DERBYSHIRE MISCELLANY Vol 18



Cromford Canal at Codnor Park c.1955

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THE REVEREND ROBERT* PORTER (c. 1558-1617) RECTOR OF ASTON UPON TRENT^b 1588-1617

(by Miriam Wood,

So far as is known, Robert Porter was not a local man and may have come from Worcestershire.^e According to Glover's *History and Directory of Derbyshire*, in which there is a copy of a memorial to Robert Porter and his family, he is described as an M.A. and a fellow of the College of All Souls, Oxford.¹ The *Alumni Oxonienses* (the matriculation register of the University as printed in 1891) lists a Robert Porter of Worcestershire as matriculating at Brasenose College on 20 July 1578 aged 20, as Bachelor of Arts 28 January 1579, a Fellow of All Souls' College in 1580 and M.A. in October 1582.² The Alumni suggests that he was perhaps Rector of Aston, Derbyshire from 1588 and this is almost certainly so.

A survey of clergy in the Diocese of Lichfield and Coventry³ made in 1593 includes an entry for Robert Porter Rector of Aston in which it is recorded that he was ordained by Richard, Suffragan Bishop of Dover, although no date survives in the damaged entry. He was presented to the Bishop of Lichfield and Coventry for examination and approval on 26 July 1588 by the Crown, the patron of the benefice, and was instituted to the Rectory⁴ on 30 July 1588 according to the record of his institution.^{4,5} He would then have been inducted to his benefice, that is given possession of its revenues, probably in August.

Robert Porter appeared at a number of Visitations during his tenure, but unfortunately they give no further information about him⁶ In the survey of clergy referred to above, Porter was described as a master of honourable life and conversation and '*well learned and instructs his flock well*' and in a survey of 1603⁴ he was recorded as a preacher licensed by the Bishop of Coventry and Lichfield. His books and maps, at £33 7s 4d in his probate inventory,⁷ were of some value, so he was apparently the learned man his education and the report in the 1593 survey would lead one to expect. He was still in a minority of parish clergy with a degree in the Archdeaconry of Derby in 1593 (but it was a situation that improved considerably during Porter's tenure at Aston) and his library was larger than that owned by most Derbyshire clergy⁵ (see below).

Aside from the scant information on Robert Porter given by the surveys of clergy and visitation records, there is little to throw light on him as the pastor of the parish. The parish registers do not survive for this period, so although we may suspect, because Robert's will, inventory and glebe terrier are all well-written, that they were conscientiously and neatly kept, we cannot know. One aspect of his work, or at least of what was expected of him (rather than what he was obliged to do) is, however, well documented although it would have taken up a minute proportion of his time: he is found often as a witness to the wills of his parishioners. Thus, he was a witness to the wills of John Cowper in 1592, William Cowper and Christopher Bonsall in 1607, Alice Wright of Shardlow in 1610, Thomas Fayrebrother in 1611 and John Hill in 1612, and no doubt others, but only these few have been examined.⁹ Henry Holden of Wilne made him both a witness to, and an overseer of, his will.¹⁰ Ministration to the dying was a most important duty of the parish clergy, but in addition the Church had long exerted its right to ensure that their last wishes were carried out. It was the Church courts therefore that proved wills, but on a more personal level it was no doubt thought appropriate that the parson should witness or oversee the performance of a will.

Robert Porter remained at Aston for the rest of his life until his death in 1617 aged about 59, when he had been Rector for almost 29 years. What else is known about him and his circumstances, and in particular his personal life, with one exception, comes from his will and inventory of 1617 (transcribed below) and from the glebe terrier of 1612. The exception is that in the memorial to the Porter family recorded by Glover (as above) is unexpectedly a reference to his mother Margaret - we can only speculate that perhaps she came as a widow to live with her son and subsequently died at Aston. Robert was succeeded as the incumbent at Aston by his son John and together they were Rectors of the parish for nearly 49 years.

In the name of God Amen & Rubiet porter of Sylon upon Evont in top tounty of Sarby Cheric, being fick in body but of good and porfort money do make fit my luft will and coffamout in mannor following. Imprimis & Boqueage my fouls unto God weo guly rusahed wodoomed and furtified mos , and my body to boo buvied in for crawrold (nopovo runnionthy it muy bo laid) in an affund good of a ioyfull refurration . Item of give unto my bolound wife the of my parformers with I bouget of Me Charles paget Itim & give unto my founde Robert Portie, and Timothy portier, and to my five older daugs ford Sarah Porter and Hannah Porter, an Sundred pounde appent, to be paid to me daugs tore at the day of their marriag , if they marry whe poir motoor toufout off any of my will it that boy foul gaus but for pound a poor And for my found Robert porter, and Timothy poeter, Robert fall gour gis fo found as it may tonuonionfly bo made of the good , and Timothy gid whom go rommose out of fis Ap prentiship or porty after them my will is fast my find yougon reildron pould pand oury one of form an gundrod marked a poore, given for for portions, to be raifed ab my opprutours finke fit, and to be paid to mo daugglout at for ags of one and twenty or at for day of poir marinage, if for maving us the roufdet of poir mopor boing living, (of our wife my will is boat Goy fall gand but for pounds a poor) and he bo paid to my formal at the ago of towns and firmty. Itim I give unto my Buopper Richard porter forty Billingo Hem & gind unto boo pooro of too parif of Aston forty Billingo to be ginon for at too how of my doroafd, and for pound move to be lout by forty 18 things or Purshid to ropay it at ford your of pin an graf or a row for fat go put in

May. 7. A. 1617.

The opening section of the will of Robert Porter (Reproduced by courtesy of the Lichfield Record Office)

Robert Porter's will

The following is a transcript of Robert Porter's will dated 'May.7. A[nn]o.1617'.7

In the name of God Amen. I Robert Porter of Aston upon Trent in the county of Darby Cleric, being sick in body but of good and perfect memory, do make this my last will and Testament in manner following. Imprimis I bequeath my soule unto God, who hath created redeemed and sanctified mee, and my body to bee buried in the Chancell (where conveniently it may be laid) in an assured hope of a ioyfull resurrection. Item I give unto my beloved wife the estate of my parsonage w[hi]ch I bought of Mr Charles Paget. Item I give unto my sonnes Robert Porter, and Timothy Porter, and to my two eldest daughters Sarah Porter and Hannah Porter, an hundred pounds apeece, to be paid to my daughters at the age of three and twenty or at the day of their marriage, if they marry w[i]th their mothers consent, otherwise my will is that they should have but ten pound a peece And for my sonnes Robert Porter, and Timothy Porter, Robert shall have his so soone as it may conveniently be made of the goods; and Timothy his, when he commeth out of his Apprentiship or shortly after. Item my will is that my five yonger children should have every one of them an hundred markes a peece, given them for their portions, to be raised as my executours thinke fit, and to be paid to my daughters at the age of one and twenty or at the day of their marriage, if they marry w[i]th the consent of their mother being living; (otherwise my will is that they shall have but ten pounds a peece) and to be paid to my sonnes at the age of three and twenty. Item I give unto my brother Richard Porter forty shillings. Item I give unto the poore of the parish of Aston forty shillings to be given them at the time of my decease, and ten pounds more to be lent by forty shillings or one pound, to a poore man for the buying of him an horse or a cow, so that he put in sufficient sureties to repay it at three yeares end, that so it may not be lost but continued to the releefe of the honest poore from time to time, and it shall be lent at the discretion of my Executours while they live, and afterward at the disposall of the minister [?'s' obliterated] and Churchwardens. All the rest of my goods and land, my debts and funeralls (sic) being discharged, I give to my loving wife, whom w[i]th my sonne John, I leave my Executours, and my cosin John Browne, and John Wright, and Goodman Ridge my Overseers.

This I have made my last will and Testament in the presence of John Wright (signature) Thomas Ridges marke (an angular mark somewhat resembling an M)

Probate was granted to Johanna [probably in English Joan] Porter relict and one of the executors named in the testament and reference made to the education of the underage children of the deceased, Sara, Hannah, Rebecca, William, Edward, Samuel and Joan. Joan Porter's oath for the inventory was made at the feast of St John the Baptist [24 June] 161?7.

From his will and grant of probate we have personal details of Robert's family, the names of his wife and of their 10 children, the 5 named in the will and a further 5 in the grant of probate. The bequests to Robert's children amount to the large sum of £733 6s 8d as 4 of the older children are to have £100 apiece, and the 5 younger 100 marks [£66 13s 4d] each. Other bequests are small. One of them names a brother Richard, and, as would have been normal at the time, another was to benefit the poor at Robert's death. He also set up a charity as so many makers of wills did, in his case of a slightly unusual but by no means unique type.

His son John received nothing in his father's will, but that no doubt was because it was intended that he should he the next Rector at Aston. A good deal must already have been invested in him. His further education had been at Oxford, where he had matriculated in 1606, aged only 15, at Christchurch. He became a BA from Brasenose in 1610 and MA three years later.² Then there was the purchase of the next presentation to the Rectory ('*the estate of my parsonage*') undoubtedly intended for his son (see below), which would not have come cheap. One other son had been apprenticed, possibly also expensively, but the cost would have depended on the apprenticeship involved. Exactly how Porter's bequests would have been funded is unclear. A considerable sum of money was owed him as his inventory shows, and the Rector obviously anticipated that his son Robert's legacy would be funded by the sale of goods. There was some land and this, with the residue of the estate, was

made bo MI Robert dunt foin Vourget, Jonias' Fiore, vono tobort Compete the pipt Sar of Mar. Anno Some 1017. at following . Inprimis for a leaf of a olof. Juin Bieteene kme and fivleene voung beafe . Hem leven Brauget Coufes, 3 Provile horfes Jacoles Drivles . Hem & roung Golles, 5 wearing Daluer . Hem (week and Lamber, and it lamber with about fier tem 12 love wine with 2 loves and pigger . Hem have and seale popon a quouno ville . Hem Fre interested, and Thaty Summer, and envenone, Item Mault Bourly, tie, m tre gaunce loufe . Atem Fir, Prafe, Dates, ano Wfeal mitig Outeramber Hem towne growing in the teils. Firm Darto, Surilago, scanes, plouries, lawores sing itmber Atom fleater, Laborro, interes, raunges, maungered, said, quited . Alten Lorfgeares not obre furniture, 2 fone brugert, 2 Bartin reb ; ano Manuer m tre varo 10, 100 Hern factes wirmoning clotys, Shaire on the kilno, would re about inufo . tion a later with tringer in a worthoute and on hue of 2800 m fr gainson Hem Somp, Pare, and an Sanomill . flem a Brewing Trac wet offor matter Trace Hen ove voaled with Stanes a Cur. 2 great rates wit off inn mare, From Citres, Salyets (pite, Cobbaros, with ofer wave smamel -Hom Armo Downelle, a Muffel not ofer furniture. firm Doug Frand, 29 anrelis loomes what woodoon wave some tem pote, bottles, fact traven weiget and froales . Hem Baron pouro beefe, butter, greek, calmcale, greated .___ -- 101 · 1 - 10 - 1/ them prinning wheeld, tares whi o for tronges in fre what gramber . firm 3 Tables m fr had, corner and foolet not a great steff 68

An Inuchtary of the good and Mallets of R. fores of Asien soon iren in fre dounte of Saube, Mouit taken and

The opening entries in the probate inventory of Robert Porter (Reproduced by courtesy of the Lichfield Record Office) left to Robert's wife, one of the executors, and perhaps it was anticipated that these might have to be used to fulfil the will. Moreover, the legacies did not have to be paid immediately but as the children came of age or married. Realistically, it is likely too that not all of this large family would have survived childhood, although so far the Porters had been remarkably successful in rearing so many children.

Robert's education of his eldest son and his purchase from Charles Paget was probably the best way he could provide for John, certainly if he wished to enter the Church. Aston Rectory was a rich living with a large house as will appear below and Robert would have had to buy a considerable property (which he could probably not afford to do) to give John an income such as the Rectory would yield. Robert could not hope to provide so well for his other children. Their bequests would have given them a useful start in life, but ultimately their future would have to depend on how good a marriage the daughters could make with portions of £100 or less and on whether the sons' bequests, education and talents would enable them to make a reasonable living. In this, they were no different from the younger sons and the daughters of other large families.

On the Rector's death his family would normally have had to leave their home as the Rectory house would pass to his successor. In the event, as Robert's successor was his son, no doubt his widow and younger children were able to continue at the house, at least for a time. The family would also have lost the income from the living - the farm produce from the glebe, and the tithes and offerings which provided for them as well as for those parochial expenses which were the Rector's responsibility, such as the maintenance of the chancel. On the other hand, Porter seems to have leased a fairly valuable close (see the first item in his probate inventory below), which lease would have been his own property. In addition, a settlement would have been made on the marriage of Joan and Robert which would have made provision for Joan in the event of her outliving her husband. Its generosity would have depended on the size of her dowry. There is no evidence that Robert Porter had bought any private property in Aston, although his will makes it clear that he owned some land, but the reference unfortunately gives no detail as to how much he had or where it was situated. Robert's inventory does, however, mention some miscellaneous items at Derby and his son's will¹¹ refers to a house and close there, but whether there is any connection between the two references it is impossible to say.

Robert Porter's probate inventory

An Inventary of the goods and Chattels of Robert Porter of Aston upon Trent in the County of Darby Cleric taken and made by Mr Robert Hunt, John Wright, Thomas Ridge, and Robert Cowper^{*1} the xixth [19th] day of May. Anno dom: 1617. as followeth.

[Item]	[valuation]			[valuation in Arabic numerals]*		
Inprimis for a Lease of a Close	xlviii li			£48		
Item thirteene kine, and sixteene young bease	Ix li			£60		
Item seven draught horses, 3 saddle horses, saddles, bridles	xlv li			£45		
Item 6 young Coltes, 5 weaning Calves	xii li.			£12		
Item Ewes and Lambes, and Tith Lambes with other sheep	lxxii li.			£72		
Item 12 store swine with 2 sowes and pigges	x li.			£10		
Item Hay and pease upon a ground ricke	vii Ii.			£7		
Item Rye unthreshed, and Thatch drawne and undrawne	xxxix li	XS		£39	10s	
Item Mault, Barly, Rie, in the garner house	xx li			£20		
Item Rie, Pease, Oates, and Wheat in the Oatchamber	xvii li.	xs		£17	10s	
Item Come growing in the feild	xCi li			£91		
Item Cartes, Carrilags, Weanes, ploughes, harrowes, ploughtimber Hovels moveable, w[i]th other wood and timber in the yard	xxii li.			£22		
Item fleakes, Ladders, cratches, raunges, maungers, pales, gates	vi li.			£6		
Item Horsgeares w[i]th other furniture, 2 stone troughes, 2 Cartopes and Manure in the yard	vii li.	ixs	iiiid	£7	9s	4d
Item sackes, winnowing clothes, Haire on the Kilne, poultry about house (sic)		liiis	iiiid	£2	13s	4d
Item a Lathe with thinges in a workhouse, and an hive of Bees in the garden		xxis	iiiid	£1	1s	4d
Item Hemp, flaxe, and an Handmill	[missing	<u>;]</u>				

Item a Description los deside adam anallas Los de			ĩ	62		
Item a Brewing lead with other smaller Leads		xls		£2		
Item oxe yoakes with Teames, a Try, 2 great rakes ,		xxxviis	viiid	£1	16s	8d
w[i]th oth[e]r iron ware				62	10	
	iii li	xiiis	iiid	£3 £3	13s	4d
	iiii li iiii li	XS		£3 £4	10s	
woodden ware unnamed	iiii ii	12		24	105	
Item pots, bottles, Jack, Leaden weights and scoales		XVS			15s	
	vi li	iis	viiid	£6	2s	8d
Item spinning wheeles, Cardes, w[i]th other thinges in		xvs			15s	
the Hall chamber		122		100-201		
Item 3 Tables in the Hall, formes, and stooles w[i]th a great chest		1s		£2	10s	
이 있는 것은 것을 가지 않는 것이다. 이상에 가지 않는 것은 것은 것은 것은 것은 것은 것은 것이다. 것은 것은 것은 것은 것은 것은 것은 것은 같이 있는 것은	iiii li			£4		
Chaires and stooles Item Pewter dishes of divers sorts, plates, sawcers, porringers	iiii li	XVS		£4	15s	
Item Basons, Flagons, pewtercups, Candlestickes, Saltsellers		xxviiis		£1	8s	
Item a Bason and Ewre, with pewter platters and one still		xviiis	iiiid	~.	18s	4d
	viii li	xiiis	ivd	£8	13s	4d
Item Brasen morters, Chafing dishes with other brasse unnamed		xxxs		£1	10s	
	xiii li			£13		
것 그와 동안을 것 그는 것 같아요. 그는 것 것 같아요. 그는 것 것 같아요. 이는 것 같아요. 이는 것 같아요. 것 같아요. 것 같아요. 집에 있는 것 같아요. 전에 집	vii li	xs		£7	10s	
w[i]th silver			- 1	64	10	
	vi li iii li	XS		£6 £3	10s	
a table and Trundlebed				25		
Item in the Curates chamber one bed w[i]th the furniture		x?ls		?£2		
Item in a Litle chamber by it, one bedsteed a trundlebed		xxvis	viiid	£1	6s	8d
w[i]th furniture						
Item in the servants chamber one bedsteed w[i]th furniture		XXS		£1		
and stooles						
Item Cushians and Curtaines in the Nether parlo'r	x li	XXXS		£1 £10		
Item in the great chamber, a bedsteed a Trundlebed w[i]th their furniture	хп			110		
	xvii li			£17		
Cushions, Chaires, stooles, and a great presse in the same chamber				1000		
Item in the farre still parlo'r a bedsteed w[i]th furniture		xxxs		£1	10s	
	iiii li		- 1	£4		
chests a desk						
Item in the Maides chamber 2 bedsteeds w[i]th furniture, and bed w[i]th furniture in a Litle chamber next the great chamber	vi li			£6		
	v li	xviis	viiid	£5	17s	84
	xviii li	AVIIS	vind	£18	175	ou
	iii li			£3		
	vii li			£7		
	vi li			£6		
Item doores moveable about the house, and woodden ware in		xls		£2		
the buttery unnamed				622	7	
Item his bookes and Mappes Item a presse, a Table, Chaires, deskes in the study with seeling	xxxiii li			£33 £1	/S	4d
Item a Table, boardes, pales, railes at Derby		xxs xls		£2		
	xxx li			£30		
Item debts due unto him	Clxxi li.	xvis	xd	£171	16s	10d
Summa totalis	850 li	7s	2d			

*1 the appraisers include the head of the Aston Hall family and 2 of the more substantial farmers in Aston parish, but nothing is known of Thomas Ridge.

*² furniture meaning items belonging with the armour, etc mentioned, or, later in the inventory, belonging with the beds referred to e.g. hangings, mattresses, etc

The total value of Robert Porter's inventory is astonishing - and is even greater than given, as the total actually adds up to over £867, exclusive of a sum no longer legible but included in the original totalling (though unlikely to have been a substantial addition to the final sum). It was far greater by several hundred pounds than the totals for the 3 highest valued inventories known for Aston parishioners at this period - those of Thomas Hunt gentleman, owner of Aston Hall and of an estate of perhaps 170 acres,^{12,13} Alice Wright tenant of Shardlow Manor, probably somewhat smaller than the Aston Hall property but still more than 100 acres,^{9,14} and John Hill husbandman who apparently owned only a small farm of one yardland, although his inventory suggests he may have farmed about 3 yardlands (some 70-80 acres).⁹ The glebe farm was between 80 and 90 acres (see below). Hunt's inventory of 1597 amounted to a little under £260,¹² that of Alice Wright widow in 1611 to almost £350 and that of John Hill in 1612 to £342.⁹ These 3 were, according to the lay subsidy lists of 1603 and 1609, amongst the wealthiest of Astons and Shardlow's inhabitants (the assessments were on goods only in Aston, and the value of lands not taken into account).¹³

The inventory appraisers concerned themselves first with the valuation of the stock and crops of the glebe farm. It is a reminder that the Rectory house was also a farm house and the Rector a farmer, although how closely he involved himself with the running of the glebe we do not know. Undoubtedly he would have been concerned that it was run to the greatest advantage, as he and his family depended on its produce (as well as the yield of tithes) for its livelihood. The stock, horses, hay and peas, the grain and corn growing in the ground were valued altogether at £374, much more than the value of these items in the inventories of Thomas Hunt, Alice Wright or John Hill. It is, however, difficult to compare the grains and stock in these inventories as farms were different sizes and the amount of grain and number of animals would vary according to the time of year. Thomas Hunt and Alice Wright died in the Winter and their stock, corn, etc. valuations were both under £200. It is perhaps feasible to compare Porter's and Hill's inventories as they were made at the end of May and June respectively, and they may, although this is uncertain, have farmed a comparable area of land. Even so, the value of Hill's horses, stock, grain, etc. including corn in the field (at £105 greater than Porter's at £91) though estimated at over £230, was still well under the value of Porter's. The unknown quantity is how much of the Rector's stock and produce is due to tithe payments, whether corn left over from the Autumn harvest or lambs born in the Spring. The reference to tithe lambs evaluates them along with other sheep but tithe is not otherwise mentioned. The comparison with John Hill, however, suggests that a considerable proportion of Porter's grains and sheep were tithe receipts - and we may assume that much of the tithe corn had been already used or otherwise disposed of since the Autumn.

The Rectory house was a substantial building, containing 15 rooms, though some of them were no doubt small. No kitchen is named, but this is quite normal in inventories of this period (Thomas Hunt's is a case in point) as cooking might still be done in the hall or main living room. In this case, however, the hall is said to hold 3 tables, forms, stools and a great chest but nothing else. The cooking equipment is listed without reference to a room so whether it took place in the hall or in a separate building, also a possibility, is not evident. Other domestic offices, except the buttery, are not mentioned either, although there are references to still parlours, suggesting perhaps rooms which had once been (a) still room(s). A garner, an oat room and a work house are also mentioned, which may be outside the house. In the Aston glebe terrier of 1612 (a survey of the church's property - see below) there are said to be 19 bays of barns and houses of office. The barns would presumably have included a tithe barn (see below), at least another barn, stables and probably a cow house, storage for farm equipment perhaps and for firewood, but these last two were probably provided for in the hovels. The houses of office are more difficult to assess - a house of office might mean a privy, but 'office' could also refer to a menial building. The probate inventory of John Porter, Robert's son and also Rector, lists a dairy house, a larder, a bakehouse and a brewhouse - but still no kitchen Whether John built these service rooms on to the house or whether Robert's appraisers had not named them any more than they had mentioned the barns we do not know.

According to the glebe terrier the house comprised 5 bays of building, but as a bay was not a fixed measurement it is impossible to say how long the house was. The probate inventory for Robert's son John made in 1637 seems to describe what is basically the same house, though with the possible addition of the various service rooms as noted above. It is unlikely to have been rebuilt during the Civil War and Interregnum period and John's house, and possibly Robert's, may be the house which in the Hearth Tax Assessments of 1662-1670 was taxed for 6 hearths, after the house which must have been Aston Hall (9 hearths), the second largest in Aston¹⁷ - most people were taxed for only 1 or 2 hearths.

The family obviously lived comfortably and there were, besides necessities, items of silver and expensive linen (though less than his son was to have). A considerable quantity of furniture, furnishings, linen, tableware and so on would, however, have been needed for such a large household. Even if not all the 10 children were at home together, when the oldest were sent away to university and apprenticeship, there were still many left behind. As the family grew, more servants must have been needed for child care, food preparation, laundry and housework and the servants' and maids' chambers show that some must have lived in. In addition, the curate had a room in the house and it may be that Porter's mother lived with the family.

The various activities of the household can be seen from entries in the inventory, many of which will have been the province of Robert's wife Joan. The poultry and the garden would normally be under her supervision together with preserving and otherwise making use of the products of the garden and orchard (a still is listed in the inventory). Malt, barley and brewing leads (lead vats) show that the household made its own ale or beer, and not only the cheese and butter (although there is no reference to dairy equipment) but also the bacon would have been made on the farm. All of this would have been Joan's responsibility. There are spinning wheels and '*Cardes*' (for combing and separating out fibres of wool, flax and hemp) as well as stocks of hemp and flax. The '*Loomes*' referred to, and listed with hogsheads, barrels and other wooden ware 'unnamed', however, will almost certainly be tubs or vats and not relate to weaving, which was probably not done at the house. With so many people about, adults and children, family and servants, and so much farm and domestic work to be done, the house and yard must have been a hive of activity.

Robert Porter had his own study to which he could retreat, furnished with a press (large cupboard), table, chairs and desks, and a large library of books and maps valued at £33 7s 4d. To have a study was in itself a new development as Richard Clark points out in his article on the Derbyshire clergy's book ownership 1530-1650.⁸ In most inventories books were valued rather than counted (as in Robert Porter's inventory), but a few number the books. The article refers to libraries of 168 books, 80 plus hooks and 35 itemised books and their values of 'not above' £6, £8 and £5 16s 2d respectively. Robert Porter's hooks were the second most valuable noted (the most valuable library was that of his son John 20 years later) and the valuation of over £33 suggests that his library numbered at least 200 volumes and very likely 300 or more. They were probably predominately of a religious nature, but the intriguing reference to maps suggests that Porter's interests might have ranged more widely. His son John was said in his inventory to have 9 maps and it would be interesting to know whether these were all from his father and what they depicted.

Robert Porter's inventory could, except from the size of his library, still not commonly found in a layman's inventory, in many ways have been that of a particularly prosperous yeoman of the period (although as we have seen a 'gentleman' such as Thomas Hunt could have a far less valuable inventory). It shows him with a well equipped farm and a large quantity of grain and stock (but it is difficult to evaluate this because tithe dues may also be concerned), a well furnished family house - and a liking for some display in the silver he owned. He was a man ready to do his civic duty for which he had some armour, harness (also meaning armour) and a musket with other furniture' [items], and a good neighbour and friend who would lend money when approached. The amount owed him was quite considerable at £171 16s 10d (and formed a large proportion of his inventory total), but nothing is known of the circumstances in which these loans were made. However, the study of inventories has shown that it was normal in the l6th and 17th centuries, in the absence of banks, for people to borrow from relatives, friends and business associates (often on the security of a bond) and it would seem that Robert Porter was prepared to lend. There is just one reference known to a specific loan by him in the inventory of Thomas Hill of Aston husbandman 1594,18 which mentions that Hill owed £7 to Robert Porter (but only a few Aston inventories have been inspected). Inventories sometimes indicate whether debts are 'sperate' that is, likely to be repaid or 'desperate' but in Porter's case there is no such indication. Robert's will as noted before also showed him as a man of his times with its charitable giving.

The Glebe Terrier 1612

A glebe terrier is a survey of the property and dues belonging to a benefice. The first terrier surviving for the parish of Aston was taken on 9 September 1612 during Robert Porter's tenure of the benefice. It is beautifully written in an excellent, clear hand, as is Porter's will and inventory.¹⁶ The most personal part is the short description of the dwelling house (already mentioned) and its surroundings, which included 2 cottages, an orchard, 2 gardens, and 2 closes (fields) one called the Mote-yard, the other Badcraft.

The house, as we have seen, was large but it is the extent of the other buildings, the 19 bays of barns and houses of office, which is so impressive. We know from a later terrier of 1693 that the main barn alone consisted of 7 bays,¹⁹ and there is no reason to think it did not exist or was appreciably smaller earlier in the century, certainly when the total number of bays for barns and other buildings is given as 19 in the 1612 terrier. This large barn was no doubt the tithe barn, although the term is not used in the terriers. It is, however, used in the probate inventory of Robert's son John (mentioned above) and dated January 1637.

Aston was an open field township at this time (and until 1763) so the glebe consisted of numerous strips of land in the great unenclosed fields and in the common meadows. The 1693 terrier describes the glebe as $3\frac{1}{2}$ yardlands, in all 80 acres and $8\frac{1}{2}$ acres of meadow with cow pastures. It was a larger than average farm, as most farmers in Aston had only 1, $1\frac{1}{2}$ or 2 yardlands (probably a yardland was about 24 acres of arable and meadow). He also leased a close. Although this would have meant that the Rector was better off than most it cannot alone account for the large total value of his probate inventory. which was inflated by his tithe receipts.

In the 1763 enclosure award for Aston township (not the parish as a whole) the Rector was allotted one seventh (not be it noted one tenth) of all the land enclosed in lieu of tithes and other dues and from the residue an allotment for the glebe.²⁰ As a result, in a township of about 1750 acres, or a little more, he was allotted 240 acres in lieu of tithe and 71 acres for his glebe. He had already in the enclosure of Aston Moor and Shardlow been allotted 49 acres in lieu of tithe in Aston and 100 acres in Shardlow (a township of 1500 or so acres).²¹ The grand total was 460 acres. Only 71 acres was for the glebe and if the remaining 389 acres was calculated to be the equivalent of the value of tithes and dues in the parish, it can be seen just how valuable the tithes were. (In fact, even this did not represent the whole of the tithe due to the Rector as 240 acres of Shardlow and (Great) Wilne still paid tithe in kind after the enclosure.)²²

Footnote - the living (benefice) of Aston upon Trent

The patron of a benefice owned the advowson or right to select the next incumbent of a living when it became vacant. He presented the person chosen to the Bishop for examination and approval. This advowson or right of presentation was treated as a piece of property, often owned by a layman who could use it to provide for a son or other relative, or if no one in his family wished to enter the church, then it could be sold. The owner could simply be paid to present a particular person, the next turn might be sold to be used as and when the purchaser needed it or the advowson might be sold off to a new owner in perpetuity. The richer the living the more valuable it was as a piece of property. In their introduction to the *Visitation Returns .from the Archdeaconry of Derby in the 18th century* the editors point out that only 4 clergy incomes were valued at over £250 with Aston the richest. In 1772 it was said '*The reputed yearly value is upwards of £300*',²³ but 56% of benefices were worth less than £100, of which 21% were worth less than £25. It was a state of affairs resulting from the impropriation of tithe by laymen, but Aston parish and clergy did not suffer from this diversion of church dues..

Robert Porter or his family must have been comfortably off, as they could not otherwise have afforded to buy so rich a living as Aston from the Crown, the patron at the time Porter became the Rector of Aston. In his will, however, Porter states that he has bought 'the estate' (that is, the advowson or next presentation) of his parsonage, meaning the living not the house although that, of course was part of the living, from Mr Charles Paget and not from the Crown. In fact, the patron before 1587 had been the same Charles Paget (himself a Catholic), a younger son of Sir William Paget, a privy councillor and secretary of state in the last years of Henry VIII and prominent in the politics of the reigns of Edward VI and Mary. He died in 1563. Sir William had bought the Manor of Weston together with the advowsons of Weston and Aston Rectories, formerly the properties of the Abbey of Chester and then for a short time the Diocese of Chester in 1548²⁴ and settled them on Charles, who finally came into his inheritance in 1578.²⁵ His involvement with Mary Queen of Scots led to his attainder and the confiscation of his lands in 1603.²⁶ Robert Porter must therefore have made this purchase sometime between 1603 and 1612, the year of Charles Paget's death.

As has been seen, Porter left the parsonage to his wife, and, when following his death his son John succeeded Robert (he was instituted on 20 May 1617),⁴ the patron was said to be Joan Porter widow for this turn only. By this time Charles Paget was dead, having left Weston and the two advowsons to his niece and then her daughter Mary Gerard. It was his great niece who inherited the estate and married Anthony Roper of Eltham in Kent esq. and the advowsons therefore passed to the Ropers,²⁷ although the '*turn*' to present on Robert Porter's death was exercised by Joan Porter.

Notes

- a Lists of Derbyshire Clergymen 1558-1662 by Richard Clark (see Reference 4 below) gives Richard Porter, but Robert is undoubtedly correct
- b Aston upon Trent is the ancient parish, which included Shardlow and Great Wilne until 1838.
- c Another Robert Porter is listed in Alumni Cantabrigienses, matriculating in 1578 at Cambridge, but Glover's copy of the memorial in Aston church to Robert Porter (see Reference 1 below) describes him as a fellow of All Souls College, Oxford, as was Robert Porter of Worcestershire.
- d A Rectory was a living or benefice, not as in modern usage, a house where the Rector lived. The house was part of the living, but at this period would probably be referred to as the Rectory house.
- e The Roman numerals in the inventory have been converted to Arabic numerals by the transcriber. The currency was pre-decimal, pounds, shillings and pence, as follows: li = £, there were 20 shillings (s) in a pound and 12 (old) pence (d) in a shilling. One new penny is roughly equal to two and a half old pence

References

Abbreviations: DRO Derbyshire Record Office LRO Lichfield Record Office

- 1. The History of the county of Derby. The Materials collected by the Publisher, Stephen Glover, Vol 11, 1829.
- 2. Alumni Oxonienses The Members of the University of Oxford, Oxford, 1891.
- 3. Lambeth Palace Library, Carte Antique et Miscellanea, Vol XIII/37 m. 14.
- 'Lists of Derbyshire Clergymen 1558-1662' by Richard Clark. The Derbyshire Archaeological Journal, Vol. CIV, 1984.
- 5. The National Archives, E331 /C and L/6.
- 6. LRO B/V/1/23-25, 29.
- LRO B/C/11, Will and probate inventory of Robert Porter 1617.
- 'His bookes in the studie': An assessment of book ownership among the Derbyshire clergy, 1530-1650 by Richard Clark, *Essays in Derbyshire History Presented to Gladwyn Turbutt*, Edited by Philip Riden and David G. Edwards, Derbyshire Record Society, Vol XXX, 2006.
- LRO B/C/11, Wills of John Cowper proved 1592, Christopher Bonsall and William Cowper proved 1607, Alice Wright and Thomas Ferebrother proved 1611, John Hill proved 1612.
- 10. DRO D3155/ Deeds 6846.
- 11. LRO B/C/11, Will and probate inventory of John Porter 1637.
- 12. LRO B/C/11, Will and probate inventory of Thomas Hunt 1597.
- 13. DRO D779 B/T 109-110.
- 14. DRO D3155/WH 6521.
- 15. DRO D3155/WH 6446, 6482.
- 16. DRO D2360/1/7/1.
- 17. Derbyshire Hearth lax Assessments 1662-79, Edited by David G Edwards, Derbyshire Record Society, Vol VII, 1982.
- 18. LRO B/C/11, Probate inventory of Thomas Hill 1594.
- 19. DRO D2360/1/7/2.
- 20. DRO Q/RI 9, Enclosure Award Aston 1763.
- 21. DRO Q/R18, Enclosure Award, Aston Moor and Shardlow 1757.
- 22. DRO D1326 A/P 3b, Tithe Award Shardlow 1849.
- 23. Visitation Returns from the Archdeaconry of Derby 1718-1824, Edited by John Beckett, Margery Tranter and Wendy Bateman, Derbyshire Record Society, Volume XXIX, 2003.
- 24. DRO D779 B/T 233.
- 25. DRO D779 B/T 231.
- 26. DRO D779 B/T 158.
- 27. DRO D779 B/T 172-5.

THE MELTON FORWARD CONTROL

(by Keith Reedman,

A noticeable difference exists between the appearance of lorries in Europe and trucks in the USA. In Europe the driver's cab is usually right at the front and in the USA the driver sits behind the bonnet, which to our eyes seems old fashioned. The general adoption of forward control in Europe owes something to a wholesale greengrocer in Long Eaton.

Not long before the First World War, the Nelson brothers, William and Thomas, came to Long Eaton from Shepshed in Leicestershire and founded a wholesale fruit and vegetable business. Bill Nelson had previously worked for a Loughborough based merchant and had been making deliveries in the Long Eaton area, so was familiar with potential customers. Originally the brothers operated from a disused theatre building in Queen Street which was vacated in 1910 when the new Palace cinema was opened in the Market Place.¹

In 1914 the brothers built a pair of semi-detached houses in Northcote Street² for their own occupation with a range of stables and cart sheds at the rear and an office at the yard entrance. In 1919 they added a large warehouse at the rear³ which contained a sub-basement for the specific purpose of ripening bananas. Exactly when they moved from horse to motor transport is uncertain but they were using motor lorries during the 1920s. By 1932 they had decorated one for the local hospital carnival (fig. 1).



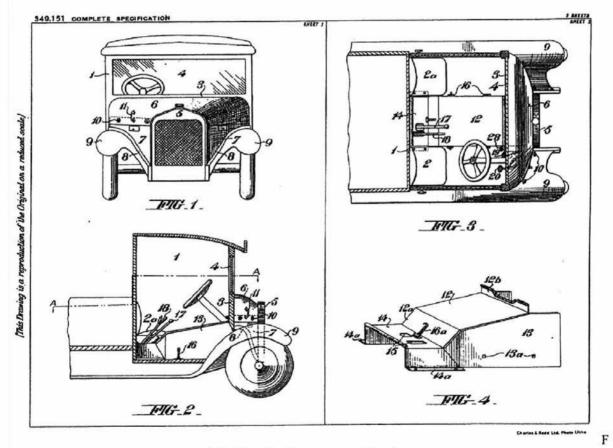
Fig 1. Nelson Brothers' lorry decorated for an early 1930s carnival

The motor lorries of that time were often supplied by manufacturers with a driver's cab but without any other bodywork. Coach and body builders would then provide the load platform to order, suitable for the customer's requirements. Evidently one of Nelson Brothers' lorries was ill-suited to the job because the load platform was too small. So toward the end of the 1920s they asked Noel Crowe, owner of the local garage business Wallis & Co Ltd, to extend the platform.

Noel John Crowe (1908-?) was the son of Emmanuel Crowe, one of a dynasty of Crowes who had all been in the Long Eaton lace industry. The 1920s had seen a dramatic decline in the lace trade and in 1926 when Noel left

school (Trent College, Long Eaton) he had no intention of joining his father's business. Instead he persuaded his father to lend him £900 to buy a garage business from Wilfred Wallis. This business did not have a long history, having been set up by Wilfred Wallis after the death of his father William in 1921. William Wallis had been a partner in the Long Eaton lace machine building firm of Wallis & Longden and Wilfred had been apprenticed to that firm. After his father's death Wilfred submitted plans to the Long Eaton UDC to '*Erect Motor Garage Shop, showroom & Offices ... in Derby Road*.⁴ Subsequently a substantial workshop building in Oxford Street which had been built in 1906⁵ and which backed on to the Derby Road showroom was used for the business. After selling the motor business to Noel Crowe in 1926, Wilfred Wallis retained the showroom on Derby Road and set up shop as a dealer in wireless sets which were just then becoming the latest trend.

Having acquired the Wallis motor business and incorporating the firm as Wallis & Co Ltd in 1926, Noel Crowe expanded by buying another local garage on the corner of Nottingham Road and Conway Street which had been started in 1907 by Laucelot Harriman, son of another local lace manufacturer. With Crowe having well established himself in the motor trade in Long Eaton it is not surprising that the Nelson brothers should have asked him to modify their lorry. In the event, Crowe decided that extending the load platform of the lorry was not a practical proposition as it would have moved the centre of gravity of the load too far back in relation to the rear wheels, causing instability. However, he had a solution: by re-siting the driver's cab over and to one side of the engine, the load platform could be increased by the area formerly occupied by the cab. This solution was so satisfactory that on 4 March 1930 Noel Crowe applied to patent his idea. Patent number 349,151 was accepted on 28 May 1931, titled 'Improvements in or relating to Motor Road Vehicles'⁶ (fig. 2).



ig 2. Drawing for patent specification.

The main patent specification was '...to provide an improved construction and arrangement ... wherein the carrying capacity is increased by locating the driver's cab over the engine instead of, as is customary, at the rear of the said engine.' And 'to provide a motor vehicle with forwardly arranged driver's cab ... wherein the entire engine is readily accessible without dismantling any part of the vehicle body'.

It seems that the Patent Office was generous. The positioning of a driver's cab right at the front and above the engine in a road vehicle was not novel. Thorneycroft of Basingstoke had a steam wagon thus arranged before 1900 and by 1922 their type W petrol engined lorry had forward control (fig 3). On the continent both Panhard & Levassor in France⁷ and Benz in Germany⁸ had similar arrangements before the First World War. Even in the USA a forward control was built on a truck before 1920⁹ but it never caught on there. By the time of Crowe's patent in 1930, forward control was well established in Britain but only a small proportion of lorries were built in this configuration and of those, most were the heavy load types. Some manufacturers offered the same vehicle with both layouts. It seems that although Crowe's patent was used to convert existing vehicles it was mainly employed by manufacturers to convert their existing conventionally designed lorries to forward control.

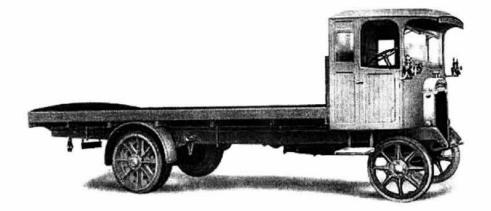


Fig 3. Thorneycroft type W lorry of 1920-22

Noel Crowe named his idea the Melton Forward Control, taking the name Melton from his house on Derby Road, Risley, near Long Eaton. The term commonly used was 'Forward Control' and the idea of the conversion was quickly taken up by many motor manufacturers including Ford, Morris, Dodge, Commer, Reo, Studebaker & General Motors (Bedford). To cope with the conversions he was asked to carry out, Crowe expanded his garage site southwards in Conway Street. Such was the demand that he installed a 125 ton mechanical press to produce cab parts for Morris Commercial vehicles and opened a depot in Burnt Oak, Edgware to deal with work for both Ford at Dagenham and General Motors at Hyde in Middlesex.

Quite quickly during the 1930s most manufacturers incorporated Forward Control into their basic design and Crowe began to accept a royalty payment rather than to manufacture components for conversions. For instance, the lorry manufacturer ERF, founded in 1933, adopted forward control in its first designs.¹⁰ So although Crowe continued to be make bodywork pressings for some years he could see that the motor manufacturers would not continue to rely on his limited production and sought an alternative product. By 1933 it had been decided to use the capacity of the large mechanical presses to manufacture stainless steel sinks and the trade name of 'Leizure' (later changed to Leisure) was adopted.

Stainless steel sinks had been an American idea and it seems ironical that the forward control had been quickly adopted on this side of the Atlantic by American vehicle manufacturers without it becoming standard in their homeland. The stainless steel sinks which were produced in quantity by 1935 were new to the British market but were very expensive and by 1937 cheaper vitreous enamelled pressed steel sinks were manufactured. Crowe also manufactured, for a short period before WW2, '*Walco'* hand operated motor rollers, an example of which is preserved in Erewash Borough Museum at Ilkeston (fig 4). When the site on Conway Street became too small the company expanded to a large site on Nottingham Road to the east of the High Level railway line.

In 1954 Noel Crowe sold the business to Allied Ironfounders for the then large sum of £750,000.¹¹ The business which has now evolved into Leisure Consumer Products, part of the Aga Rangemaster Group, still manufactures Leisure stainless steel sinks in Long Eaton at a large factory which was purpose-built in Meadow Lane in 1956-8. The garage business which was separated in the 1950s still operates on Nottingham Road under the badge of Kwik-Fit but the 1907 Conway Street garage was replaced by a block of flats in 2005. Wallis's garage

in Oxford Street now operates as ATS Euromaster and the former showroom at 37 Derby Road, which after the Second World War became a television shop, is now Ellis-Femor & Negus, solicitors.

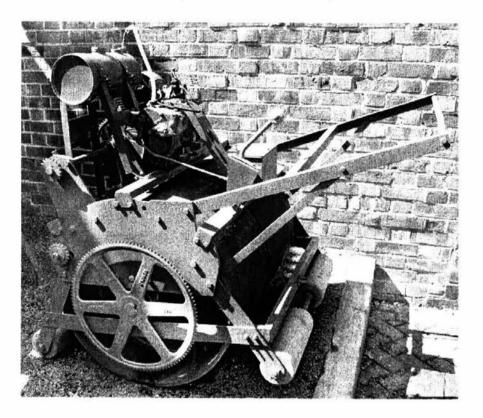


Fig 4. Walco roller

Following the death of the original Nelson brothers the firm continued to operate within the family. William's children, Gerald and Jessie, and Thomas's children, Jack and Arthur, carried on until the business was sold shortly before Gerald Nelson, the youngest, retired in 1987. The houses and warehouse were demolished for redevelopment in 2009 and the firm is no longer trading.

References

- 1. Verbal information from Mrs Miriam Nelson.
- 2. Long Eaton Urban District Council building plan.
- 3. *ibid* 2342.
- 4. *ibid* 2492.
- 5. *ibid* 2002.
- 6. Patent Specifications. British Library.
- 7. Nicholas Faith, Classic Trucks, Boxtree, 1995, p17.
- 8. *ibid*, pp 7, 40.
- 9. *ibid*, p117.
- 10. Pat Kennett, ERF, Patrick Stephens Ltd, 1978.
- 11. Daily Express, 7 October 1954.

Acknowledgements

I am grateful to Mr Ralph Brown formerly of the Leisure Company for initially bringing the Melton Forward Control to my attention. My thanks also to Mr Mike Bufton of Aga Rangemaster for allowing me to use information from an unpublished company history. Mrs Miriam Nelson has supplied valuable information and I am also grateful for the help and advice given by Margaret Alsopp, Caroline Marshall, Gerald Newbrook, Norman Painting and Brian Waters.



Fig 5: Morris type C with forward control typical of Crowe's patent. Photo Roy Streetton

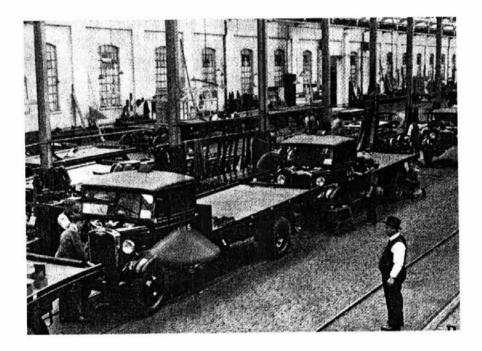


Fig 6 Morris C type forward control lorries having their cabs assembled at Wolverton LMS works

LIMESTONE QUARRIES NEAR PEAK DALE, HIGH PEAK

(by Derek Brumhead,

Two huge limestone quarries (Tunstead and Old Moor) in the vicinity of the village of Peak Dale near Buxton in the High Peak, produce over 5m tonnes of limestone a year and can be viewed from footpaths (rights of way) which provide magnificent vantage points. The operating plant can readily be identified as well as the techniques of drilling and blasting.

Although Carboniferous Limestone gives rise to the beautiful scenery of the White Peak, it is also one of our most valuable economic resources and quarrying is an important industry. Tunstead quarry (SK 093693), originally opened by ICI in 1929 and now operated by the Tarmac Group, is located 4 km east of Buxton, near the village of Peak Dale (SK 090762) in the High Peak of north west Derbyshire. The main face, which is 2.5 km long, is located in the Chee Tor Rock, which is approximately 125m thick, and one of the purist limestones in the world, averaging 98% CaCO₃, with certain beds exceeding 99% purity. The overall dip is constant, averaging 1:7 to the east. A series of faults, progressively upthrowing to the south has exposed almost all of the Chee Tor succession, while that portion south of Fault IVa brings up the underlying Woo Dale Limestone.

The quarry is near the village of Peak Dale (SK 090762) and there is a convenient parking space at P_1 on Fig 3. Although not private it is often used during the week by limestone lorries, so it is advisable to double park at one end. From here follow a track south-eastwards to a magnificent view (A) into Tunstead quarry from the footpath, a right of way, which runs (not too closely!) along its northern edge. A labelled photograph of this view is provided (Fig 1) and I am grateful to Steve Hill, the estates manager, for identifying the plant for me.

Quick lime (calcium oxide), hydraulic lime (calcium hydroxide), milk of lime, cement, ground lime and aggregates are some of the products of this quarry which are put to an enormous variety of uses in our everyday life (Fig 4). This high purity limestone is used in a number of industries where the chemical properties as a basic oxide, a flux, a neutralising agent or a source of calcium are important. It is used in the manufacture of soda ash (sodium carbonate), glass, metallurgical flux, sugar-beet refining, wire drawing, water treatment, paints and rubbers, limestone aggregates, and much else. Cement (a new dry process plant was opened in 2004) is an important product at Tunstead, since clay which occurs in wayboards (thin seams of volcanic ash), joints and fissures is available in large quantities from washing at the crushing plant. A second plant is the subject of a planning application.

Tunstead along with the adjacent Old Moor quarry is the largest producer of high purity limestone in Europe, over 5.5m tonnnes annually. One of the most recent uses of limestone is in flue gas desulpherisation at coal-fired electricity generating stations, and nearly a million tonnes a year is sent to the Trent valley and elsewhere. Woo Dale Limestone is slightly less pure with a MgCO₃ content making it unsuitable for some chemical uses. Much of it is used therefore for concrete aggregate and roadstone.

At present (June 2009) a Maerz Kiln is being built (Fig 1). The design makes it possible to burn limestone having particles in the size range 10 to 30 mm, which could hitherto not be burned in shaft kilns. The kiln is characterised by the parallel flow of limestone and combustion gases in the kiln, and the regenerative preheating of combustion air. Two shafts containing the material to be calcined are connected to each other by a crossover channel at the bottom end of the burning zone. Both shafts are charged alternately.

On returning along the track, a huge mountain of spoil is seen on the left. This is associated with the working of a thick dolerite sill (Waterswallows quarry) which was worked by Tarmac before it closed (Fig 3). Returning to the cars, drive to a small parking space (P_2) just over Buxton Bridge. Alternatively, or on weekdays when this may be occupied, park in Peak Dale village (P_3).

From Buxton Bridge follow a path to viewpoint B where there is a view over the railway to the impressive shaft kilns. The original tiny ICI quarry is next to the railway line. Opened in 1929, this was adjacent to the then Midland Railway line from Manchester to Derby and London, with a link to the ICI Cheshire chemical works. Sidings were built to convey the limestone away and today these have been greatly extended so that hopper trains can be directly loaded under cover with lime, cement and aggregates.



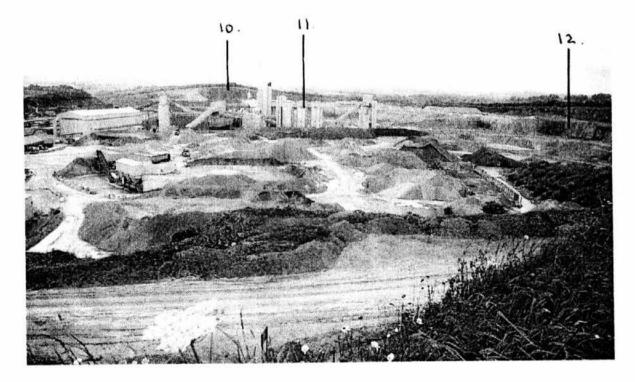


Fig 1. Viewpoint A: Tunstead Quarry. Key: 1: Shaft Kilns, 2: Kiln Feed, 3: Hydrated lime and milk of lime,
4: Maerz Kiln (under construction), 5: Cement Bagging Plant, 6: Aggregate Plant, 7: Old Moor Quarry,
8. Imported materials for Cement Plant: sand, clay, mill scale, gypsum, coal, petcake, 9: Limestone silo for Cement Plant, 10: Woo Dale Limestone, 11: Cement Plant, 12: Chee Tor Rock.
I am grateful to Steve Hill, Estates Manager for this information. June 2009.

From here continue along a rough field path, passing through some stiles, until reaching a magnificent view (C) into Old Moor quarry (SK 105743) which is linked to Tunstead quarry by a causeway over Great Rocks Dale, which carries the railway. It has been in operation for nearly thirty years, and has four bench levels or 'lifts'. A fifth level is planned which will reach down into the Woo Dale Limestone. This limestone is about 400m thick, and a borehole locally has shown that at its base is an unconformity with rocks of possibly Ordovician age. Evidence of the quarrying technique can usually be seen here, a row of drill holes punched by a rig along the edge of the limestone face. These drill holes are filled with explosives which blast down the limestone into heaps for removal by 100 tonne dumper trucks and taken for processing into Tunstead quarry.

If there is time or inclination it is possible to extend the walk to the adjacent hamlet of Tunstead (SK 109750) to see the memorial to James Brindley, canal engineer and millwright, who was born here.

References

Harrison D.J., 'The limestone and dolomite resources of the country around Buxton, Derbyshire': description of 1:25 000 sheets SK07 and parts of SK06 and SK08', *Mineral Asses., Rep. Inst. Geol. Sci.*, no 77, 1981.

Ineson, P.R. and Dagger P., 'Geology of Tunstead quarry, Derbyshire, England, Trans. Inst. Min. Metall (Sect B: Appl. Earth Sci.), May 1985.

Stevenson I.P. and Gaunt G.D., Geology of the country around Chapel en le Frith, London, 1971.

Stowell F.P., Limestone as a raw material in industry, ICI, Oxford, 1963.

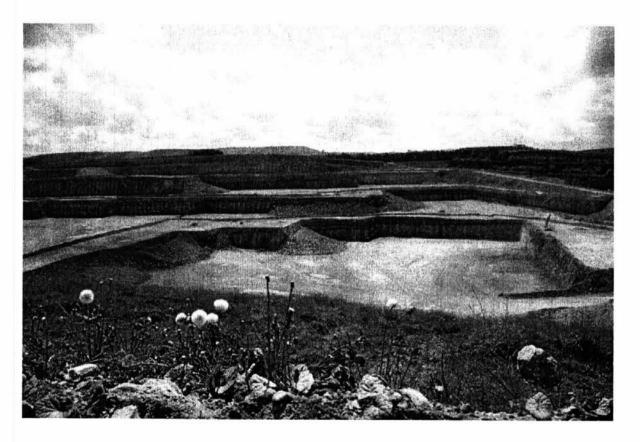


Fig 2. Viewpoint of Old Moor Quarry showing the four levels. Note the drilling rig, with the line of holes awaiting explosives. June 2009.

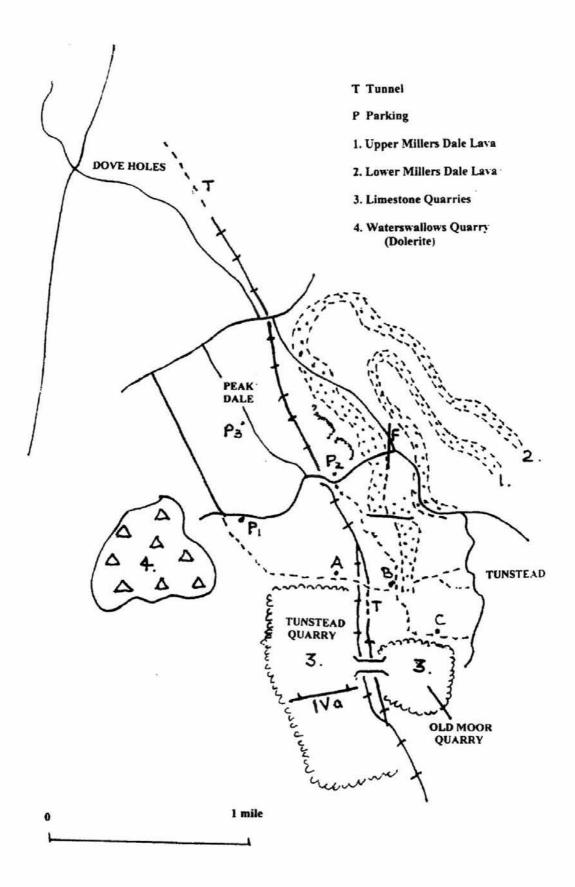


Fig 3. Map of the area with localities mentioned in the text.

	WYDRATED UNDER CONTROLLED CONDITIONS TO A DRY POWDER	ANDER WITH HYDRATED LIME	WITH CHLORINE GAS GIVES DRY BLEACH POWDER (OR CHLORIDE (OF LIME).	AGMICULTURE AND HORTICULTURE FOR LAND FERTILITY AND PERTILIER, POR	MAKING LDAR-SULFRUR, NICOTINE, AND OTHER FUNOICIDES.	SOIL STABILIZATION IN ROAD CONSTRUCTION.	FOR MAKING MEDICINAL CALCIUM HYDROXIDE.	FILLER IN RUBBER AND OTHER MATERIALS.	MANUTACTURE OF OREASES AND FOR SODA LIME FOR ABSORFTION OF CARBON DIOXIDE.
E ROCK MITE (CACO.)	WYDRATED UNDER CONTROLLED	MILK OF LIME WOOD AND ADD ADD ADD ADD ADD ADD ADD ADD AD		WITH CARBON DIOXIDE GIVES PRECEPTATED CEALLE FOR TOOTH-					TREATING PRODUCTS OF WOOD DISTILLATION. WIRE DEAWING. FURHEICATION OF CANE SUGAR AND SYRUP.
LIMESTONE ROCK CALCTUM CARBONATTE (CACO)		LAKED UTHO ALLOUNEND	BULLDING AND CON- STRUCTION FOR MAKING BRUCKS, MORTARS AND FLASTERS, WHITEWASH, SOLL STABLIZATION, ETHYLENE OXIDE, AN DATE MENUTY SOU	PLASTICS AND SURFACE ACTIVE AGENTS, DETERGENTS, PURIFICATION OF ORES,	AND PREPARATION OF NON-PERROUS SALTS. WITH ALUMENTIN SUL-	PHALTE GIVES SALIN WHITE, A GLOSSY COATTING FOR PAPER. SOFTENDIA AND PURIFYING WATER SUFFLIES.	SKINS AND HUDES FOR SKINS AND HUDES FOR LEATHER, USED FOR SCOUNING WOOL TO REMOVE ACIDS, ETC.	WITH FATS AND ORS FOR CANDLES AND OREASES WITH HIDES AND BONES FOR GUE AND GELATTNE,	PURDICATION OF OILS AND FETROLS, FURITYING COMMON SALT, RESINS, PLASTICS, RUBBER,
CRUSHED AND SCREENED		QUICKLIME CALCTUM OXIDE (CRO)	WITH SODA, FLUORSPAR, ETC., FOR MANUFACTURE OF STEEL AND OTHER METALS. AORICULTURE FOR LAND FERTILITY.	GAAS FURLIFICATION. DEHYDRATION OF GASES, OILS, SOLVENTS, ETC.	WITH CORE IN ELECTRIC ARC FURNACE CIVES CARBIDE.	Solud CAUSTIC SODA. FURIFYING ALUMINTUM ALUMINTUM		FOR FOR AND	ULTCARINE. TAR PRODUCTS, PHENOLS, CRESOL, OILS, ETC.
	CALCINED IN KILINE CACO - CAD+C	TUMP LIMESTONE	BURNT TO CALCIUM OXIDE AND CARBON DIOXIDE. WITH SALT AND AMMONTA GIVES SODIUM BICARBONATE AND CARBONATE. ALSO USED FOR FURIFICATION OF BEFT SUGAR.	FOR SLADDING AND FURIFYING IRON AND STEEL AND OTHER METALS.	WITH CLAY, SAND, ETC. OIVES CEMENT AND ROCK WOOL INSULATOR.	AGGREGATE FOR CONCRETE, ROLOSTONE (UNTREATED OR TARRED), BALLAST. GROUND LIMPESTONE	AGRUCULTURE: LAND FERTILITY, FERTILIZERI, CATTLE CARE AND FOULTRY ORT. ALSO IN INSECTI- CODIS AND WEED KILLER.	PREVENT SPREAD OF FLAMES TO FREVENT SPREAD OF FLAMES FROM EXPLOSIONS.	FILLERS FOR ASPEALT, LINO, RUBBER AND CLEANSERS. WITH SODA, SAND, ETC. GIVES GLASS.

Fig 4. The uses of limestone and limestone products in industry. Reproduced fromStowell (1963), pp42-3.

JOSEPH WILKES AND MEASHAM

(by Janet Spavold and Sue Brown)

Mining had taken place in Measham since the middle ages; the valuable Main Coal seam outcrops across the area. The 1570 Crown lease of the mines noted that the freeholders had rights to the coal under their lands and shares in that under the common. In 1596 a Mr Wyrley described it as a village '*in which are many coalmines*, *little else worthy of remembrance*'. The Earl of Huntingdon and the Wollastons owned the mines by 1640. A Newcomen atmospheric engine had been installed in 1729 to pump the mines at Oakthorpe.

Joseph Wilkes came to Measham in 1767 when he took a 30 year lease on the coal mines here, in partnership with Curzon. He became involved with road improvements because local communications to his markets were so poor. He promoted turnpike roads around the area, all with concave surfaces which he mistakenly believed would allow better drainage; in fact it scoured the road surfaces. He laid wooden rails as feeder lines to the turnpikes.

By 1770 the collieries were worth £150 p.a. in rental value. Prior's 1775 map of Leicestershire shows seven pits and a 'fire engine' at Measham. In 1777 Wilkes bought the manor and developed the area further with his brothers John and Thomas. In 1782 he bought Oakthorpe colliery and installed a Boulton & Watt steam engine; by 1787 he was the first person to adapt it successfully to the direct winding of coal. He rapidly modernised the collieries, working both on the longwall system. But poor communications and high transport costs led to declining profits; the engine stopped work in 1796 and by 1798 he was not selling coal. He was a promoter of the Ashby Canal in the hope that it would allow profitable working again; by 1700 the canal was partly completed and Wilkes was working 3 pits again: Old Measham pit (NE of Measham), Oakthorpe pit and New Pit (SE of the Old pit). But the canal's finances were not stable, and by 1800 Wilkes was using most of his coal for the 5 steam engines he had for his enterprises - they consumed 7,000 tons of coal per year. The miners had concessionary coal, and his other workers bought it at a low rate. Between about 1775 and 1825 the Poor Law records show that the overseers supplied free coal to the local paupers. By the time of Wilkes's death in 1805 the mines were in decline because of the development of Moira's mines and many Measham miners went there. The Moira Colliery Co bought the old Oakthorpe and Measham pits in 1857 and closed them soon after. Measham Main Colliery and Minorca Colliery were later developments.

The Measham cotton mill started working in 1783, and burnt down in 1901. In 1802 Wilkes & Jewsbury installed a 36hp Boulton & Watt engine; before that it was water powered. There were warehouses, a bakery and pigsties also on the mill site. Dr Charles Loudoun visited it in 1833 for the Factories Inquiry Commission, when it was making cotton tape and employing about 200 hands, of whom 100 were women and girls. Wilkes employed pauper children who were recruited locally, but also for example brought from Ashby de la Zouch, Ticknall and Stratford-upon-Avon. Sometimes the youngest started at 7 years old, though they were mainly 8 or 9. Loudoun noted that all members of some families worked at the mill, and could earn as much as £2 10s per week. Working hours were 6am to 8am, 8.30am to 12 noon, and 12.45 to 7pm (6pm on Saturdays). Their morality and thrift were evident, and two thirds could read and write. The factory had had no major accidents and the children 'appeared, for factory children, tolerably healthy'; but they worked an 'unreasonable and cruel length of time daily, and even adults have been expected to do a certain quantity of labour which scarcely any human being is able to endure'. Health problems noted there were the 'twisting of the ends of the long bones, relaxation of the ligaments of the knees, ancles [sic] and the like ... their ailments are such as every medical man must expect to be the probable consequences of young people working, in some instances, nearly forty consecutive hours twice a week, and, besides, labouring from twelve to fourteen hours on those days of the week when night-work was not expected. He listed deformed pelvis, varicose veins and ulcers as common consequences of the work in those over 25. There must also have been poor consequences for the women during pregnancy. Yet Wilkes was noted as a good employer; he provided a dancing master, in working hours, for the children employed at Ashby. The Factory Returns of 1838 show that by then the majority of the employees were females.

In 1756 the Wilkes brothers had installed a Boulton & Watt engine in their corn mill. They ran a brickyard to supply their development of Measham and other areas; the 'Wilkes's Gobs' were made to halve his costs from brick tax, which was 4s per thousand bricks. They had a tape mill and a bleach mill, and another cotton mill in

Ashby de la Zouch which produced calico until 1830, then lace until 1832 when it closed. Wilkes was a banker and financier. He built himself a fine house at Overseal, recently restored. A characteristic of his buildings is the blind arcade.

[These notes were produced in connection with a walk around Measham led by the authors in 2009.]

BRITISH ARCHAEOLOGICAL ASSOCIATION EIGHTH ANNUAL MEETING, DERBY, 18-23 AUGUST 1851

(by Jane Steer,

The British Archaeological Association was established in 1843 for the Encouragement and Prosecution of Researches into the Arts and Monuments of the Early and Middle Ages. In 1851 it held its eighth Annual Meeting and Congress in Derby. At that time the Dukes of Devonshire and Rutland and the Lord Bishop of Lichfield were patrons of the Association, Sir Oswald Mosley was President and the Vice-Presidents included several well known local figures including Francis Bradshaw, High Sheriff of Derbyshire, Lord Vernon, the Hon. George Cavendish, MP, the Archdeacon of Derby, Douglas Fox, Mayor of Derby, Godfrey Heathcote, Mayor of Chesterfield, Michael Bass, MP, Thomas Bateman, Thomas Bent, MD, Sir John Harpur Crewe, Edward Strutt, Gladwin Turbutt and Sir Henry Sacherevell Wilmot. The Mayor of Derby, Douglas Fox, was Chairman of the Local Committee and Henry J. Stevens was the Honorary Secretary.

The programme for the meeting¹ states that 'The chief objects of the Meeting are to promote a personal intercourse between antiquarians and historical inquirers who reside in different parts of the country and abroad., and to offer a week's amusement and instruction by the reading and discussing of papers on antiquarian and historical subjects, and in visiting and examining together the Antiquities of the locality'. A one guinea ticket which admitted 'a Lady and a Gentleman' (half a guinea for a Lady) covered all the meetings, excursions and soirees during the week.

Most of the papers listed in the programme are still favourite topics at Society meetings today. They were either read at evening meetings in the Atheneum, Victoria Street, or at venues during the excursions and included:

Ancient Customs and Sports of the County of Derby by Mr L. Jewitt Derbyshire Barrows by Mr Bateman Churches of Derbyshire by Mr Wickes Monasteries of Derbyshire by Mr Halliwell Painted Glass of Morley Church by Mr Waller Ancient Crosses in Bakewell Church by Mr Barker, Melbourne Church by Mr J. Dean The Antiquities of Melbourne by Mr Briggs Monuments of the Cockayne Family in Ashbourne Church by Mr Maunsell and Haddon Hall by Mr Duesbury

The programme gives a brief list of the daily excursions but the event was covered by Mr Willox of the *Derby Mercury* which devoted 8½ columns to his very full and detailed coverage of all the excursions on 27 August 1851 in order to provide 'a complete record of the exceeding interesting excursions' (including a reprint of its report on the first excursion on 20 August but not the report on the opening meeting). About 100 people went on each excursion which usually started at 8am, travel taking place by a special train or by omnibus and carriages.

The proceedings started with an evening meeting at the Atheneum on 18 August. Impressions of monumental brasses were hung round the room giving a 'very pleasing and interesting effect'. In front of the southern windows a row of tables were laid out with 'glass cases containing impressions of antique seals, curious carvings, ancient ornaments for the person, weapons, etc; vases, drinking cups, watches, and other articles of vertu. The room was also decorated in different parts by spirited drawings of ancient or remarkable edifices, and pictorial representations of ornamental carvings.²

On Tuesday 19 August the party left Derby at 8am on a train made up of 12 first class carriages for Chesterfield where a visit was made to the church before leaving for Bolsover Castle where they were met by the Rev Mr Hamilton Gray.3 After refreshments, 'the party proceeded to wander over the house amidst a bewildering accumulation of objects of the rarest interest, beauty or historical importance ... carved cabinets, elaborately decorated oak carvings in sideboards; buffets, chairs and tables; capital and well-selected pictures; marble busts and works of art innumerable'. In the drawing room, besides a collection of Etruscan vases, Etruscan Scarabai and Roman coins there was also a collection of Jacobite relics including a ring which had belonged to Mary Queen of Scots and contained her portrait. Hardwick Hall followed where the Duke of Devonshire provided 'a banquet' before a visit to South Wingfield Manor at 6.30pm. It was 9.10pm before the party arrived back in Derby and the evening lectures were abandoned. On Wednesday the train left again at 8am for Rowsley. An omnibus took them to Chatsworth where the party was met by Mr Paxton. Some stayed at Chatsworth whilst 'the most arduous of the archaeological section' went to Bakewell church and then to Lomberdale Hall where Thomas Bateman showed them his collection of Celtic and other antiquities. Because they were running late only a quick visit was made to Youlgreave church before joining up with the rest of the party at Haddon Hall where Mr Duesbury read a paper on Haddon Hall and the Duke of Rutland lent the Association some ancient documents to take back to Derby.

Thursday saw 100 visitors leaving Derby by train for Tutbury and then by carriages provided by Sir Oswald Mosley to his seat at Rolleston⁴ for 'a substantial and elegant breakfast'. It was reported that 'The mansion-house of Rolleston Hall is in every respect a sumptuous edifice, internally and externally, and its beauties, natural and artificial, were universally admired ... In the dining room a fine family group of Sir Oswald Mosley, his lady, and their children, attired as rustics, painted by Mr Drummond, attracted much attention'. Tutbury church followed where Mr Baily gave a talk about the church and some excavations at the east end which had proved that the chancel had a semi-circular apse, flanked probably by some side chapels. A mass of masonry just discovered within this apse may have been the high altar as a considerable number of human skeletons were found behind it. After a visit to Tutbury Castle, the party travelled on to Norbury church and Ashbourne church before returning to Derby at 8pm for evening lectures.

On Friday carriages and omnibuses conveyed the visitors either to Melbourne or to Repton where the two groups met up later in the day. In Melbourne papers were read by the Rev Deans on the history of the church which he thought had been built on the site where Osthrid, Queen of Ethelred, King of Mercia had been murdered and by Mr Briggs who spoke about the antiquities of Melbourne. After a tour of Melbourne Hall and a visit to the Anchor church at Foremark, the party reached Repton at 1.45pm. The bells were pealed and a floral arch had been erected in front of the Grammar School. After a tour of church the party went to look at several excavations which had been made during the morning in Dr Pelle's vegetable garden. Several portions of the foundations of massive walls and a large pillar had been found, the latter thought to be the north-east pillar of the central tower of 'a vast ecclesiastical edifice'. The pillar gave a key to the general structure of the edifice and other fragments of foundations were discovered which were quite sufficient for 'the skilful architects who accompanied the meeting' to complete the probable ground plan of the chancel and transepts of the building.

The Congress was nearly at an end. A Public Dinner was held on Friday evening followed by a Public Breakfast hosted by the Mayor of Derby on Saturday morning, both at the Atheneum Room. At the latter the Congress thanked the Chairman, Sir Oswald Mosley, 'whose cordial hospitality, untiring perseverance and kind attention had been admired by all, the Committee of the Derby Museum for the loan of valuable articles for the exhibition, the managers of the Town and County Library and Newsroom and the Atheneum Newsroom and 'the gentlemen of the Press'. Two visits were then made to Little Chester to look at the site of the Roman bridge and to Morley church to look at the stained glass and monumental brasses. The Derby Mercury report concluded with a transcript of two of the papers read during the week: Remarks on the Opening of Ancient Barrows by Thomas Bateman and On the Antiquities of Melbourne by J.J. Briggs.

References

- Derby Local Studies Library, Parcel 19.
- 2. Derby Mercury, 20 August 1851.
- 3. The Rev John Hamilton Gray, Vicar of Bolsover, who rented Bolsover Castle from the Dukes of Portland, fitted out the mock medieval castle in the style of the 17th century.
- The majority of Rolleston Hall was demolished in November 1925. Only the Ballroom and a single storey wing built in 1870, now known as the Old Hall, were left standing.