Major, was Molanus, Vermuyden's former servant and one of Heath's and Vermuyden's enforcers (Stone, 1992). Heath's estates were sequestered in 1645 and in the following year he fled to France, where he died at Calais in 1649 (Dictionary of National Biography). Meanwhile Vermuyden was on Parliament's side. His sough, though continually attracting quarrels and lawsuits, progressed, and finally laid dry the mines of Cromford Moor in 1651. In the following year a Parliamentary Commission reckoned that the mines of the Dovegang Plot were worth an annual £350 in lot and cope, £50 more than the rest of the mines of the Wirksworth Wapentake together (BM Add MSS 6686 ff133-135). The Barmaster's accounts show a dramatic rise in the amount of lead ore mined in the Cromford liberty. Sir Cornelius died in 1677 and when his son, Cornelius II, died in 1693, he still owned two thirds of the Dovegang (Fisher, 1952). Jennett Carrier continued to own mines in the Wirksworth liberty until her death in 1662.

## CONCLUSION

By the early seventeenth century the mines of the Wirksworth, Middleton and Cromford areas had been worked to the water table, and all attempts to drain them had proved inadequate. The situation changed with the advent of the King's Attorney General, ostensibly working to improve the King's income from the mines. Heath was greedy enough to determine on lining his own pockets from this rich orefield, clever enough to see how the Dovegang, the richest vein, might be drained, and unscrupulous enough to circumvent the mining rules to exclude the local miners from the rewards. He was also shrewd enough to enlist the help of Vermuyden, who had already been knighted for his work in draining the East Anglian fens, and who succeeded where his predecessors had failed.

The immediate results of Heath's plotting were the dispossession of existing mine owners, including local men, and the consequent change in the economic status of many of them from that of independent miner to that of wage labourer in the sough workings and in the rich mines laid

dry by the sough. According to a petition of about 1641 there were 1,000 men working in the Dovegang (PRO E101/280/18). Vermuyden's sough vastly increased the output of the Cromford Moor mines and introduced the techniques used in many subsequent ones. It was the soughs which maintained the area as one of the leading lead-producing areas in the country for over a century.

Sir Robert Heath's Dovegang Plot was a unique event. The fears of the miners that his example would be followed, leading to their exclusion from every mining area, were never realised. Never again were the laws of the mines subverted and the mines seized. Every subsequent sough, and there were dozens, was accomplished in the way attempted by George Sayers in 1615, by agreement with the local mine owners, who paid the soughers a "composition" for the ore laid dry.

## ACKNOWLEDGEMENTS

I thank the staffs of the Public Record Office, the Derbyshire Record Office and the Local Studies Library, Matlock, for their help, and Dr. J.H. Rieuwerts for sight of a copy of the Royal Greenwich Observatory material.

## REFERENCES

- BM Add MSS British Museum Additional Manuscripts (microfilm in the Local Studies Library, Matlock)
- DRO Derbyshire Record Office, Matlock
- PDMHS Peak District Mines Historical Society
- PRO Public Record Office, Chancery Lane, London
- RGO Royal Greenwich Observatory
- Dias, J. R. 1981 Lead, society and politics in Derbyshire before the Civil War. *Midland History*, Vol. VI, pp 39-57.
- Fisher, F. N. 1952 Sir Cornelius Vermuyden and the Dovegang lead mine. *Derbyshire Archaeological Journal*, Vol. 72, pp.74-118.
- Slack, R. 1992 Free men or wage-slaves? The miners of the Wirksworth area in the 1650s. *Bull PDMHS*, Vol. 11, no 6, pp 272-274.
- Stone, B. 1992 *Derbyshire in the Civil War*. Cromford, Scarthin Books.

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