

DERBYSHIRE MISCELLANY

Vol 18



Cromford Canal at Codnor Park c.1955

**The Local History Bulletin
of the
Derbyshire Archaeological Society**

Volume 18

DERBYSHIRE MISCELLANY

Volume 18: Part 5

Spring 2009

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LOST BOY/BLACK SHEEP: THE ADVENTURES OF WILLIAM GELL

(By Ron Slack,

Abstract

A picture of London low life in the 1630s and of soldiering in the Thirty Years War appear, respectively, in court papers concerning the career of William Gell and in Gell's letters to his parents.

The family

In every generation of the Gell family of Hopton the second and subsequent sons were sent away, usually to London, to make their own way, while their elder brother, the first-born, inherited the family's estate and considerable wealth. William, born in 1615, was the second of the two sons of John Gell, the future baronet and commander of the Parliamentary forces in Derbyshire during the Civil War of 1642-1646. While his father's younger brother Thomas had become a London lawyer, William was sent to the capital to learn the merchant's trade. This was in 1631, when he was sixteen. At the same time his father gave him a good start by making arrangements for some of his rents to be devoted for six years to raising money for William and his four sisters.¹ In 1636 an indenture² by which John Gell signed over his estate to his elder son John includes a provision that the younger John Gell should keep his father, mother and brother in food and lodging "*if the said William Gell ... shall need & will come to the said John Gell his brother ...*". One provision implies that Gell senior had by then formed a low opinion of William's capacities and trustworthiness. He directed that if his son John had no heirs the estate should go, not to William, who was then twenty-one years old, but to his uncle Thomas and his heirs.

The apprentice

In 1636 Gell had been financing William's training and living costs for five years. William was under the supervision of Thomas, who sent accounts of his expenditure to Hopton³ – "*An account of money laid out by Mr Thos Gell for his nephew Willm Gell ...*". Thomas, with the help of William Rowland, a solicitor and agent of John Gell's, found him lodgings with a Mr Walker, "*a servant*", from Monday 31 October 1631 and paid his bills for food and clothes. Rowland negotiated an annual bill of twelve marks (£8) for William's "*diette lodgings and washing*" and Thomas footed bills for a "*cloth sute, cloake and stockins*", a hat and other clothes. There are also frequent payments of 10/- to William, presumably for pocket money. Thomas engaged a teacher, Mr Conradis, "*to teach Mr William Gell to write a good secretarie and Italian hand, as also to teach him to cyfer and to keepe a merchants booke*". Conradis was to have £2 for teaching him handwriting and another £3 for the arithmetic and book keeping. The family's low opinion of the boy's capabilities is shown in a provision that if book keeping proved to be beyond William's grasp, Conradis was to be paid £1 less. However, he seems to have been a good teacher. By the time that William was writing home a few years later his handwriting is far more neat and legible than either his uncle's or his father's and his letters better organised.

Two years later Conradis seems to have succeeded with book keeping too, as William was sufficiently capable to be apprenticed, in or about 1633, to a London merchant, Thomas Northey⁴, an arrangement which considerably raised John Gell's stake in his son's performance. Apprenticeships were not cheap and Northey was paid an immediate £200, while Gell also entered into a substantial "bond" with him as surety for William's "*good and true behaviour*". Gell sent William his alarm clock with a fatherly letter⁵, concerned that he should not lose sleep – "*I am not against it, that you make use of the allarum delivered to you out of my study, whereby you may be wakened at what houer you please: so it do not call you from sleep unseasonably, for I would have you to have a speciall care of your health*". He was not yet satisfied with his eighteen years old son's literary ability and recommended William to imitate the ancient Roman Cicero's style in his letters home – "*See that in your letters (that you send unto me) you do more heedfully imitate Cicero, and follow more diligently his stile in writing, his words, signes and so forth. If you shall do this I will thinke that you have profited very well. Commend me to your master and to your host likewise*". William did his best, keeping a notebook⁶ in which he practised his handwriting and literacy by copying out improving parables –

"Pigeons on a time made warre with the kite: whom that they might conquer, they chuse the hawk for their king: hee beinge made their king plaieth their enemy, not a king. Hee plucketh and teareth them in peeces nor lesse greedily upon [more than] the kite. It sore repenteth the pigeons of their enterprise, thinking it hath bin [better] for

them to endure the [rule of] the kite, then the tyranny of the hawk: so man might [change his] condition for nothing...".

William was young, country bred and, according to his father, of an "easie nature"; he was described later as "a very provident and carefull younge gentleman whilst hee was in the countrey, well imployed in his father's business: and for a space after hee first came to be apprentice with Mr Northey."⁷ All went well for three years. William behaved himself and Northey was sufficiently confident of his honesty to trust him with money, including on occasion some large amounts. All changed when William struck up an acquaintance with a neighbouring youngster, Thomas Birkett.

The downfall

The relationship between the two was later to be described by John Gell as the story of how a guileless young man was corrupted by rogues. In Gell's version Birkett, while described as a merchant, spent most of his time in taverns and gaming houses and was a notorious confidence trickster. He boasted that he could win money from anyone at a game called "even and odd", except "such as knowe the tricke of it", and had in fact won over £500 from William Gell "and other young gentlemen". He was equally successful with dice and cards, boasting that he had won £200 in that way from William "and if his father would have settled his estate on him hee would have fooled him and have gott it on him every penny". Birkett had a wide acquaintance with the underworld and was able to show William a much more exciting side of London life than he was likely to find in the house of Mr Northey. Sadly for him Birkett's amusements turned out to be not only expensive but, possibly, unhealthy. It was alleged by one of Birkett's friends that William "had a foule disease and that hee went to doctor Butler for him".

This may have been false evidence but one of the first of Birkett's circle whom William met was Anne Harbine, alias Anne Kelley, "a woman of an infamos life". Birkett knew that William often carried Northey's money and Anne was the instrument for parting him from some of it. He was assured by Birkett that Anne was "a woman of a great fortune and a clean reputation", of "good worth and qualite". William must have found her exotic and exciting. Birkett "taught her how to spoile him" and saw to it that one of their amusements was dicing. Once William had been hooked Anne was supplied with "false dice" and their victim was soon losing Northey's money. In a succession of visits to Anne William lost £40, most of which went to Birkett.

Birkett led young William on a round of taverns and gambling dens, introducing him to a rogues' gallery of characters whom he persuaded Gell to believe were honest merchants, like himself, "that desired to play at dice privately". The sessions were staged at the Three Tuns, near Guildhall, and a tavern in Lumber Street called the White Horse, "where there is a tennis court of the backside, and a gameinge house". William played even and odd, dice and cards with his new companions, spending more and more of Northey's money until they had taken £200 from him. As with Anne Harbine's winnings, Birkett kept most of this "as the principall man that had power with [William]", and "tooke delight to bragge of his owne witt and cunninge and the folly of the said William Gell".

In 1635 John Gell was appointed to the annual office of High Sheriff of Derbyshire. This year was the one in which the king, Charles I, who was governing the country without Parliament, further alienated his subjects by extending the ship money tax from coastal towns to the rest of the country. High Sheriff Gell had the task of collecting the tax and incurred great hostility by the vigour with which he carried out his duties. He was also superintending the arrangements for the marriage of William's sister Millicent. It was during this busy and stressful year that he learned that his young son had gone astray, when William's trusting master finally noticed that his money was disappearing. In 1635 and 1636 Gell had to take time from his official and family duties in Derbyshire to conduct what must have been painful meetings with his son and with Thomas Northey. Northey was persuaded not to call in Gell's bond and Gell paid Northey £150 to cover most of William's embezzlement. There is a note on the back of one of the legal papers to the effect that in 1636 Gell, having paid £150 the previous year, now owed Northey £70. In the draft of a petition to the king about the affair, Gell claimed to have paid a total of £400 to Northey. He was also obliged to pay another £70 in 1637 to cover William's debts with a mercer. This man clearly knew all about William's escapades as when his money was returned to him he acknowledged that "Mr Birkett did much hurt" to the young man. It says a deal for John Gell's powers of persuasion and, perhaps, for William's charm that after this catastrophe Northey was prepared to reinstate him as his apprentice after William had promised to mend his ways. His father warned Birkett to "forbeare the companie" of William, which Birkett "faithfullie promised that he would doe".

Birkett, however, was unable to resist the chance of easy money and William seems to have learned nothing. Northey too seems to have been remarkably gullible as William soon re-established himself as a trustworthy apprentice. Birkett proposed that William should get whatever money he could lay his hands on and that the pair of them should go to France, where he promised that William would quickly win back all the money he had lost. William fell in with this idea, took £70 from Northey, and fled to France with Birkett. Inevitably the £70 was soon transferred from William to Birkett, and William was reduced to selling his clothes to pay his debts while Birkett left him "to shifte for himselfe" in France and crossed back to England.

Soldiering

Left high and dry in France, William decided to lend a hand to the Protestant cause in the Thirty Years War by joining a Swedish army advancing into Germany to confront the troops of the Holy Roman Emperor. There survives the draft of a jaunty and encouraging letter from Gell to his son, undated but probably written at this time.⁸ Headed "To Tyro, a soldier" the letter begins "I heare yt you are about to goe ... to bee a soldier in ye nether lands. You undertake yt wch becometh you, whom I have ever thought a stouthe man. I have no great skill in warfare yet I served about two yeares in ye borders of France under ye late Duke of Buckingham.". Gell went on to stress the need for strict order and discipline for military success.

William told his mother, Elizabeth Gell, of his adventures in a letter written in June 1638⁹ – "Now I will give you a breefe relatione of my jorney into Germany where at the first comeing was reasonable good as wee marcht thorow the country: but when we came into garrisone then wee began to suffer, for where wee had vittle before then we were stinted.". After a month of this hungry garrison duty things became much worse as Imperial troops carried out a successful surprise attack, capturing the town and imprisoning William and his comrades. It got worse – "When wee had beene in prisone a little while they set the house afire where wee had like to have beene smothered in getting out & after that they threatened to shute us and said wee set it afire."

While some of the men managed to rejoin the Swedish army, hunger drove William and others to switch sides – "Soe I marching alonge in the Emperors army held oute for a certayne tyme but what with lieing in the fields & for want of foode I fell sick & was left in a village where I beeing very weake & ill & thincking to have ended my days there my comrade wantinge a paire of shews asked me for myne and I gave them to him.". As the army marched away the villagers returned and William was thrown out. He made his way barefoot to Hamburg "and there I lay under the chirurgeon's hands two months & the cure of my feete beeing frosen cost 11 dollars & dyet and other things cost in all 6L 10s wch my fellow prentise paid & soe I left the cuntry & never intend to goe thither againe for the cuntrys thereabout are most of them unenated [uninhabited?] & burnt up only some few great towns left."

William's letter was written in Gravesend, where he was waiting to board ship for Holland and was held up by lack of money. He was full of contrition for his behaviour in London – "I would not stay heere to bee a further greefe to you & disgrace to my friends: for although I have beene foolish heeretofore: and what I have done was for want of witt & good government: yet since I went over into Germany I have soe suffered for it that make mee fearefull to displease and if it please god when I am over before I come backe againe I will be assured of both your favors or els I will never retorne back: which I hope in tyme with good currage may be woone.". William was particularly worried that his mother should think him indifferent to the fact that she had been ill – "one thing troubles mee more than all the rest which Mr Rowland tould me that I should aske whether you was alive yett. I would intreate you not to thinke soe hardly of mee that I should speake soe slightly of my owne Mother & the best friend I have in the world". He signed his letter "Your sorrowfull sonne".

William was at Gravesend because his father had sent him there. With his troublesome son back in England, penniless, Gell had considered what to do and discussed it with his brother.¹⁰ As early as the 1630s black sheep were being sent off to the "Colonies" or as far away as their fathers could send them. In John Gell's time the colonial options were fewer than they subsequently became and he proposed two possibilities, which he put to his brother. He asked Thomas to send William to the Low Countries if he could, but if not, to Virginia. He was to tell Rowland that "I entreat him to see William on shipboard". In the event the choice was the Low Countries, and William was instructed to join a Lieutenant Coke, presumably a member of the Derbyshire family to whom the Gells were related.

Thomas had entrusted Coke with William's supervision. Inevitably there was a hitch. In the same letter in which William told his mother about his German adventures he told her "I did purpose ere this tyme to have beene in Holland with Mr Coke, for which purpose my Unckle left with Mr Rowland thirty shillings, to carry mee over:

which sume of money was soe small, that except a ship had beene ready to have gone upon the instant, and had a good wind withall, that money would not serve torne, my unckle not considering this & what a deere place Gravesend is where I did lye, to bee ready for the first ship that came: now there is a shipp to go within this two days: if the wind do not prevent it, & my mony is soe spent that I cannot goe with it: for my passage will cost five shillings & vittalls wch I must lay aboard the ship will cost five or six shillings more, then what will carry mee after I am landed I know not, I having but five shillings left in all: but I am not to argue the case; therefore I would desire you, good Mother to help mee with soe much mony as may carry mee over."

Elizabeth must have sent him the money as by the following year he was safely under the strict supervision of Lieutenant Coke in Utrecht. A letter to John Gell at Hopton,¹¹ addressed "To his deare and loveinge father" and dated 6 November 1639, reveals that Coke had been given money for William and was doling it out to him at 3/- a week. "It hath beene your good will & pleasure to send Leutenat (sic) Coke a leven pounds sixteene shillings whereof he hath given me six pounds sixteene shillings by three shillings a weeke & five pound to furnish me with clothes & hee hath layd out this last summer 36s by 3s a weeke & five pound more which hee hath given my captayne at our coming in to garrison to bee payd mee by three shillings a weeke for all which I give you most humble & dutyfull thanks that it hath beene your good will & pleasure soe charritibley (sic) to relevee mee who was wholly unworthy to have received such favor at your hands, but have rather deserved your just frown by reasone of my former disobedience & have since by my ignorance in writeing incurd your further displeasure.". In a second letter¹² on 23 November William hoped that in a letter which he thought Coke had written to John Gell "I hope you shall heere nothinge but well of me; if it should be otherways then well I should be sorry for I strive according to his directions to behave & carry myselfe.". He repeated that he was living on the 3/- a week and that he needs more "for it is very small not suffissient to keepe good gentlemen company". He also needed more for clothes "for we have had a hard march wch hath woare my cloths very much". William was still finding it expedient to protest his remorse "I rest your sorrowfull sonne in that I have soe much displeased you". The last of William's letters to survive is one which he wrote to his father from Utrecht on 28 November 1639.¹³ He thanked Gell for arranging extra payments from "my Captaine" - "praise god that I have soe good a Father for I have deserved the contrary". He would "not only promise but performe the best duty & obedience that I am able".

John Gell v Thomas Birkett

Having incurred a further debt of £70 from William's escapade in France, which he would have to repay Northey if he was to avoid having to redeem his bond, John Gell consulted his lawyer brother and Thomas drew up a summary of the case as he saw it, beginning "A man binds his son prentice with a London marchant ..." He ended his paper with the question "whether the father may have an action in the case against B: for either of these sumes or what other remedy he may have". John decided that, though Birkett and his accomplices had committed no crime, and that in fact he did not know who the others were, he must make some attempt to recover his losses from them. The bond is stated in Thomas's paper and in Gell's subsequent petition to the king, to be in the sum of £500 and later, in court proceedings, to be £1,000. Any loss would have been painful for a man like Gell, seriously interested in money, and these losses were great enough to be painful even for a wealthy man. £1,000 in 1636 was the equivalent of about £100,000 at the end of the twentieth century. Gell decided that he did "have an action" and petitioned the king for redress. The draft of the petition is undated, but William is described as still being in France, placing it in 1636 or 1637.

Gell's case was given a hearing in the Court of Requests, where "in regard ye plt hath his sonne uttly ruined & undone by ye defendt & hath bin forced to pay all ye money of wch his sonne was cozend hee prays relief". Gell's "bill" to the court told the sad story. William Rowland frightened Anne Harbine into a confession of her part in William's downfall and at a hearing at Brassington in September 1638 Gell produced four witnesses who declared that they had seen Birkett and his friends gambling with William and had heard them boast of their success in cheating him of his money. The four were all Derbyshire neighbours - John Buxton, gent, of Brassington, Robert Cowper, yeoman, of Atlow, Thomas Adams, tailor, of Chaddesden and Rowland Woodhouse, husbandman, of Hulland. That these four Derbyshire men, of widely differing social standing and with ages ranging from twenty-four to fifty, should all have spent time in London in the company of a gang of shady rogues, some of whom they knew well enough to name, seems a remarkable combination of circumstances.

Birkett's opening shot was to enter a "demurrer" to Gell's bill of complaint in November 1639. In it he made a complete denial of all charges and submitted that the bill was unfit to be considered.

He maintained that it was unfair to ask him to accuse himself by answering Gell's questions. John Gell's bill was "*altogether unfitt for a courte of equity, and contayneth very scandalous rayleings and approbrious language, and alsoe such criminous and felonious matters as is properly examinable and punishable in the Star Chamber*". The court, however, rejected Birkett's demurrer and instructed him to answer the bill. In his answer, submitted in March 1640, he admitted winning £20 from William "*by fair play*", and to have accompanied him to France, though only because "*ye apprentice pswaded him unto it*". He denied cheating and said that the men whom he had said were men of honour were in fact honourable. He denied ever meeting Anne Harbine or saying that she was a respectable woman. He pointed out that he was only nineteen years old at the time he met William Gell and claimed that it was William who had persuaded him to go gambling. Although innocent he was anxious to get rid of John Gell as he intended to set up in business and needed to avoid scandal. He therefore offered to pay Gell some of the money. He also claimed that one James Warren of Lincolnshire had a letter of attorney from Gell, dated 7 December 1638, authorising Warren to clear up the business, and that Gell had signed a deed on 5 April 1639 releasing him from all further demands. Gell denied both of these assertions.

Birkett's demurrer was over-ruled in 1640 and he was committed for a time to the Fleet prison for his "*contemptuous speeches menconing the affidavit of Rowland Woodhouse*". The case was heard in November 1640, when Birkett sought to blacken William's character - he "*did discover and approve himselfe to bee a disolute debochst and idle servant ... palpablie addicted to lacivious temtacons and improvident gaminge ... and spent his tyme and money in and uppon lewd and lacivious women ... to the endangeringe of his health and safetie of his psn by uncleane disease*". Birkett submitted statements from two witnesses for the defence, one of whom was among the men named by Gell's witnesses as Birkett's accomplices. He admitted winning "*six or seven pounds*" from William at the Three Tuns, said he had heard that William and Birkett had been to France and accused Rowland, acting for Gell, of forcing him to pay £5 for the sake of a quiet life. He had heard of Birkett's and others' arrests but did not know what any of them had paid and "*beleaves thatt if the defendt had payd 20L to the sd Rowland hee might have bin quiett*". There was evidence from a barber-surgeon, Thomas Hall, that William had come to him in 1635 and asked him for a cure for a complaint described as the "*rinninge of the raines*" or a discharge from his loins, which William ascribed to the fact that he "*had been abroade and gott it by one woman*". Hall said that he had treated him for about three or four months, using remedies obtained from a Dr Butler, and had not seen him since.

In addition to his difficulties in getting what he could from Birkett, Gell also seems to have had problems with Northey. Evidence was given that Rowland had had to threaten Northey with court action when, in spite of Gell's having repaid the money embezzled by his son, the merchant refused to surrender his bond. Rowland and Northey had exchanged "*ill tearmes and language*" in the course of their argument. Northey is unlikely to have returned the bond, deposited for William's good behaviour since, whatever the degree of influence exerted by Birkett, William had been a spectacularly bad apprentice. Gell must have had to swallow his anger and disappointment.

The end

There is no hint of deviousness in William's letters to his father and mother. They chime with John Gell's description of him as being good-natured and with Birkett's opinion that he lacked judgement. He sounds like a little boy lost, knowing the hole he has dug for himself and praying for the time when he can get himself out of it. Laid up with frost-bite in Hamburg or eaking out his 3/- a week in garrison at Utrecht, he must have thought of Hopton as the Promised Land. However William, having survived his soldiering and returned to England, seems to have been denied permission to return to his Derbyshire home. He was in London, under his uncle's supervision, in the autumn of 1641, when £4-2-6d was "*laid out for William Gell*" by uncle Thomas.¹⁴ The hardships he suffered on the Continent may have permanently damaged his health as he survived his return only until November 1642. William was buried at Wirksworth on the 14th.¹⁵ He was twenty-seven years old.

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Acknowledgment

All the references are to documents in the Derbyshire Record Office and I thank the DRO staff for their help.

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AN ACCOUNT OF AN ARTIFICIAL SPRING OF WATER

By Erasmus Darwin, M.D., F.R.S.

Read November 4, 1784.

To the President and Fellows of the Royal Society

GENTLEMEN,

Derby, July 16, 1784

CONFIDENT that every atom which may contribute to increase the treasury of useful knowledge, which you are so successfully endeavouring to accumulate, will be agreeable and interesting to the Society, I send you an account of an artificial spring of water, which I produced last summer near the side of the river Darwent in Derby.

Near my house was an old well, about one hundred yards from the river, and about four yards deep, which had been many years disused on account of the badness of the water, which I found to contain much vitriolic acid, with, at the same time, a slight sulphureous smell and taste; but did not carefully analyse it. The mouth of this well was about four feet above the surface of the river; and the ground, through which it was sunk, consisted of a black, loose, moist earth, which appeared to have been very lately a morass, and is now covered with houses built upon piles. At the bottom was found a bed of red marl, and the Spring, which was so strong as to give up many hogsheads in a day, oozed from between the morass and the marl: it lay about eight feet beneath the surface of the river, and the water rose within two feet of the top of the well.

Having observed that a very copious spring, called Saint Alkmund's well, rose out of the ground about half a mile higher on the same side of the Darwent, the level of which I knew by the height of the intervening weir to be about four or five feet above the ground about my well; and having observed, that the higher lands, at the distance of a mile or two behind these wells, consisted of red marl like that in the well; I concluded, that, if I should bore through this stratum of marl, I might probably gain a water similar to that of St. Alkmund's well, and hoped that at the same time it might rise above the surface of my old well to the level of St. Alkmund's.

With this intent a pump was first put down for the purpose of more easily keeping dry the bottom of the old well, and a hole about two and an half inches diameter was then bared about thirteen yards below the bottom of the well, till some sand was brought by the auger. A wooden pipe, which was previously cut in a conical form at one end, and armed with an iron ring at the other, was driven into the top of this hole, and stood up about two yards from the bottom of the well, and being surrounded with well-rammed clay, the new water ascended in a small stream through the wooden pipe.

Our next operation was to build a wall of clay against the morassy sides of the well, with a wall of well-bricks internally, up to the top of it. This completely stopped out every drop of the old water; and, on taking out the plug which had been put in the wooden pipe, the new water in two of three days rose up to the top, and flowed over the edges of the well.

Afterwards, to gratify my curiosity in seeing how high the new spring would rise, and for the agreeable purpose of procuring the water at all times quite cold and fresh, I directed a pipe of lead, about eight yards long, and three-quarters of an inch diameter, to be introduced through the wooden pipe described above, into the stratum of marl at the bottom of the well, so as to stand about three feet above the surface of the ground. Near the bottom of this leaden pipe was sewed, between two leaden rings or flanches, an inverted cone of stiff leather, into which some wool was stuffed to stretch it out, so that, after having passed through the wooden pipe, it might completely fill up the perforation of the clay. Another leaden ring or flanch was soldered round the leaden pipe, about two yards below the surface of the ground, which, with some doubles of flannel placed under it, was nailed on the top of the wooden pipe, by which means the water was perfectly precluded from rising between the wooden and the leaden pipes.

This being accomplished, the bottom of the well remained quite dry, and the new water quickly rose about a foot above the top of the well in the leaden pipe; and, on bending the mouth of this pipe to the level of the surface of the ground, about two hogsheads of water flowed from it in twenty-four hours, which had similar properties with the water of St. Alkmund's well, as on comparison both these waters curdled a solution of soap in spirit of wine,

and abounded with calcareous earth, which was copiously precipitated by a solution of fixed alkali; but the new water was found to possess a greater abundance of it, together with numerous small bubbles of aerial acid or calcareous gas.

The new water has now flowed about twelve months, and as far as I can judge, is already increased to almost double the quantity in a given time; and from the rude experiments I made, think it is now less replete with calcareous earth, approaching gradually to an exact correspondence with St. Alkmund's well, as it probably has. its origin between the same strata of earth..

As many mountains bear incontestible marks of their having' been forcibly raised up by some power beneath them; and other mountains, and even islands, have been lifted up by subterraneous fires in our own times, we may safely reason on the same supposition in respect to all other great elevations of ground. Proofs of these circumstances are to be seen on both sides of this part of the country; whoever will inspect, with the eye of a philosopher, the lime-mountain at Breedon, on the edge of Leicestershire, will not hesitate a moment in pronouncing, that it has been forcibly elevated by some power beneath it for it is of a conical form, with the apex cut off, and the strata, which compose the central parts of it, and which are found nearly horizontal in the plain, are raised almost perpendicularly, and placed upon their edges, while those on each side decline like the surface of the hill; so that this mountain may well be represented by a bur made by forcing a bodkin through several parallel sheets of paper. At Router, or Eagle-stone, in the Peak, several large masses of gritstone are seen on the sides and bottom of the mountain, which by their form evince from what parts of the summit they were broken off at the time it was elevated; and the numerous loose stones scattered about the plains in its vicinity, and half buried in the earth, must have been thrown out by explosions, and prove the volcanic origin of the mountain. Add to this the vast beds of toad-stone or lava in many parts of this county, so accurately described, and so well explained, by Mr. WHITEHURST, in his Theory of the Formation of the Earth.

Now as all great elevations of ground have been thus raised by subterraneous fires, and in a long course of time their summits have been worn away, it happens, that some of the more interior strata, of the earth are exposed naked on the tops of mountains; and that, in general, those strata, which lie uppermost, or nearest to the summit of the mountain, are the lowest in the contiguous plains. This will be readily conceived if the bur, made by thrusting a bodkin through several parallel sheets of paper, had a part of its apex cut off by a pen-knife, and is so well explained by Mr. MICHELL, in an ingenious paper, on the Phenomena of Earthquakes, published a few years ago in the Philosophical Transactions.

And as the more elevated parts of a country are so much colder than the vallies, owing, perhaps, to a concurrence of two or three causes, but particularly to the less condensed state of the air upon hills, which thence becomes a better conductor of heat, as well as of electricity, and permits it to escape the faster; it is from the water condensed on these cold surfaces of mountains, that our common cold springs have their origin; and which, sliding between two of the strata above described, descend till they find or make themselves an outlet, and will in consequence rise to a level with the part of the mountain where they originated. And hence, if by piercing the earth you gain a spring between the second and third, or third and fourth stratum, it must generally happen, that the water from the lowest stratum will rise the highest, if confined in pipes, because it comes originally from a higher part of the country in its vicinity.

The increasing quantity of this new spring, and its increasing purity, I suppose to be owing to its continually dissolving a part of the earth it piles through, and hence making itself a wider channel, and that through materials of less solubility. Hence it is probable, that the older and stronger springs are generally the purer; and that all springs were originally loaded with the soluble impurities of the strata, through which they transuded.

Since the above-related experiment was made, I have read with pleasure the ingenious account of the King's wells at Sheerness, in the last volume of the Transactions, by Sir Thomas Hyde Page, in which the water rose three hundred feet above its source in the well; and have also been informed, that in the town of Richmond, in Surrey, and at Inship near Preston in Lancashire, it is usual to bore for water through a lower stratum of earth to a certain depth; and that when it is found at both those places, it rises so high as to overflow the surface of the well; all these facts contribute to establish the theory above-mentioned. And there is reason to conclude, that if similar experiments were made, artificial springs, rising above ground, might in many places be thus produced; at small expence, both for the common purposes of life, and for the great improvement of lands by occasionally watering them.

This article was first published in the Philosophical Transactions, Vol LXXV of the Royal Society.

A SEVENTEENTH-CENTURY WALL PAINTING

IN ST. MARY'S CHURCH, CHADDESSEN

(by Peter Cholerton,

Introduction

(a) St. Mary's Church:

The church of St. Mary the Virgin lies at the east end of Church Lane, Chaddesden, at grid ref SK 3818 3689. First recorded in 1347, the church functioned for many centuries under the control of the vicar of nearby Spondon. After the death, in 1354, of Henry de Chaddesden, Archdeacon of Leicester, his executors greatly enlarged the original chapel in his home village in order to accommodate a new quasi-collegiate establishment of four chantry priests. In 1547 the chantry was dissolved and its substantial endowments appropriated by the Crown. The church itself continued as a place of worship, finally gaining independence from the vicar of Spondon in the nineteenth century. The Victorian era also witnessed the restoration of the chancel (1857/1858) and then the nave and aisles (1858/1859). The twentieth-century expansion of Derby destroyed much of the built heritage of Chaddesden, thus making St. Mary's Church an especially valuable link with the past. Today the church is one of only three Grade I listed places of worship (ie two churches and one chapel) within the city of Derby.¹

(b) General Notes About Ecclesiastical Wall Paintings:

In mediaeval times, the interior walls of churches were plastered and decorated with wall paintings designed to be both devotional and educational.² Entering the main door of a typical church or chapel, the worshipper of centuries past would probably first encounter a large painting of St. Christopher carrying the Holy Child; next there would be scenes from the Bible and the lives of the saints painted in glowing colours on the walls, culminating in a vivid representation of the Doom or Last Judgement on the west face of the chancel arch.³ Over the years a wall painting might be repainted several times or, if a change was thought necessary, simply covered with a few coats of limewash and overpainted with new subject-matter.

Most church wall paintings fell victim to the Reformation and its increasing hostility to church imagery. In 1536, for example, clergy were instructed not to 'set forth or extol any images, relics or miracles ...'.⁴ Injunctions of 1538 then commanded the people 'not to repose their trust ... in any other works ... as in ... offering of money, candles or tapers to images or relics ...'.⁵ Nine years later, Injunction number three of 1547 ordered the clergy to destroy all images that had been 'abused' even by the simple act of censuring, and Injunction number twenty-eight of the same year directed that the clergy and parishioners were to 'take away, utterly extinct and destroy all ... pictures, paintings and all other monuments of feigned miracles, pilgrimages, idolatry and superstition; so that there remain no memory of the same'.⁶ The final blow came in 1548 when the Privy Council ordered the removal of all images from churches and chapels.⁷ It was obviously impossible to remove wall paintings from a church without destroying the very plaster on which they were painted, so, since the Royal Injunctions provided no further guidance on the matter, the clergy took the only option open to them and simply concealed the paintings with limewash. The reign of Queen Mary (1553-1558) offered a brief respite from the anti-image hysteria, but the policy of enforced austerity continued once more during the reign of Queen Elizabeth I (1558-1603), when the only permitted decoration in churches was that provided by the stained-glass windows, the Royal coat-of-arms (usually replacing the Doom painting over the chancel arch), the tables of the Ten Commandments (to be set up at the east end of the chancel) and other selected texts such as the Creed and Lord's Prayer.⁸ Sentences from scripture are again mentioned early in the reign of King James I (1603-1625), when Canon LXXXII of 1604 ordered them to be set up in convenient places on church walls, their borders sometimes filled with angels and flowers, etc.⁹

By Victorian times most of these later texts had, in their turn, been whitewashed over and forgotten and the whole concept of decorating church interiors now underwent a radical change. Many church architects and 'restorers' wrought wholesale destruction by hacking off all the many layers of plaster that had accumulated on church walls over the centuries, in order to expose the underlying masonry which, of course, the original builders had never intended to be seen! In Derbyshire, for example, Hartington church was restored in 1858 when 'remnants of old fresco painting came to light on the walls ... but they were not capable of being preserved'.¹⁰

At Chelmorton, the restorers of 1874 removed layers of plaster from the walls, only to discover the words of one of the Beatitudes (Matthew 5:8) written in Black Letter text on a zigzag scroll, as well as other similar inscriptions and paintings 'too much damaged to be accurately described'.¹¹ In 1822, during the restoration of Ballidon chapel, the walls which had hitherto been covered with what were described as 'pen and ink frescoes' were plastered over by the churchwarden because, in his opinion, they made the chapel look like 'a bad place'.¹² In 1962, the removal of 'dirty and decayed Victorian plaster' from the walls of the nave of Eyam church revealed significant traces of wall painting in the form of two versions (Elizabethan and Jacobean) of decorative schemes containing the emblems of the Twelve Tribes of Israel and quotes from the relevant verses of Genesis ch. 49, as well as traces of a third scheme - the Creed and Lord's Prayer - dating from 1645 and set within elaborate frames.¹³

The Chaddesden wall painting

The early Sunday morning communion services in St. Mary's Church are held in the chancel, the oldest part of the building. Some 25 years ago, the writer was in his usual seat opposite the priest's door in the south wall when he noticed what appeared to be a few faded lines of text on the wall plaster some 80cm above the doorway arch (Fig.1). Subsequent investigations with the aid of a ladder, a torch, and a soft brush to remove dust and cobwebs revealed traces of two large concentric circles delineated by equidistantly spaced red dots around their circumferences. An interlaced design of some sort filled the space in-between the two circles, while the area bounded by the inner circle contained seven lines of Black Letter text. Unfortunately, because the painting was located on the south wall, it was not particularly well illuminated by natural daylight, and the rather basic lighting arrangements which then prevailed in the chancel cast little in the way of additional light upon the work. Consequently, it was not possible to decipher any of the thirty or more individual words of text, or even establish whether they were written in English or Latin. In fact, the only two portions of the work that the writer thought he could read from his rather precarious vantage point on the ladder were the final letters of a word, '...ion' at the end of Line 6 (ie the sixth line from the top), and part of Line 7, 'Ann(o) 1623', or maybe '1523'.

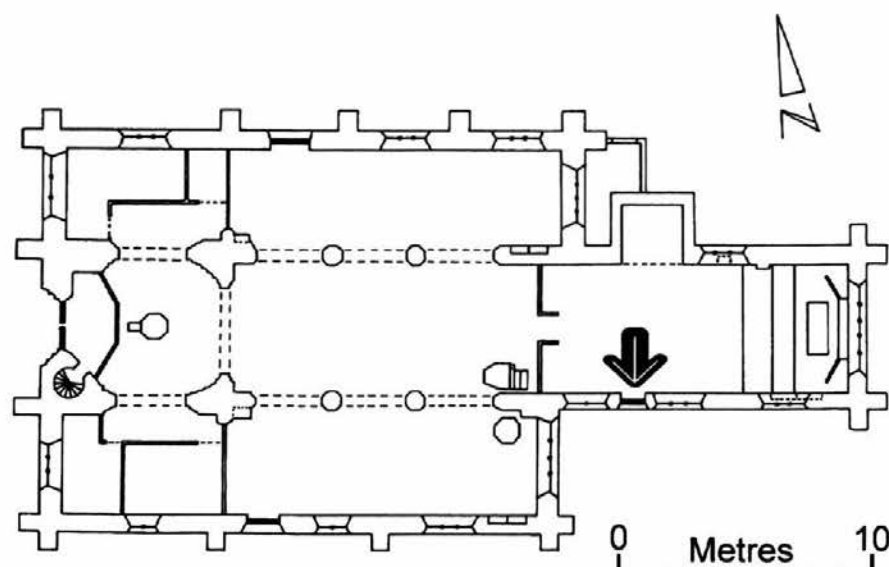


Fig 1: St Mary's Church. Location of the wall-painting (arrowed)

In 1990, Rev. J. Drackley, then Secretary of the Derby Diocesan Advisory Committee for the Care of Churches happened to be visiting the church and, together with the writer, spent a few minutes examining the wall painting from ground level. Both parties agreed that the partly visible word on Line 6 was most likely 'Temptation', and that in all probability the text was a seventeenth-century rendition of the Lord's Prayer.¹⁴ This was the state of affairs prevailing when the writer's guidebook on St. Mary's Church went to press in 1997.¹⁵ In the summer of 2007, however, St. Mary's Parochial Church Council finally gained Diocesan approval for the installation of an ambitious new lighting system. The old 'chandelier' type light fittings were removed and replaced by new pendants and spotlights, considerably improving the levels of illumination throughout the building. By a stroke

of good fortune, two of the new spotlights in the chancel were sited almost opposite the wall painting, thereby enabling the writer to examine the area more critically.

A series of ladder-based inspections was made between December 2007 and February 2008. The wall-face directly above the priest's door has retained a considerable area of plaster, though in places this has been either stripped away altogether to reveal portions of the underlying stonework or disfigured by later pointing (Fig.2). The diameters of the two concentric circles were ascertained to be approximately 1.36m and 0.99m. The red dots, each some 2cm in diameter, tracing the outlines of the two circles had evidently been placed not by measurement but rather by eye, for the distances between the dots are often quite irregular. For example, in the outer circle the gap between adjacent dots is usually in the region of 10cm, but can be anything from 8cm to 12cm. In the inner circle, the gaps tend to be around 8cm, but are sometimes as close as 5cm or as distant as 12cm. When the wall painting was first set out, the dots, which now appear pale red in colour, were probably filled-in with red ochre. Given the diameters mentioned above, the outer circle must once have had approximately 43 such dots; the inner, perhaps 39. Today some 26 dots are visible in each of the two circles. As mentioned earlier, the space in-between the circles contains traces of an interlaced design; much of this is still hidden by coats of later limewash, but from what little can be seen, has all the appearance of trailing vine branches, tendrils, or similar.¹⁶

Spaced at horizontal intervals of 12cm within the inner circle are seven lines of Black Letter text, and it is readily apparent that some of the individual letters are also obscured by one or more layers of later limewash. By digitally photographing the better-preserved letters prior to enhancing the resultant images on a computer, as well as making tracings on clear plastic film, a list of basic letter-forms was gradually compiled. The lettering (presumably originally written in lamp-black) is a minuscule text of the type generally known to calligraphers as *Textus quadratus*, identified by the diamond-shaped feet and forked ascenders of the letters, and was the style adopted as the early model for printers' types.¹⁷ Typically, ordinary letters on the Chaddesden wall painting, for example, *a*, *o*, *n*, etc., measure around 7cm in height and 3cm in width, whereas taller letters such as *h*, *l*, *t*, etc., as well as the capitals are up to 9cm in height. Different examples of the same letter-shapes vary somewhat in both style and size as is only to be expected of hand-written characters inscribed on a vertical wall surface over 3m above ground level!

A careful examination of the first two lines finally provided the means by which the text was deciphered. Line 1, at the very top of the inner circle, was the best preserved of all and evidently comprised just two words of seven and one letters respectively. After several false starts, this was interpreted as '*Beholde I*'. These two words, taken in conjunction with the first four letters of the last word on Line 2 – '*knoc*' – enabled a search through a Biblical concordance¹⁸ which swiftly produced a match, namely the Book of Revelation, Chapter 3, Verse 20: *Behold, I stand at the door, and knock: if any man hear my voice, and open the door, I will come in to him, and will sup with him, and he with me.*¹⁹ With this as a working hypothesis, the text of the wall painting was then 'tested' against the verse, and all remaining words, letters, and fragments of letters found to agree, subject only to minor differences in spelling. Fig.3 presents a more detailed picture of the text in the inner circle with solid lines representing visible letters and parts of letters, and dotted lines conjecturally supplying details of erased or overpainted characters; although it should be noted that no attempt has been made to mark the positions of missing red dots. A few individual characters are worthy of especial note as follows:

The first word of the text on Line 1 is either '*Behold*' or '*Beholde*', however, what seems to be the final 'e' has a short, downward sloping bar exiting to the right from where its vertical stem should be, the purpose of which is unclear. On Line 3 much of the word '*voyce*' is still covered by limewash, but a definite flourish can be seen above the left-hand stem of the letter 'v'; such embellishments are not uncommon on examples of this letter on other texts of a similar age, and what is probably a fragment of a comparable flourish is visible above the 'v' in '*Revelation*' on Line 6. However, the 'v' on Line 3 has a vertical descender on its right-hand side rather giving it the appearance of a letter 'g'; though, as far as can be seen, this peculiarity is not repeated in the second 'v' on Line 6. Also on Line 6, it seems likely that the chapter number '3' was once written immediately after the word '*Revelation*', especially since Line 7 begins not with the word '*Anno*' as the writer first thought, but rather with '20', the number of the verse.²⁰ Attached to the right of the '20' on Line 7 is a flourish, and after a short gap there is what seems to be a small cross with one raised arm, immediately followed by the date '1623', the second digit of which has been partially abraded and could equally well read '1523'. To complicate matters further, the small cross actually touches the first digit '1'.²¹ To the right of the date and close to its final digit is a second and different flourish. A little below Line 7, but just within the inner circle, is a short horizontal border comprised of an undulating wavy line (the 'nebuly' of heraldic design), not unlike a series of conjoined horseshoes.

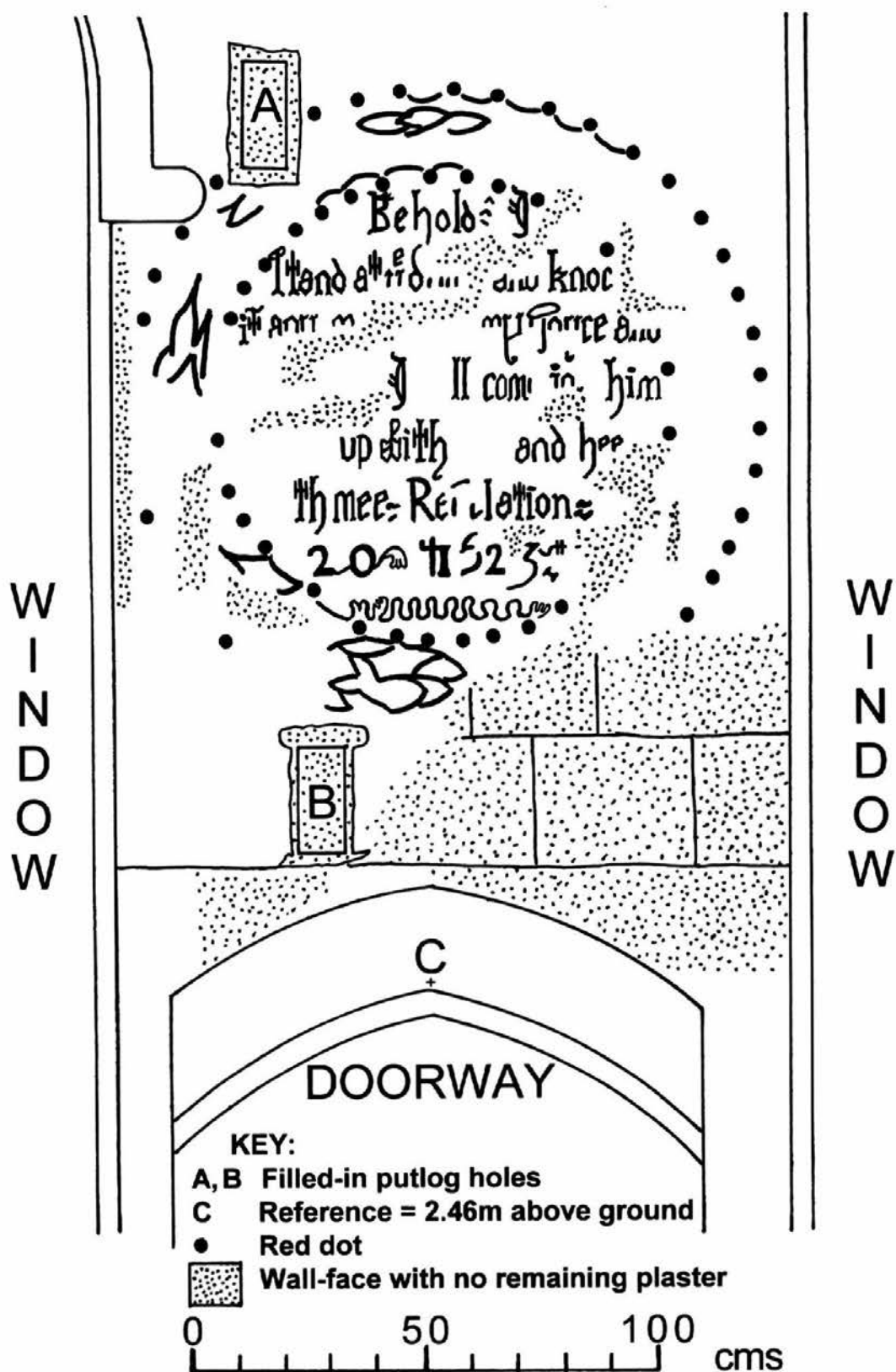


Fig 2: The wall painting as seen today.

Beholde I
 Stand at the door and knock
 if any man hear my voice and
 open the door I will come in to him
 and will sup with him and hee
 with mee. Revelation. 3
 20 11623

0 cms 50

Fig 3: Conjectural restoration of missing detail in the text of the wall painting.

Surviving photographs of the chancel reveal that - unlike the nave - its walls were still covered with plaster until the early years of the twentieth century; a fact explaining why past historians such as J. C. Cox did not comment on the painting.²² It therefore seems that at some unknown date in antiquity, the wall painting was overpainted and forgotten until its inadvertent discovery, which must have occurred around the time of the First World War. Evidence for this was provided by the late Mrs. Mary Davison (née Cokayne), formerly of Potter Street, Spondon, who was born in Chaddesden in 1904, and remembered much of the plaster on the chancel walls of St. Mary's Church being removed c.1915 when she was a young girl. Speaking to the writer in 1984, she said that in places the plaster had been perhaps an inch-and-a-half thick. She recalled seeing some of the text above the priest's door, but was never able to read any of the words. Although the plaster has been stripped from most wall faces in the chancel, the process was not particularly thorough, for while it is possible to determine the outlines of most of the individual stones, scattered areas of plaster and/or limewash remain.²³ Certainly, whoever was responsible for scraping the walls had the foresight to cease work once the wall painting over the priest's door was uncovered. Whether any more wall paintings were found at the same time is unfortunately not known.

Significance of the text

Whilst the verse - '*Beholde I stande at the door, and knock ..*' - was clearly chosen because of its appropriateness for a wall painting sited directly above a door, its principal meaning was doubtless to emphasise Christ's offer of salvation to those who were willing, in a figurative sense, to open their doors and listen to his message.²⁴

It is also highly probable that the text had special significance relating to its location within the chancel, and in order to consider this it is first necessary to examine various ecclesiastical edicts concerning the positioning of the altar in the sixteenth and seventeenth centuries. Early in the reign of King Edward VI, John Hooper, Bishop of Gloucester & Worcester, and Nicholas Ridley, Bishop of London, were at the forefront of a movement to rid churches of their former high altars of stone, replacing them with wooden communion tables instead. In November 1550 their efforts succeeded, and all diocesan bishops were instructed to ensure that altars in churches under their jurisdiction should henceforth be taken down, and tables set up in their places in '*some convenient part of the chancel ... to serve for the ministration of the blessed communion*'.²⁵ Unlike an old stone altar firmly fixed at the east end of its chancel, a new wooden communion table was now moveable, and it was not long before the word 'convenient' was considered sufficient authority for the clergy to place the tables in the choir or the middle of the chancel. In this way, the table, now frequently oriented with its long axis east-west (ie 'table-wise'), would be nearer the congregation. In the 1549 Prayer Book, the priest was simply instructed to stand '*humbly afore the middes of the Altar*', this being deemed to be in the middle of either of the longer sides (north or south) when the table was positioned table-wise, or behind it, facing west, when the table stood altar-wise. Just three years later, when the 1552 Prayer Book was published, the table was now to stand in either the body of the church or the chancel, with the priest officiating from its north side and the communicants kneeling at stools or benches around its other sides.²⁶ In many churches the most suitable location for the table was held to be the lower or western end of the chancel.²⁷

The communion table and its location within the church continued to be a source of great religious contention, and in the years of Queen Mary's short reign (1553-1558) it was decreed that churches should once again have high altars of stone.²⁸ However, in 1559, Royal Injunctions of Queen Elizabeth I (1558-1603) specified that where a Marian stone altar had been installed, it should be taken down and replaced with a '*holy table*' standing where its stone predecessor stood (ie at the east end of the chancel). For services of Holy Communion the table was then to be placed '*in good sort within the chancel, as whereby the minister may be more conveniently heard*'. Once the service had finished, the table was to be moved back to its usual resting place.²⁹ As Chaddesden then formed part of the Diocese of Coventry and Lichfield, its priest and churchwardens would have been expected to comply with the diocesan injunction issued by their Bishop, Thomas Bentham, in 1565. He confirmed that stone altars in churches were to be taken away, and that parishes were in future to use '*a decent and simple table upon a frame covered with a fair carpet, and a fine linen tablecloth upon it, in as beautiful a manner as it was being upon the altar*'.³⁰ Nearer to the likely date of 1623 for the Chaddesden wall painting, Canon LXXXII of 1604 omitted all reference to the table standing or being returned to the east end of the chancel, simply instructing it to be placed at a convenient location within the church or chancel; this no doubt coming as a great relief to those who formerly had to move such a heavy and cumbersome object back and forth between services!³¹ Thus, during the opening years of the seventeenth century, the communion table at Chaddesden must have been permanently located either at the lower end of the chancel or in the nave; and, for the reason given below, it is the contention of this paper that the table was actually sited opposite the priest's door in the chancel.

Towards the end of King James' reign (1603-1625), some clergy began to express their dissatisfaction at this placing of the communion table, for they saw an unprotected table in the chancel or nave as a source of confusion and irreverence. Gradually a movement began to site tables back at the east end of the chancel, where they were now to be surrounded by wooden rails.³² Once William Laud, a supporter of reform, became Archbishop of Canterbury in 1633, instructions were issued to all churchwardens 'to place the communion table under the eastern wall of the chancel, where formerly the altar stood ...', the very position which still applies in many churches to this day.³³

From the foregoing paragraphs it is clear that at Chaddesden, from any time after 1550 until around 1633 or thereabouts (excepting a brief gap during the reign of Queen Mary), the communion table was very probably sited at the lower (western) end of the chancel. With the table in this position, the wall painting above the priest's door would make a very fitting, if somewhat elevated, backdrop to a service of Holy Communion. Line 5 in particular (... *will sup with him* ...) reminding communicants that the act of worship in which they were participating was also known as the Lord's Supper, and that they, the laity, would duly be receiving symbols of both the body and (since the Reformation) the blood of Christ. There may, perhaps, have been a companion wall painting on the opposite side of the chancel, but any vestiges of this would have been destroyed in 1876 when the new organ was installed.

A third interpretation can also be placed on the text of the wall painting. The Book of Revelation is generally accepted to have been written by the apostle St. John the Divine, sometime around the year AD 96. It is a prophetic work, being the unveiling or revelation of the future with regard to the Church and the world. Chapters 2 and 3 contain messages to the 'seven churches which are in Asia', and the Chaddesden text (Rev. 3:20) is part of a larger segment (Rev. 3:14-22) addressed to the church of Laodicea, which is rebuked sternly for its lukewarmness. Was the chancel text also intended as an oblique warning to the people of Chaddesden not to make the same mistake of being half-hearted in their religious observances?

Corroborating the date of the wall painting

With some uncertainty prevailing over the interpretation of the numbers on the right-hand side of Line 7, it is perhaps best to investigate what other dating evidence exists within the text. It is evident that the words of Lines 1 - 6 are a verbatim quote of just a single verse - no more and no less - from the Book of Revelation (ie Chapter 3, verse 20), and that the verse number itself is inscribed at the start of Line 7 (the chapter number is now missing from the end of Line 6). This effectively rules out the alternative date of 1523 suggested earlier, simply because the sub-division of Bible chapters into verses was not introduced until 1560, when the Geneva Bible was first published.³⁴

The appearance of the word 'Revelation' in the text also provides some indication as to the date of the painting. In the mid sixteenth century, the Book of Revelation was known by its earlier title, The Apocalypse, and was still referred to as such in, for example, the First and Second Prayer Books of King Edward VI of 1549 and 1552 respectively.³⁵ However, the slightly later Geneva Bible of 1560, as well as the Bishops' Bible of 1568 and the Authorised (King James) Version of 1611 all used 'Revelation' in preference to 'Apocalypse', indicating that the Chaddesden text must date from after 1560. It should be noted that the Rheims New Testament of 1582, which kept the old title of 'The Apocalypse' for its final chapter, was a product of the Roman Catholic College at Rheims and therefore not likely to be the basis of the Chaddesden text.

The Authorised Version of the Bible was first published in 1611 and might be thought of as the obvious source for the text of a wall painting made in 1623. The actual spelling used in Rev. 3:20 of its first edition reads: 'Behold, I stand at the doore, and knocke: if any man heare my voyce, and open the doore, I will come in to him, and will sup with him, and he with me.'³⁶ While this is the same passage that features in the wall painting, there are several apparent minor variations in the spelling of words such as 'ye/the', 'hee/he', 'mee/me', etc.³⁷ Although it has not proved possible to trace its exact origin, the Chaddesden text was in all probability actually taken from one of the 140 or more editions of the popular Geneva Bible that were still being published decades after the release of the Authorised Version.³⁸ It would be interesting to know whether the words were copied directly onto the wall from the Church Bible at Chaddesden, or whether the artist used another Bible as the source for the inscription.

Under normal circumstances it might be hoped that the parish registers could provide some additional information about the wall painting. The earliest Chaddesden register covered the period 1598-1718, and according to a report of 1824 was evidently in a state of 'tolerable preservation'. Unfortunately the register

cannot throw any more light on the painting or confirm its date because the book vanished somewhat mysteriously only a few years later.³⁹

Apart from its surviving parish registers, St. Mary's Church possesses few documents of any antiquity. However, one manuscript of interest is a printed leaflet describing the work done when the church underwent major repairs in the mid nineteenth century. The chancel was restored in 1857/1858 under the architectural supervision of Mr. G. Place of Nottingham, and the leaflet notes that the total cost amounted to £433-10-9. A note to the accounts lists some additional items of general expenditure in both '*Church and Chancel*' that were included in this sum, two of which, ie '*Illuminated texts ... £2-10-00*' and '*Architect's Fee, Design for Chancel Walls ... £1-00-00*' are worthy of comment here.⁴⁰ The illuminated texts referred to are undoubtedly the six proverbs painted above the arches separating the nave from the aisles, as well as the two inscribed above the north and south doors of the nave. Although these texts are also written in a Black Letter script, they are different to the text of the chancel wall painting; their uniformity suggesting that they were produced using stencils. The second item, '*Design for Chancel Walls*', most likely refers to the decorative wall-hangings that formerly adorned the lower parts of the walls before the installation of the present panelling in 1903 and 1918.⁴¹

Based on the somewhat limited textual evidence as well as the suitability of the verse as a backdrop for a communion table placed at the lower end of the chancel, it therefore appears that the wall painting must date from sometime between 1560 and 1633. It is therefore highly likely that the partly abraded digits to the right of Line 7 represent the date 1623.

Making the wall painting

The work of painting illustrated texts on church walls was an exacting process, and the services of an accomplished sentence-writer did not come cheap. For example, in 1684, one James Addison of Hornby, Lancashire, was contracted for £30 to beautify Kendal parish church with scriptural sentences; the borders were to be decorated with cherubim, seraphim, green hissing serpents, and flying dragons, the sentences themselves garnished with various quaint devices and flourishes in green, yellow, and black.⁴² Since there is always pressure on a church to keep its costs to a minimum, is it possible that the work at Chaddesden was undertaken by a local person skilled at calligraphy? This seems most improbable, as few of the early seventeenth-century villagers, excepting, maybe the clergy and one or two of the more wealthy inhabitants, would have possessed the necessary skill.

In 1623, the presumed date of the church wall painting, two priests officiated at Chaddesden. John Birch served as Vicar of Spondon from 1577 until 1629, and between c.1619 and c.1623 was assisted by John Goostrey as curate.⁴³ Both men feature in Chaddesden wills of the period as witnesses, legatees, etc., and doubtless wrote some of the wills too. With this in mind, an examination of Chaddesden wills from 1595-1630 was made to check for any pronounced similarities between the style of hand-writing in the wills and the text of the wall painting. In only a few cases were any superficial resemblances noted, though in one of these, the will of Walter Clarke (August 1623), the writer of the document may have been John Goostrey, the curate. Whether this man, described in an Episcopal visitation of 1623 as '*a haunter of alehouses and a misdemeanourer*', could have created the chancel wall painting is destined to remain an enigma.⁴⁴ Equally frustrating is the uncertainty concerning the identity of the person or persons who actually commissioned the painting in the first place. Was it something decided upon by the vicar and his wardens and paid for by all the parishioners; or maybe a generous donation by a member of the Wilmot family, then but recently arrived in the parish? Once again, the answer will probably never be known.

Conclusion

As St. Mary's Church is presently best-known for its interesting mixture of mediaeval and Victorian art and architecture, this discovery of a seventeenth-century wall painting provides a fascinating insight into the hitherto unknown internal decoration of the building in that period. Worthy of special note is the likelihood that the Chaddesden wall painting, dating apparently from 1623, was seemingly designed to edify and inspire those participating in the service of Holy Communion at the point in time when the communion table stood at the lower (western) end of the chancel.

Countless ecclesiastical wall paintings were destroyed after the Reformation, damaged beyond repair through the general neglect of churches in succeeding centuries, or simply obliterated by over-enthusiastic Victorian

restorers. On the specific subject of post-Reformation wall paintings, other commentators have remarked that such decorations 'suffered from later bouts of iconoclasm and neglect, and few now remain'.⁴⁵ Derbyshire unfortunately does not possess significant numbers of ecclesiastical wall paintings of any period and this makes the Chaddesden survival all the more important. Further work on the wall painting by a suitably skilled and accredited conservator would certainly reveal additional detail presently obscured by later coats of limewash, and also stabilise the painting to ensure its long-term preservation. Hopefully this is something that St. Mary's Parochial Church Council might care to address in the near future; the expense of conservation would, of course, be substantial, but grant assistance could make it a viable proposition.

Acknowledgement

My thanks go to Rev. Wayne Stillwell, Vicar of St. Mary's Church, for the interest he has shown in this work.

References:

1. The others being Derby Cathedral and St. Mary's Bridge Chapel (City of Derby - List of Buildings of Special Architectural or Historic Interest at: www.Derby.gov.uk).
2. The two main types of wall paintings were frescoes in which the artist first set out a rough outline in bold strokes on the plaster base coat; the plasterer then covered this with a thin finishing coat of lime plaster upon which the artist worked while it was still wet, the coloured pigments sinking into the surface. The alternative method - secco - was much more common in England. Here the wall was plastered and a finishing coat of lime-putty applied. Once this had set, it was moistened and painted with basic earth colours mixed with a binding medium such as lime-water or casein from skimmed milk (Rouse, E.C., *Medieval Wall Paintings*, formerly *Discovering Wall Paintings*, 2004, pp.23-25). Paintings were sometimes outlined in fresco and then finished in secco. Secco pigments can deteriorate due to the disintegration of their binders, leaving only the fresco colours of the outline drawing (Council for the Care of Churches, *Wall Paintings in English Churches - Questions and Answers*, 1971, p2).
3. Dr. Rouse identified five main themes for mediaeval wall paintings, ie Decorative Schemes, The Bible Story, Single Figures of Saints, Lives of the Saints, and Moralities (Rouse, E.C., *Medieval Wall Paintings*, formerly *Discovering Wall Paintings*, 2004, pp35-70).
4. Duffy, E., *The Stripping of the Altars - Traditional Religion in England 1400-1580*, 2005, p398.
5. *Ibid*, p407.
6. *Ibid*, pp450-451, 480.
7. *Ibid*, p458.
8. Addleshaw, G.W.O. and Etchells, F., *The Architectural Setting of Anglican Worship*, 1948, pp35, 103-104. The Ten Commandments were sometimes to be found with the Royal coat-of-arms on the tympanum over the chancel arch.
9. *Ibid*, pp104-105. A particularly decorative example from around this time may be seen in All Saints' Church, Bradbourne, where the text of Ecclesiastes 5:1 is contained within a border fashioned to look like a temple - the 'House of God' of the text (Combes, I.A.H., *Anglican Churches of Derbyshire*, 2004, p39).
10. Cox, J.C., *Notes on the Churches of Derbyshire*, 4 Vols., Vol. 2, 1875/79, p482.
11. *Ibid*, Vol. 2, p83.
12. *Ibid*, Vol. 2, p440.
13. Notes and News, *Derbyshire Archaeological Journal*, Vol. 82, 1962, pp111-112.
14. Though plausible, these two assumptions would later prove to be incorrect.
15. Cholerton, P.F., *The Church of St. Mary the Virgin, Chaddesden - A Guide and History*, 1997.
16. This could also, perhaps, be a design based around a theme of interlinked fishes. The Black Letter text of one of the Beatitudes discovered at Chelmorton c.1874 and mentioned earlier in the paper was set out on a zigzag scroll or ribbon, the face of which was white while the back was red with gold stars. The scroll was entwined round a stem from which sprang branches of leaves and red berries. Cox thought it probably dated from the years after the introduction of Canon LXXXII of 1604 (Cox, J.C., *Notes on the Churches of Derbyshire*, 4 Vols, Vol 2, 1875/79, p83).
17. Martin, J., *The Complete Guide to Calligraphy - Techniques and Materials*, 1996, pp50-51.
18. Cruden, A., *Cruden's Complete Concordance*, 1945 edn.
19. The Bible, Authorised (King James) Version 1611, 1949 edn.
20. The numerals of Line 7 are not quite as tall as the capital letters of the text.
21. It is possible that the cross is actually part of a monogram intended represent the initials of either the

artist or the person commissioning the painting. Alternatively the symbol might simply be a fragment of an earlier wall painting showing through. In connection with this latter suggestion, it may be significant that when a plumb-line is dropped from the wooden plug which fills a large hole located in-between the two ascenders in the 'h' of 'Behold' on Line 1, it passes through (with a small margin of error) both the cross and the apex of the doorway arch, but seems otherwise unconnected with the two circles of red dots and their text.

22. Cholerton, P.F., *Britain in Old Photographs - Chaddesden*, 1999, pp36, 37, 41. Unfortunately the chancel photographs do not show the area of the wall painting. It is just possible that the 6th Duke of Devonshire, as lay rector of the parish, and a major contributor to the restoration of the church in 1857-1859, might have acted as a restraining influence against the removal of the plaster on the chancel walls. In law, however, whilst the repair of the chancel was the liability of the lay rector, such an individual was not responsible for its ornamentation or decoration.
23. Indeed, as late as 1947, the walls at the east end of the chancel were still plastered over, for they are clearly visible in a photograph taken by Mr. (later Rev.) Derek Buckley of Chaddesden (www.picturethepast.co.uk, photo. ref: DCHQ004681). Even today, the sedile and piscina niches of the chancel remain coated with whitewash, through which it is just possible to determine faint traces of a reddish pigment - vestiges of an earlier colour scheme, or more wall paintings perhaps?
24. Interestingly, William Durandus, the thirteenth-century Bishop of Mende, France, made an oblique reference to this quotation in his book, *Rationale Divinorum Officiorum*, as follows: '... I, William ... will knock diligently at the door, if so be that the Key of David will open unto me: that the King may bring me in to his Treasury, and shew unto me the heavenly pattern which was shewed unto Moses in the mount ...'. (Neale, J.M. and Webb, B., *The Symbolism of Churches and Church Ornaments: A Translation of the First Book of the Rationale Divinorum Officiorum*, Written by William Durandus, 1843, p4).
25. Addleshaw, G.W.O., and Etchells, F., *The Architectural Setting of Anglican Worship*, London, 1948, pp22-27.
26. *Ibid*, pp.28-29. Harrison, D., intro., *The First and Second Prayer Books of Edward VI*, 1968, pp212, 377.
27. Addleshaw, G.W.O., and Etchells, F., *The Architectural Setting of Anglican Worship*, 1948, p109.
28. Duffy, E., *The Stripping of the Altars - Traditional Religion in England 1400-1580*, 2005, p545.
29. Addleshaw, G.W.O., and Etchells, F., *The Architectural Setting of Anglican Worship*, 1948, pp33-34.
30. *Ibid*, pp33-34.
31. *Ibid*, p109.
32. *Ibid*, p121.
33. *Ibid*, p128.
34. The Geneva Bible was the first complete Bible to use verses. Whittingham's New Testament of 1557 actually introduced their usage.
35. Harrison, D., intro., *The First and Second Prayer Books of Edward VI*, 1968, pp136, 345.
36. From on-line version at the Schoenberg Center for Electronic Text and Image at the University of Pennsylvania Library (<http://dewey.library.upenn.edu/sceti>).
37. Other spelling differences may once have existed (eg in the spelling of 'door', etc), but are now either overpainted or destroyed by the later removal of plaster.
38. www.greatsite.com
39. Austin, M.R., *The Church in Derbyshire in 1823/4*, Derbyshire Archaeological Society Record Series, Vol.5, 1974, p.59. Cholerton, P.F., *The Church of St. Mary the Virgin, Chaddesden - A Guide and History*, 1997, p53.
40. Although included under the heading of Chancel Restoration, some of the items were most definitely not in the chancel but rather in the main body of the church, eg works done to western door, pulpit, etc.
41. For pictures of the wall hangings, see Cholerton, P.F., *Britain in Old Photographs - Chaddesden*, 1999, pp37, 41. For details of the later panelling, Cholerton, P.F., *The Church of St. Mary the Virgin, Chaddesden - A Guide and History*, 1997, pp21, 28.
42. Addleshaw, G.W.O., and Etchells, F., *The Architectural Setting of Anglican Worship*, 1948, p105-106.
43. Barber, T.G., *How the Church came to Spondon and her Chapelries - Stanley and Chaddesden*, 1950, p5. Cholerton, P.F., *Chaddesden Wills and Inventories 1533-1868*, 1983, Unpublished MS.
44. Clark, R., 'Lists of Derbyshire Clergymen 1558-1662', *Derbyshire Archaeological Journal*, Vol.124, 2004, pp258-284, p266.
45. Council for the Care of Churches, *Wall Paintings in English Churches - Questions and Answers*, 1971, p1.

A NOTE ON STONE FRAGMENTS FOUND AT ST ALKMUNDS, DERBY

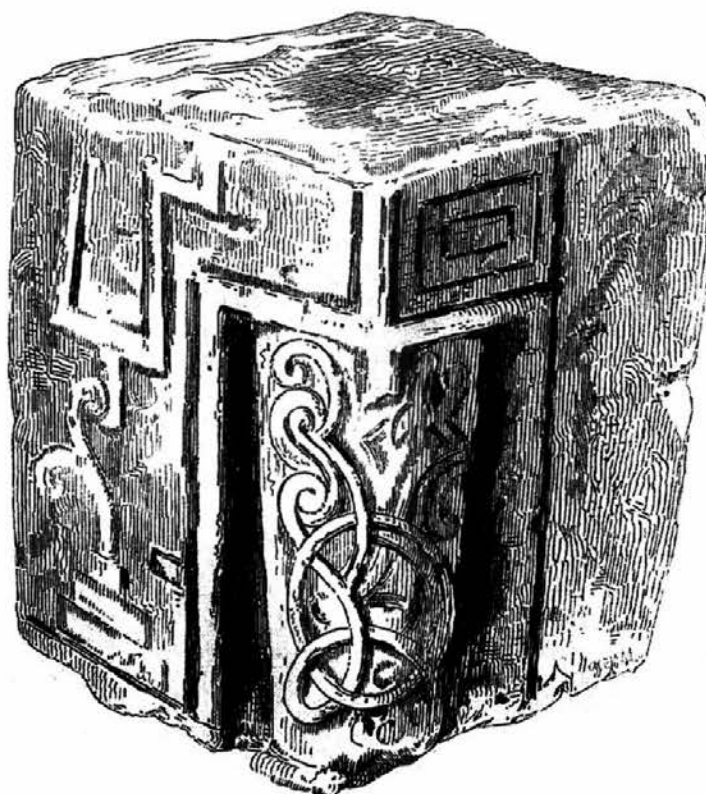
from

THE ARCHAEOLOGICAL JOURNAL 1846

PROCEEDINGS OF THE COMMITTEE, FEBRUARY 26

(Contributed by Malcolm Burrows,

The Rev. Henry De Foe Baker of Browne's Hospital, Stamford, presented a fragment of sculpture, ornamented with figures of animals, which was discovered in pulling down St. Alkmund's church, Derby and appears to have formed the lower limb of a finial cross. Mr Baker offered at the same time, for insertion in the forthcoming Journal, impressions of three glyphographic representations of ancient sculpture, produced by Mr Palmer's process, which, as Mr Baker remarks, may prove very valuable and available for the illustration of topographical or antiquarian works. These included two sandstone capitals of conical form, discovered under the pavement in the late church of St Alkmund, Derby (now replaced by a new and tasteful structure).



Conical Capital (ante Norman) found beneath the foundations of St Alkmund's church, Derby



Conical Capital (ante Norman) found beneath the foundations of St Alkmund's church, Derby

THE RULES OF AN EIGHTEENTH CENTURY POOR HOUSE

Rules and Orders to be observed by the Poor at the Poor House

1. That they shall at all times behave Peaceably, and Quietly, shall not swear Quarrell or use Rude or Indecent Language.
2. Shall not Strike or Abuse the Master or Mistress on pain of Punishment, but if Aggriev'd complain to the Overseers.
3. Any Person during his or her Maintenance in the House Purloining Selling or Pawning any Materials Implements of Work or Apparell belonging to the House shall be Punished as the Law in that Case Directs.
4. Shall take their Clean Linnen from the Mistress every Saturday Morning and bring their Foul Linnen to her every Sunday Morning.
5. Shall not go out without Leave or beyond the time allowed on pain of Punishment.

6. Shall if able go to Church or such as are Dissenters to some place of Publick Worship at least Once every Sunday and Return to the House as soon as Service is over.
7. All shall be in Bed by Nine O'Clock in the Summer and Eight in the Winter.
8. Shall not Smoke but Abroad and by no means in any Chamber.
9. Persons Convicted of Lying or Swearing shall sit by themselves in the Dining Room the next meal time and have Papers fixt on their Breasts with Infamous Lyer or Common Swearer written thereon and Lose their Dinner.

Rules for the Master

1. That he do Admit no person into the House without an Order from One or both the Church Wardens of the Parish.
2. That he do in no Case Admit any persons till they be first carefully Examined Washed Clean'd and have cloaths. If it be necessary their old cloaths (if worth it) to be Clean'd and Laid by till the poor person be Discharged and then Delivered to the Owner in Exchange for the Cloaths of the House.
3. That he do keep Peace and good Order in the House and permit none to Fight Quarrell or Use Rude and Abusive Language without Punishment, either by loss of a Meal or Confinement.
4. That he do keep able poor to such Work as they are fit for and call them to it by Ring of Bell at the Hours following from Lady Day to Michaelmas from Six in the Morning to Seven in the Evening and from Michaelmas to Lady Day from Seven in the Morning to Six in the Evening.
5. Shall allow them half an Hour at Breakfast and an Hour and Half for Dinner and Play in the Summer and an Hour for the Latter purposes in the Winter and shall allow the Children to play abroad when the Weather will permit and a sufficient time for Learning to Read.
6. That he allow none to go into the Garden but those who are set to work therein.

Rules for the Mistress

1. That she do make Ready the Provisions in a Clean manner and have Breakfast ready by Eight O'Clock in the Summer and Nine in the Winter Dinner at One and Supper when the Workers leave their work.
2. That she see the Rooms kept Clean Swept every Day and washed as often as Conveniently may be and have the Windows set open every Day Rainy and Damp Weather ones Excepted and suffer no victuals to be Eaten out of the Dining Room (Except by the Sick).
3. That she keep the Children's Heads and Hands clean also all the Cloaths and Beds that she Mark all the Linnen with the Letters S P H and keep an Exact Acct in a Book of all Household Goods Cloaths and Linnen belonging to the House.
4. That she or the Master do see all Fires and Candles be put out by Nine O'Clock in the Summer and Eight O'Clock in the Winter. That the Bill of Fare as Ordered be Punctually observed.

NOTE FROM 'THE BUILDER' ON

THE USE OF GYPSUM OR PLASTER FOR CHAMBER FLOORING

At the resumed discussion [on French methods of fireproof building, at the R.I.B.A. on 20 March] Mr. C. C. Nelson read a communication from Mr. H. J. Stevens, Fellow, of Derby, as to the nature of the floors to which Mr. Garling had alluded during the discussion on the 6th. instant, wherein the writer said :-

Gypsum or plaster from the quarries near Derby, and parts of Nottinghamshire, is very extensively used for chamber flooring in this district, and its durability, when properly prepared and laid down, fully equals what Mr. Garling asserted. The coarsest description of gypsum is used, and after calcination, is broken-down with wooden flails. It is kept in a dry state, and when laid, is mixed with water to the consistence of rough mortar, and spread over the wooden joists on reeds or laths to a uniform thickness of 2 inches to 2½ inches. It hardens very rapidly, and the workmen use a long float of wood for levelling it, and on the second or third day it is polished off with boulder stones or trowels. It is desirable that the surface should not be broken by using the floors too soon after they are laid, it is also usual to give a increased hardness by a coat of linseed oil, and in Nottinghamshire the floors are painted, and look extremely well. Two sides of the room have wood fillets laid down, varying in thickness with the superficies of the floor, which, being removed immediately after it is laid, allow for the expansion, which is not only very considerable, but continues for some time. Floors of this material are very strong, and are extremely well suited for cottages, being, in this district, much cheaper than inch white deal - 2s. 3d. to 2s. 9d per superficial yard is the builder's price for laying them down, including reeds, laths for securing the reeds, and plaster. The under surfaces of the joists are edged, and sometimes planed, and the ceiling is formed by the plastering of the reeds between the floor timbers, for which an extra 3d. per yard is sufficient. These floors are to a certain extent fireproof, and having a smooth surface are easily cleaned, and afford no harbour for vermin: on these accounts, as well as for their cheapness and durability, plaster floors, as they are called, are almost invariably adopted in the Midland Counties, where the carriage of the material does not act as an objection. Mr. Garling is wrong as to the finer quality being laid over the coarser material. I believe what is herein stated will give you the detail of the process, and I have only further to observe that it admits of being burnt over again, and it is considered desirable that a certain proportion of old plaster should be mixed with the new: when that is the case the floors are found to set harder.

Relative to the amount of space in proportion to the whole superficies which should be left around the plaster surface to allow of its expansion, Mr. Papworth said, his own experience suggested that an inch and a half on every side of a floor for every ten superficial feet would not be too much. Mr. Wyatt concurred in this opinion, and referred to a loft at the seat of Lord Cardigan, in Northamptonshire, where the walls had bulged from the expansion of a plaster floor, although space had been left originally to provide for this occurrence. The chair, Mr. Inman, stated that floors of plaster, sometimes mixed with coal ashes, were in general use in large mansions in the vicinity of London about eighty or a hundred years-ago. This was the case in some of the upper floors at Hampton Court Palace, where a layer of cockle shells, about 2 inches in thickness, was also introduced in the floors, for the purpose of deadening sound.

[During an earlier discussion on French floors, Mr. Garling had "referred to some plaster floors which he had seen in Lincolnshire in the vicinity of the quarries. These consisted of a body of coarse plaster, with about an eighth to a quarter of an inch of fine plaster as a surface, very finely and smoothly trowelled; and although these were from 100 to 150 years old, they were now as hard as marble." *The Builder* 25 February 1854, 94]

This article was first published in *The Builder*, 25 March 1854, p149.

FROM THE *DERBY MERCURY*

THE DEPOT, DERBY TO BE SOLD BY AUCTION BY EYRE AND SONS

At the House of Mr. Spencer, the New Inn, in Derby, on Monday the 10th of December, 1832, at six o'clock in the afternoon, subject to conditions to be then produced.

ALL those BUILDINGS and PREMISES lately used as a MILITARY DEPOT, in an open and airy situation, adjoining to Lodge Lane and Cherry Street, in the town of Derby, consisting of a modern and substantially built DWELLING HOUSE, with a frontage of 35 feet and 4 inches, and 14 feet 3 inches in depth; - The BUILDING lately used as the DEPOT for ARMS, two stories high, and 52 feet 7 inches in length by 21 feet 2 inches in width, the ground and upper floors of which are each divided into the Rooms; - the BUILDING lately used as the GUARD ROOM, SMITHY, and ARMORY, 39 feet 9 inches by 13 feet 4 inches, and the small detached BUILDING lately used as the POWDER MAGAZINE.

The whole of these Buildings are nearly new, very substantial, strongly built, and in excellent repair, and present every facility of being immediately converted either into a Manufactory, a Brewery, Warehouses, or respectable Dwelling Houses, and their situation for any of these purposes is unexceptionable. Their size, compactness and strength render them particularly available for any Manufacture where Machinery is required, and they certainly present an opportunity such as can but seldom occur, to Gentlemen connected with the Lace Trade.

The Land, including the site of the walls, is, by admeasurement, 1060 superficial square years, and the whole is inclosed by a strong brick wall, coped with stone. The Premises have the additional advantage of double frontage, to Lodge Lane on the one side, and Cherry Street on the other, to each 120 feet.

The premises may be inspected, and further particulars obtained, by applying to Mr. HALL, Spar Works, St Helen's; Mr. JOSEPH FOX, Engineer, City Road; Mr. HARRISON, Engineer, Bridge Gate; Mr. TOMASIN, China Manufactory, Nottingham Road; or to the AUCTIONEERS, Full Street, Derby.

Nov. 27, 1832

Derby Mercury, 28 November 1832

The Military Depot on Lodge Lane was built c1820 by the County of Derby to replace the Ordnance Depot on Normanton Road, Derby which had been built in 1803-5 to the designs of James Wyatt.¹ The Ordnance Depot was closed in 1822 and the buildings advertised for sale by the Office of Ordnance,² but not without comment by concerned members of the public to the *Derby Mercury*.³ According to the Abstract of Accounts for the County of Derby for Easter 1820 to Easter 1821, the cost of the new Depot was £1603 3s 0d for 'Purchase of land and Building Depot' and £21 for 'Plans of Depot'.⁴ Another £24 15s was paid to J and M Gamble for painting the Depot in 1830⁵ but two years later the Depot was redundant and offered for sale, firstly by Mr Brearley in August 1832 and later that year by Eyre and Sons. It had been sold by Easter 1834 for £1205 with further income of £53 9s 7d for 'Interest from the time of the Sale'.⁶ John Whitehurst III, clockmaker, had taken possession of the Depot, either as the purchaser or a lessee, by December 1834. An advertisement shortly after the death of his father, John Whitehurst II, announced both the sale of his father's premises in Irongate and John III's impending move to the Depot Clock Manufactory, Cherry Street to carry on the business.⁷

References

1. Maxwell Craven, *Derby, an Illustrated History*, 1988, p110.
2. *Derby Mercury*, 10 April 1822.
3. *Derby Mercury*, 24 April, 1 May and 8 May 1822. Letters signed by A.B., C.D. and E.F.
4. *Derby Mercury*, 21 May 1821. Abstract of the Income and Expenditure of the County of Derby.
5. *Derby Mercury*, 2 June 1830. Abstract of the Income and Expenditure of the County of Derby.
6. *Derby Mercury*, 23 April 1834. Abstract of the Income and Expenditure of the County of Derby.
7. *Derby Mercury*, 3 December 1834. A drawing of the Cherry Street works can be found in Maxwell Craven, *John Whitehurst of Derby, Clockmaker and Scientist, 1713-88*, 1996, p172.