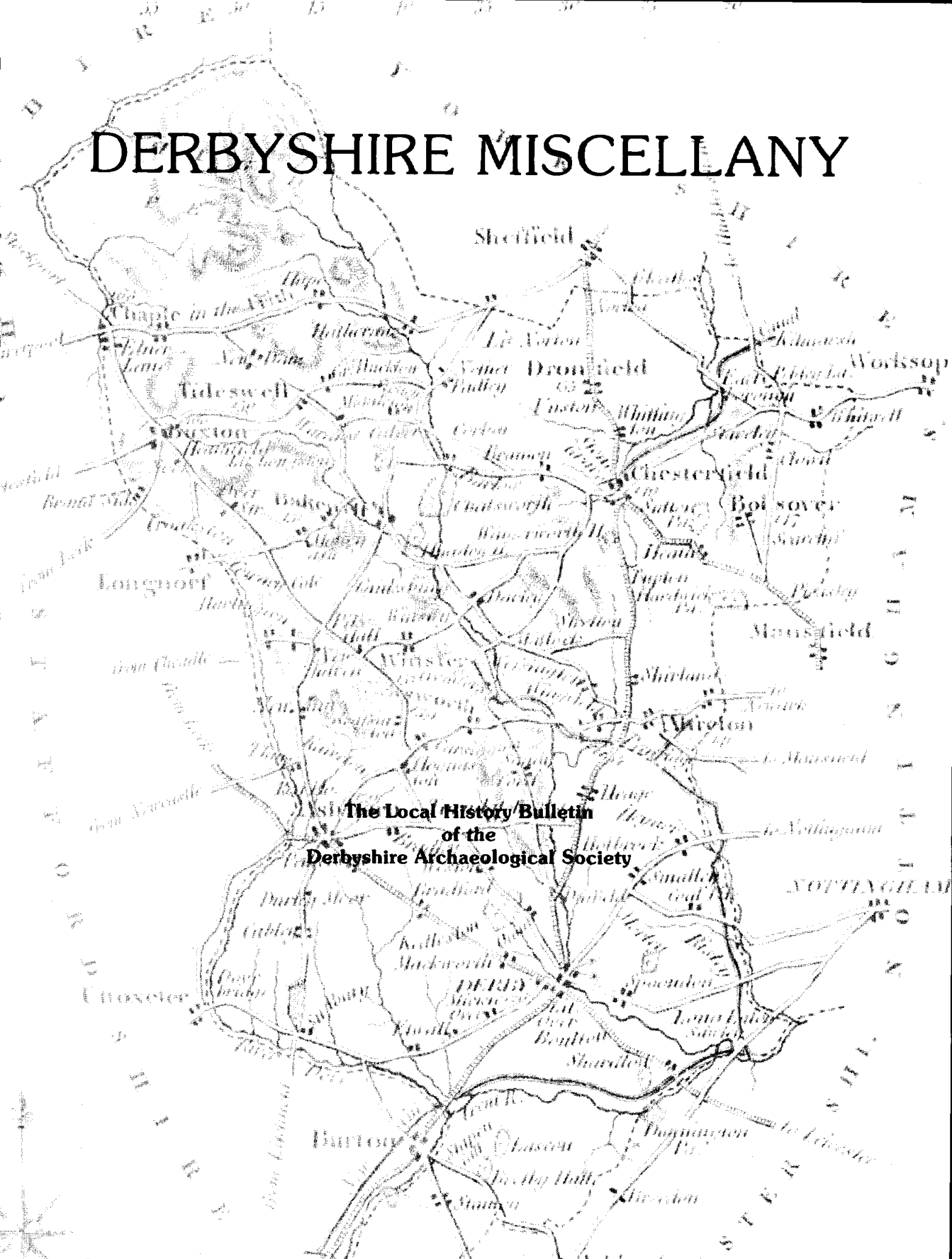
DERBYSHIRE MISCELLANY



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ARLESTON AND THE KNIGHTS HOSPITALLER OF ST JOHN OF JERUSALEM

(by Barbara Hutton

Some years ago[1] Howard Usher cast doubt on the well-established legend that Arleston Hall was the site of a Preceptory of the Knights Hospitaller of St John of Jerusalem. He traced the origin of the story to Cox's *Churches of Derbyshire*[2], but considered that it had no foundation in fact.

In the course of a wide-ranging study of the history of Barrow on Trent and Twyford parishes by the author and Alwyn and Joan Davies, it seemed necessary to look further into this story to see if the facts of the case could be established one way or the other.

There can be no doubt that a 'Camera' (literally chamber but in this context roughly equivalent to a monastic grange) was established at Barrow on Trent, probably by a gift of Robert de Bakepuze, who was said by Worsley[3] to have been lord of the manors of Arleston and Sinfin in 1297. If we could establish the descent of these manors, perhaps it might throw light on the question. We therefore pursued two lines of enquiry: to trace the history of the Hospitallers, and to trace the descent of Arleston manor.

It seemed likely that the Knights of St John, who are still established at Clerkenwell on the site they acquired in 1140, would know about their early history, but it soon transpired that they knew of very little documentation. This is probably because the records of the Order were collected in Malta. We discovered from various sources the following.

Robert de Bakepuze gave the church of Barrow to the Hospitallers, according to the Victoria County History.[4] With the Church went the great tithes and a certain amount of land, perhaps also a house - we don't know because the Rectory was not surveyed until later. A confirming deed[5] dated 1197 between Robert de Bakepuze and the Hospitallers seems to be watertight evidence for this transaction.

An undated deed of Prior William de Henley[6] who held office 1281-1290, records the exchange of a messuage and 2 acres of land in the town of Barrow, which Ely son of William bought from the Hospitallers, for 10 acres of land that Ely had inherited from his father. A group of six undated deeds[7] concern this same Ely, one of them describing half an acre of arable land lying between that of the Master of the Hospital and that of David of Stanton.

The Camera at Barrow was directly responsible to the Prior at Clerkenwell in 1330[8] when William Brix, a brother of the Order, was in charge and refused admission to the Sheriff's officer. At some time during the ensuing century Barrow became a dependency of Yeaveley, where there was a Preceptory at Stydd.

A survey[9] of the whole property of the Hospitallers in England was made in 1338 and records a Camera at Barrow with one messuage whose garden and orchard were worth 3s 2d. There were also a dovecote and a mill and revenues from the Rectory and the manor court. The Hospitallers' outgoings included wages for a bailiff and his men, for a cowman and a pigkeeper, and for the repair of buildings. This confirms the presence of the Knights in Barrow parish but not at Arleston Hall.

In the British Museum there are cartularies[10] recording the assets of the Hospitallers at Barrow in 1504, 1509, 1516, 1522 and 1526, during which period the property was let at farm to Thomas Babington and later his son John. In 1526 Barrow Rectory was leased to Ralph Pemberton for 29 years *'as lately farmed by William Bothe'*.[11] We know that William Bothe died about 1520.[12] This indicates that the Babingtons were merely collecting the revenues and Bothe handled the management of the estate.

At the Dissolution of the Monasteries in 1535 the property of the Hospitallers was again surveyed.[13] Barrow, still a Camera, was by then subsidiary to Stydd, so the then Preceptor, Ambrose Cave, *'also has the manor ofBarrow with its appurtenances and the Rectory of the same which is worth annually after deductions £20'*. Later on it

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adds '*And for the pension issuing from the Rectory of Barrow appropriated to the Prior of St John of Jerusalem in England, for half of the tithes from the lordships of Twyford, Stenson and Arleston* - £3.'

This is all we can learn about the Hospitallers: certainly there was a Camera at Barrow and they owned the Rectory and a manor, but there is no link with Arleston apart from the right to half its tithes. Monastic land was free from the payment of tithes and at the time of Barrow's enclosure Mr Beaumont's land there (which appears to have been acquired from the Hospitallers) was tithe-free. However, this was not in Arleston but Barrow.

The descent of the manor of Arleston in its early years seems to have followed the female line, but this is masked by the men to whom their wives gave title. In 1294[15] Lucy wife of Richard Grey owned the manor and passed it on to her daughter also called Lucy. Then in 1366 another Richard Grey, perhaps Lucy the younger's brother, resigned any claim to Arleston in favour of his kinsman John Waleys. Waleys is also the surname of one of the Knights of St John at Yeaveley in 1338, but this may be a coincidence. The term kinsman is a very general one, but probably he was a relative by marriage, either with Richard the younger's sister or his daughter. The name of John Waleys' wife was Joanna.

Lucy the younger married John Fraunceys of Ticknall and had by him a daughter Joanna and sons John and Robert. John held Arleston in wardship in 1384[16] and Robert and his wife Joanna who was the widow of John Waleys held Arleston in 1388[17]. Robert Fraunceys had two claims to the title, through his mother Lucy and through his wife Joanna[18] but his sister Joanna was thought to have a better claim than he. The manor was divided so that one third went to Robert's wife Joanna (formerly Waleys) and two thirds to Robert's sister Joanna Fraunceys and her husband, Thomas Fitzherbert.[19] Robert Fraunceys died in 1407. In the same year a panel of trustees was nominated to oversee the partition between the two Joannas, consisting of Richard Montgomery, John Fitzherbert of Roston, John Findern, Henry Bothe and Robert Cook. It appears that Thomas Fitzherbert must also have died, because his widow then married Thomas Blackfordby. They had a daughter called Joanna.

In 1421[20] four men we have not heard of before conveyed the manor of Arleston to Ralf Fraunceys. Ralf and his brother Thomas who was a cleric were presumably sons of Robert and Joanna, though that must be guesswork. The four men were Sir Ralf Shirley, Thomas Stanton, John Schatton and Thomas Pegg. It could be that one of these, probably Shirley, had married young Joanna Blackfordby who would now be just 14, or intended to marry her. By this deed the manor came back into the Fraunceys family - Ralf, Thomas and a man called Ely Stoke. Ely had a son Thomas who was married to Agnes the daughter of Ralf Fraunceys - another descent in the female line - who acquired the rights of Ralf, Thomas and Ely to the manor of Arleston in 1422.[21] It was then sold to six people: John Bradshaw, Thomas Mackworth, John Newton, Walter Hume, John son of Henry Bothe and Robert Stokes (Stokes and Stoke are interchangeable spellings). The following year, 1428, the rest of the six passed it to Henry Bothe, gent,[22] and the Fraunceys family resigned all their claims in Henry's favour.

Henry has been mentioned above in a deed of 1407 when he was associated with John Findern and Robert Cook, two men connected with the adjoining manor of Sinfin. From at least the 1327 Lay Subsidy, Sinfin had been in the hands of a family called Touk - Robert in 1327, John in 1383 and 1396; and in 1398[23] John Touk appears as the former owner of the manor of Sinfin which was in that year conveyed to John Pegg. In 1402 two deeds[24] (written in Norman French and not Latin) describe the transfer of Sinfin from Sir John D'Aubridgecourt and Rev Richard Adynburgh to John son of John Findern and two John Iretons - one a gent and the other a cleric. In 1410[25] John son of John Findern resigned the manor to Robert son and heir of John Cook of Sinfin; that Robert is described elsewhere as '*of Heanor*'. Next year the conveyance is reversed and Robert of Heanor son of John Cook of Sinfin releases the manor to John son of John Findern and the two John Iretons.

Then follow three deeds of 1416-1417[26] by which Henry Bothe acquired the manor of Sinfin. In one Richard Adynburgh, rector of Weston on Trent, released his claim, in another John Ireton, gent, released his, and in the third the vicar of Barrow, Richard Bare, released any rights his church might have to Henry del Bothe, gent., his wife Isabel and his son John. By 1428, therefore, the manors of Arleston and Sinfin had come into the hands of the same family.

The Bothes were evidently not very sure of their title to Arleston and Sinfin, since there are at least nine more deeds during the 15th century[27] in which the claims, real or conventional, of others are released to the Bothes. The family tree is confusing, and made more so by having another branch in Derby. At one stage John son and

heir of Henry Bothe of Erleston co-existed with John son of Henry Bothe of Derby, and there were so many Johns and Henrys that on a church monument John Bothe has to be identified as the one who died in 1413: both he and a contemporary John were married to wives called Margaret.

John son of John Bothe married Joanna widow of John Findern and had two sons, Ralph and William, and a daughter Joy who married Thomas Shirley and died in 1523.[28] Ralph died in 1510 and William in 1520 (will at Lichfield) leaving his estate to John who we must suppose to have been his son though he is not so described in the will. John married another Joanna and died in 1531 leaving five children who presumably included Henry Bothe who married Elizabeth Blackwall in 1524. In 1541[29] Henry released his claims to Arleston in favour of three men: Nicholas Burwey, John Beaumont and William Hurt. Sir John Beaumont was Master of the Rolls (i.e. an Appeal Court Judge) and the other two were probably also lawyers. Beaumont was already lessee of Barrow Rectory with its house, lands and the great tithes, having acquired it on a 51-year lease as a result of the Dissolution of the Knights Hospitallers in 1540[30] who had themselves leased it to Henry Sacheverell (Parson of Swarkestone). However, Beaumont was not in the business of building up a country estate but of making a quick profit, and in 1542 sold the manors of Arleston, Egginton and Hilton to Sir Thomas Pope for £80.[31] The lease of Arleston Hall and lands at £30 9s 8d p.a. to the same Sir Thomas followed immediately (Court of Augmentations). The description of the Arleston estate in these deeds includes a number of field names: Hunters Hallowe, Heyclose, Hetherclose, Cowclose, Weversley Close, Les Close Feldes, Benbowe Close, Hartynges Close, Levydoles Close, Le Lees, Le Asshes, Lond Medowe and Rownd Medowe. Many of these we can place on the map.

Sir Thomas Pope[32], like Sir John Beaumont, was a national figure, but he had no previous connection with Derbyshire. Born 1506/7 in Oxfordshire he went to Eton and presumably trained as a lawyer, becoming in 1532 a Clerk in the Star Chamber. Four years later (1536) he became Treasurer in the new Court of Augmentations set up to handle the revenues accruing to the Crown from the Dissolution of the Monasteries. He became M.P. for Buckingham and was knighted in 1537. On acquiring Arleston from Beaumont in 1542 Pope immediately made an exchange with the Crown for lands that would round off his Oxfordshire estate, but, still in 1542,[34] the Crown leased back to him the capital messuage and lands of Arleston for 21 years, to start from the end of any existing lease. Ten years later, 1552,[35] Edward Beaumont was able to claim successfully that Sir John Beaumont's lease had not yet expired; he thus re-acquired Arleston and in 1554/5 Pope bought the reversion of it[36]. Meanwhile in 1552 Sir Thomas Pope bought the manor of Sinfin[37] and its lands from Sir Arthur Davey for £600. It is not known how Sir Arthur, who in 1461 owned land in Egginton, came to own Sinfin.

Sir Thomas Pope died in 1558/9[38] and left the Arleston property, or the reversion of it once the lease expired, to his widow Elizabeth, daughter of Walter Blount of Uttoxeter. She had a son and heir John by her earlier marriage to Anthony Basford or Berisford, but John died in 1566 and his heir appears to have been William Pope of Wroxton, Co. Oxon. William was at that time a minor, but later, in 1600, being in debt to his brother-in-law, Edward Blount of Burton on Trent, sold Arleston, Sinfin, Egginton, Hilton, Barrow, Normanton and Asshe to him for £5,000. Edward immediately mortgaged Arleston[39] but was able to recover it in 1602.[40]

Edward Blount went to live at Arleston with his third wife, the Lady Amy, but his title was contested by his second cousin Sir Thomas Pope Blount of Tittenhanger, Herts, who asserted that Edward had made a verbal agreement to convey Arleston and Sinfin to him. Then in 1604[41] Edward entered into a written fine and recovery by which his (Edward's) sons should succeed him with the reversion to the sons of Pope-Blount. Edward at this time had no children and Lady Amy being unlikely to produce heirs this was in effect passing over the estate. But Edward then got the help of his nephew Edward Shrigley of Derby to overturn the agreement, and the dispute probably went on for several years, the documents concerning it being undated.

In 1607 there was more trouble because Edward was charged[42] that he *'decayed and depopulated'* four tenant farms in Sinfin and let the fields as rough grazing to two firms of Derby butchers. This dispute dragged on for more than ten years. At last in 1623 Edward Blount died. His widow Lady Amy, now living in Clerkenwell[43], leased the manors of Arleston and Sinfin to Sir Thomas Pope Blount and his son Henry at £200 p.a. for 59 years. It seems that on her death Sir Thomas must have inherited the freehold.

Sir Thomas Pope Blount died in January 1638/9 and his son Sir Henry Blount of Gray's Inn succeeded him as lord of Arleston and Sinfin. In 1640[44] he agreed to sell to Sir John Harpur, Knight, of Breadsall[45]; at this time the two manors with their lands in the parishes of Barrow, Twyford, Stenson and Normanton had a rent roll of

£535 p.a. With them in the sale were included the manors of Alstonefield, Warslow and Longnor in Staffs and of Netherhall and Overhall (the two Breadsall manors) in Derbyshire with all the properties pertaining to these. Sir John was prepared to pay for all this £1,000 down and £1,000 a year for 99 years, Sir Henry remaining tenant for life at Arleston Hall. This was a bad time to be entering into a heavy financial commitment, and Harpur fell behind in his payments so that in 1645 the agreement was cancelled and a new one made with a bond of £4,000 to ensure Harpur's compliance. This second agreement also fell through, partly through uncertainty about who was entitled to collect the rents, but finally a third agreement of 31 Jan 1646 seems to have settled the matter.[46]

Sir John Harpur died in 1679, his grandson another Sir John in 1681, and his great grandson, also Sir John Harpur and 4th Baronet of Calke, came into possession of Arleston and Sinfin as a baby of two years old when Sir Henry Blount died in 1682. The Harpur family's acquisition of Arleston explains why so many documents relating to it are found in the Harpur-Crewe papers.

In all this long history of Arleston there appears to be no connection with the Hospitallers either as owners or tenants, so we have drawn a blank.

Then we considered any evidence remaining on the ground. The place-name Arleston, formerly Erlestune (Domesday Book), is interpreted as *'the tun or homestead of a nobleman'*. On the map it appears as a rectangle of land about half a mile east-west by two-thirds of a mile north to south, within the ecclesiastical parish of Barrow. There is a Hall incorporating stonework of uncertain age in a structure dating no earlier than the 16th century; we know that a lot of the house was pulled down and/or rebuilt in 1712[47]; it included a chapel. Opposite on the west side of the access lane was a deserted medieval village recorded by Maurice Barley in 1953[48] but later ploughed out; air photos of 1971 show signs of house platforms in the field nearest to the hall and two parallel roads running west to Stenson.

Sketch of Arleston Hall

At Barrow there was a hall built about 1717 next to the church but now demolished, and there survive the remains of a manor house built about 1775.[49] Both these may have had earlier predecessors but there is no record of them. There is a former Rectory house dating from the 17th century.[50] In 1627 the Manor Court Papers[51] record that the ancestors of the then lord of the manor Mr Beaumont *'kept a court upon a messuage wherein William Bowme now dwelleth, in right of the Priory of St John of Jerusalem'* and called the Priory Tenants' court within Barrow. In 1599 this had been described as *'One tenement, now or lately occupied by widow Bowme with lands etc belonging'*[52] and was part of Barrow Rectory Manor, but whether or not it was the predecessor of the present Rectory House cannot be known, nor whether it was the capital messuage of the Hospitallers' Camera. It was surely not Arleston Hall which would have been so named, and no tenant of the hall with the name Bowme is known.

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22. *ibid*
23. *ibid*, 13/2.
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Acknowledgements
This paper embodies research carried out by three people, the author and Alwyn and Joan Davies. We have had help from many people, especially the staff of Lichfield and Derbyshire Record Offices and Derby Local Studies Library; Joan D'Arcy, Henry W. Gray, Jane Steer, Howard Usher and the Curator of the Museum of the Order of St John of Jerusalem.

EXTRACTS FROM 'A JOURNAL OF A VISIT TO LILFORD, JULY 1812'

by Mary Hodgkinson, daughter of Richard Hodgkinson, 1763-1847, agent for Atherton and Lilford families

1. Buxton to Chesterfield via Ashbourne and Derby

I left home on Tuesday the 28th July, 1812, at 6 o'Clock in the Morning with my Father in a gig for Lilford. The first day we went to Buxton. The neighbourhood of that place is very bleak and having seen only a tree or hedge to be out we travelled thirty miles without seeing any fences except stone walls; they commence at about a mile short of Disley and continued to within 3 miles of Ashburn. That length of road lay entirely over hills, some of them very high, some were cultivated and had tolerable crops on them but others bid defiance to all cultivation both on account of their steepness and the nearness of the rock to the surface.

The Crescent at Buxton is a very handsome building. It was built solely at the expense of the Duke of Devonshire; he has just finished a new Church there which it is said has cost him 30 thousand pounds. It is to be consecrated on Sunday the 9th of August.

We proceeded next to Derby and in our way stopped at Ashburn; by stopping there we escaped one of the most tremendous storms I ever witnessed; the thunder was awful in the extreme, the rain intermixed with hail fell in such torrents that in a very short time the street we were in, though steep, was completely deluged. It continued about an hour. They have no trade at Ashburn except a little lace weaving. Great numbers of French prisoners are sent there on their parole of honour, but as they have liberty to walk a mile out of town and no guard over them, many of them escape, in which they are often assisted by the inhabitants which strongly shew the impropriety of allowing them so much liberty.

Derby is an ancient town, the streets are narrow and the houses mostly old and mean. It contains 3 stone churches, one of which is very handsome with the loftiest tower I ever saw. It is a place of very little trade which accounts for it improving so little. Silk mills are the principal business. The Duke of Devonshire has 2 almshouses there for the support of 12 decayed burgesses of that borough. As their widows they are only allowed 4 shillings a week but at the approaching elections they expect that the burgesses will inform his Grace that it is too little to support them and they think he will increase it. .....

..... We dined at Chesterfield. While dinner was preparing we went to the church for we perceived on entering the town that the spire was very crooked; we enquired of the sexton the reason, for from its curious corkscrew appearance we thought it must have been purposely built so. He said there was no record had ever been found of the time when it was erected or whether it was at first straight. It is composed entirely of wood and lead and was added many years after the church was built. If it was intended for ornament they are much mistaken for instead of that it is a deformity. Chesterfield is a genteel town of not much trade but a great depot for French prisoners.

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BUBONIC PLAGUE OR ANTHRAX OR MEASLES?

(by John Clifford

It has long been assumed that the massive mortality in Europe in the fourteenth century usually known as The Black Death, and subsequently three hundred years later, and particularly in England in 1665 was attributed to Bubonic Plague. There were several epidemics in the years between, principally in the ports, the larger towns and cities, and London in particular, which similarly have been thought to have been plague. Admittedly much of what has been written about that period has come from the studies of economists and historians who have accepted the medical evidence without question, and much of that evidence, particularly for the earlier period is in any case imprecise and inexact. However the Catalan doctor Jacme d'Agramont of Lerida in 1348 distinguished carefully between plague on the one hand and smallpox, measles, anthrax and goitre on the other, and Ziegler *The Black Death* tells us that in the same year Guy de Chauliac, personal physician to the pope, had described plague symptoms with equal clarity. By the end of the seventeenth century there had been considerable further advances in medical science. A great amount of knowledge had been amassed, but it is in more recent times that scientists have probed deeply into the facts and legends of history to find the underlying truths.

The recently published articles in the press referring to Dr Robinson's book, *The Seven Blunders of the Peak*, and one in *Peak and Pennine* entitled *'Grave Doubts'* indicate that he is working on the theory that bubonic plague was certainly not responsible for the high mortality in Eyam in 1665/6. He firmly believes that the deaths were due to measles, and he aims by the exhumation of a plague corpse to substantiate his theory (see below).

The doubts were first cast by Graham Twigg in his book *The Black Death - A Biological Reappraisal*, published by Batsford in 1983. He is quite certain that plague could not have existed in Eyam and writes that "*In this bleak environment it is impossible to believe that Rattus rattus could have survived if introduced, let alone have formed a widespread population*". He maintains that the case for bubonic plague collapses on examination of the habits and habitat of *Rattus rattus*, though some of his assertions are contradicted by other reliable sources. The so-called black or house rat, which originally came from Asia, was introduced in the thirteenth century by the returning Crusaders, coming through Asia Minor into southern Europe where it remained an open air animal. However it is found throughout the world. It was known in England as early as the thirteenth century though Twigg offers evidence of very much earlier arrivals. It soon became a permanent resident and "*continued as the only British species until the eighteenth century*" (Thorburn *Mammals*). However, particularly in temperate regions, it is a commensal creature and lives in close association with man and prefers to share his dwelling. It is almost totally dependent upon the warmth provided by human habitation and warehouses and is rarely found away from buildings. Most houses, of whatever social class, would house a rat family, the preferred part of the house being in the rafters and roof space, probably the warmest part of the house, whereas the brown rat when it arrived would prefer to live at ground level.

Rattus rattus prefers a temperature some four degrees higher than *Rattus norvegicus* but it can be found in all continents. Thorburn writes that it "*was plentiful in Scotland well into the nineteenth century, being common at one time in both the Orkneys and Shetlands*". G.M. Thomson (*The North West Passage*, 1975) whom Twigg discounts, reports that plague struck savagely in Greenland but Twigg states that there is no evidence of the existence of *Rattus rattus* there in modern times and he considers it unlikely to have been present there in earlier times. There is other evidence to show that *Rattus rattus* was found in Norway in 1349. In a World Health Organisation paper by Brooks & Rowe entitled *'Commensal Rodent Control'* (WHO/VBC/87.949), they write that *Rattus rattus* is found in a few localities in Finland & Sweden, but is sparsely distributed above the 45^0 of latitude, and in northern parts generally lives indoors. Professor M.W. Service, Professor of Medical Entomology at the Liverpool School of Tropical Medicine in a letter in July 1996 confirms that the Black Rat occurred in Scandinavia. Currently the few surviving colonies of this mammal extend as far north as certain Scottish off shore islands.

The Larousse *Encyclopaedia of Animal Life* notes that *Rattus norvegicus* was introduced in Europe in the eighteenth century, reaching England by 1729. This being so, the inevitable conclusion, to which Twigg leads us, is that there were therefore no rats in the northern counties of England until well into the eighteenth century.

The spread of the disease is largely dependent not only upon the survival of the rat in any particular environment, but also of course on the survival of the bacillus and its host. Bubonic plague is caused by the bacillus *Yersinia pestis*. The rat flea, *Xenopsylla cheopis*, by which the bacillus is primarily transmitted is dependent on the rat, or other rodent, its principal source of food being that creature's blood. If the flea feeds from a rodent which carries the bacilli they are transmitted to the flea's stomach, where they multiply rapidly forming a solid mass which blocks it. Such a flea is said to be "blocked". Further feeding so distends the gullet that it regurgitates into its host some of the feed which has by then become infected by the "block", thus transmitting the disease when the flea has adopted a new host. The human flea *Pulex irritans* is a much less successful transmitter of the bacillus. In general an infected flea carried by a human being cannot pass to another human host and transmit the disease. The flea must first establish the disease in a rat, i.e. human to rat to human. Human to human transference is by way of droplet infection as in coughs or sneezes.

Since the flea is well established in Manchuria where the climate can be severe it is logical to assume that it will survive in less extreme climates like our own, particularly in a rural district such as Eyam, where the upper part of the house, the preferred habitat of the rat, would offer an attractive degree of warmth not only for the rat, but for the flea, particularly for those discarded by their host, which would be able to survive independently until the appearance of a new host. *"A female X. cheopis with continuous access to blood meals during her life will lay 300 - 400 eggs (though one source suggests as many as 1000 eggs in a life time) in small batches of about half a dozen at a time, though this figure varies, either in the body hair of her host or directly on the floor of the burrow"* (Gratz & Brown *Fleas - Biology & Control*, WHO/VBC983.874). The larvae take 7 to 10 days to hatch and will normally complete their development in a further 15 to 18 days, but they can take up to 84 days if conditions are unfavourable. The entire life cycle of the flea normally extends from 38 to 376 days, but again varying conditions will produce extremes from as low as 2 to 3 weeks, to over 20 months.

Professor Service is firmly of the opinion that *Rattus rattus* would have no trouble surviving a Derbyshire winter but has doubts about the flea *Xenopsylla cheopis* which is a tropical rat flea, but adds that at present *"we just do not know how much this flea or other temperate fleas such as Pulex irritans (the human flea) and Nosopsyllus fasciatus played in plague transmission; these fleas would survive better at lower temperatures. Fleas would also seek out sheltered places to survive and breed, such as in beds and on people's worn clothing"*. He also adds that *"It is quite possible that bundles of cloth brought immature fleas and adult fleas into Eyam"*.

Plague bacilli can remain infective up to 3 years, if the conditions for a more normal rate of development are lacking. It is also possible for the disease to be transmitted by infected flea faeces, which can be passed into the human body through the handling of infected materials, if they should be rubbed into the skin, or if the handler should have minute lesions on his hands, such as those for instance that might occur on the hands of a tailor as a result of plying his needle. It would be highly probable that minute particles of infective substances would lie in the general detritus of a warehouse floor, and if disturbed by the movement of people or even of air currents would swirl and settle on any clothing or materials stacked on the floor.

All these factors would make it possible for infected materials, which might have contained larvae, eggs, mature adult fleas or flea faeces, to arrive in Eyam, even if the journey from London had been slow and hazardous.

These conditions favourable to the bacillus, the flea and the rat lend force to the argument that in fact bubonic plague could be, and indeed was found, not only in southern England but also in the more northerly regions. But it is necessary to examine the alternatives.

Since Graham Twigg is certain that there was no likelihood of there being an outbreak of bubonic plague in Eyam, what then was the disease that struck in 1665? His firm belief is that it was more probably anthrax.

The spoors of anthrax are very resilient and are virtually indestructible. It appears that the anthrax theory is given credence by Anna Seward, the daughter of Thomas Seward, Rector of Eyam at the time of the centenary of the plague, who seems to provide sound evidence. Clarence Daniel in his *History of Eyam* notes that Anna Seward wrote *"In the summer of 1757, five cottagers were digging on the healthy mountain above Eyam which was the place of graves after the churchyard became too narrow a repository. The men came across something which had the appearance of once being linen..... In a few days they all sickened of a putrid fever and three of the five died"*. A closely similar account relating to the same year, given by Dr. Holland and also quoted by Daniel, records that *"men digging near plague graves came to something which gave the appearance of lime. Three of them died and the spreading*

disease proved mortal to seventy persons". Unfortunately Daniel does not identify Dr. Holland and the quotation has so far not been traced.

William Wood, the 19th century village historian, having consulted the parish register, concludes that Miss Seward was mistaken but refers to a further epidemic in the summer of 1779, adding that those who died swelled in the neck and groin, but without citing the source of the evidence. The parish register for 1757 shows a total mortality in that year of only ten; two boy children in April, two women in July, one new born infant in December, and five men (two in May, one in June, one in October and one in November). There was no cluster of deaths at any time in the year which would suggest a common cause of death. However there were forty two deaths in 1779 and Wood names seventeen who died in. "*a short time*". The period of time he refers to was over 5 months and the majority of deaths were in September and November, which would not entirely accord with the behaviour of plague. Allowing for both a mistake in the year and for exaggeration for dramatic effect there were nowhere near the 70 deaths referred to by Dr. Holland, but Wood has clearly given evidence of an unusually high mortality in 1779. This was however a period of higher than average mortality, there being 30 deaths in 1778, 32 in 1780, 40 in 1781 (with 11 in November, of whom 8 were children). Census figures show an increased population in the village in the nineteenth century and if this trend were under way by 1780 the mortality of around 30 would not be very far from the norm.

In pursuing the case for anthrax, the examination of the wills and inventories of victims offers a clue. It must be remembered that wills were usually made *in extremis*, and indeed most of them contain the phrase "*being sick in body, but sound in remembrance I do make my last will and testament &c*". Thus when a will made at the height of the plague (July 1666), as in the case of Richard Talbott, refers to a heifer to be given to his eldest son, it has clearly survived long after most of the household had died. The subsequent inventory of his estate presented post plague for probate lists 87 sheep, three horses, a pig and 11 head of cattle. A similar inventory of William Torre, presented at the same time, lists two horses, sixty three sheep and four head of cattle. Others are less specific in their wills, bequeathing all their "*goods, cattles and chattels*" or all their "*goods quick and dead*". Such a high survival rate among farm stock further weakens the probability of there being an outbreak of anthrax. The period of time between the end of the plague in November and the presentation of the inventories in April would be insufficient to restock farms on this scale. Contact with the outside world would not be resumed immediately and Eyam farmers would not be readily welcomed in the local stock market in Bakewell. The Bakewell Monday Market, as it was then known, had imposed restrictions on Eyam people before the villagers imposed their own quarantine and though it is not known when they were relaxed, there is evidence from elsewhere that there was no eagerness to admit people from the plague village. The rector himself was not kindly received in his new parish four years later. On the survival of cattle Wood writes "*...the untended cattle lowed mournfully on the neighbouring hills*". They had certainly not perished in the first wave of the disease. Indeed the whole of the oral tradition recounts only the stories of animals that survived, with no mention of stock mortality.

Twigg accepts that George Viccars might have died shortly after opening a box of cloth, but suggest that his death may have been from typhoid as there is only the oral tradition and no firm evidence to link the death with the contents of the box. The rector's son George Mompesson and another "gentleman", who is not named, explained the arrival of the plague to Dr. Meade in 1720, who quotes them in *A Discourse on Plague* (1721) in the following manner:

> "*The Plague was likewise at Eyam in the Peak of Derbyshire being brought thither by means of a box sent from London to a tailor in that village, containing some materials relating to his trade. A servant who opened the aforesaid box complaining that the goods were damp was ordered to dry them at the fire, but in doing it was seized with the plague and died; the same misfortune extended itself to all the rest of the family except the tailor's wife who alone survived.....*".

Dr Michele Colman, currently working with W.H.O. in Paris is also sceptical of any association between the box and Viccars' death and offers the theory that there was a permanent local reservoir of infected sylvatic rats. One is left wondering why there was only one major outbreak of infection if this were the case. Graham Twigg would refute this on the grounds that the black rat was not to be found so far north and even if it were, it would not stray from the domestic environment, and such a source would be impossible in the absence of wild (i.e. brown) rats, which had not arrived in England by this date. In his paper '*A Plague Epidemic in Voluntary Quarantine*' published in the *International Journal of Epidemiology*, Colman writes "*there is no reason to doubt that*

the Eyam Epidemic was a plague epidemic: the symptoms and signs of plague were well known to both doctors and the general public".

Seventeenth century doctors were not always agreed on the cause of a disease and certainly the definitions of symptoms were not clearly standardised. Many doctors and local authorities were reluctant to admit to the presence in their midst of anything so drastic as plague, and resorted to much vaguer definitions to disguise the true nature of the disease. Indeed the same reluctance was evinced in India during the outbreak in the late summer of 1994 and official sources there have tried to deny the nature of the disease, and other pulmonary afflictions were suggested in the face of the hysteria and general panic occasioned by the emotive words pneumonic or bubonic plague.

One of the late 17th century medical scholars, Dr. Richard Meade, in 1721 published his "*Discourse on the Plague*", which draws on the epidemic of 1665 and in Marseilles in 1720 for evidence and was at variance with some of his less distinguished colleagues about the cause and reasons for the spread of bubonic plague, but he had clearly studied the symptoms, noting some thirty in all. He was able to compare them with other contagious and infectious diseases and is quite precise in advocating different methods of treatment. It is not necessary for us to agree with the treatment, but it must be noted that they were looking at, and attempting to treat, a variety of problems with which they were familiar and which they could distinguish without any sense of confusion.

Meade realised that the use of quarantine would increase mortality within the affected area, but saw its limiting effect on the wider population and stated that "*when the plague was last in London it had spread because there was no quarantine into Kent, Sussex, Hampshire, ... Derbyshire and even as far north as Newcastle*".

Mompesson has been criticised for imposing quarantine, and there are those who would say that his action was in every way contrary to the best interests of the villagers. Brian Robinson calls it a grim mistake, and says that "*without doubt flight would have been the better course of action*". Whilst this view is supported by Melvyn Howe in *Man, Environment & Disease in Britain* and to a lesser extent by Philip Race in *Some further consideration of the plague in Eyam,* who rightly sees it as the cause of the very high mortality in the village, it is very much at variance with the view expressed by Andrew Appleby in '*The Disappearance of Plague: A Continuing Puzzle*' published in *The Economic History Review,* 1980, who writes "*Of all the explanations given so far (for the disappearance of plague) quarantine strikes me as much the most plausible*", though it would not be effective entirely on its own. Biraben *Problemes de Mortalite* argues the case strongly for quarantine. Isolation now seems to be a most effective control measure and probably the chief factor in the eventual limitation of the disease.

As early as 1712 Meade had travelled extensively in Germany where there was at this time a policy of quarantine and strict regulations concerning the treatment of the sick in lazarettos or hospitals, the cremation of the dead, and *cordons sanitaires* around the infected area, similar in the main to measures which had been adopted in Eyam.

Dr Joseph Browne published *A Practical Treatise on the Plague* in 1720 where he acknowledges the regard, merit and great name and reputation of Dr. Meade and here we begin to get an insight into the extent of medical knowledge about this and other fatal diseases. Admittedly this is some years after the disappearance of plague in England, but surely these men and others like them were building on a foundation laid by their predecessors.

He agrees with Meade that plague could be transmitted through the air, and from diseased persons (suggesting to say the least that they were aware of pneumonic plague), and from goods transported from infected places. To these Browne would add diet and "*diseases that are causes of other diseases*". This implies the transmission of the bacilli through coughs and sneezes, namely that one complaint, a cough for example, causes another disease (plague) in others who come into contact. However Browne does not go along with those who suggest that plague could be spread by insects or conveyed in their eggs. Kircher had suggested worms as a source of infection, in particular by smallpox, measles and malignant fevers.

Manson also comments on the effectiveness of modern systems of land or sea quarantine, and we are reminded that it was very much due to similar measures to these that plague was driven from western Europe in the hundred years after 1666.

As an addendum to this paper a list of the symptoms, on which a doctor in the early eighteenth century would make a diagnosis of plague, is compared with those looked for in a modern examination as listed in Manson *Tropical Diseases*, 1987. The order has been changed in the modern diagnosis for ease of comparison.

Meade was certainly familiar with measles which was an endemic disease, and advocated methods of treatment that were quite dissimilar from the treatment for plague. Our own knowledge of measles reveals that it was more likely to occur in children and in the winter months, unlike plague which was mainly a summer disease and did not occur in a specific age group. Measles can leave children with permanent defects, notably blindness, and it is interesting to note that there is no mention in the very detailed oral tradition in the village of Eyam of post plague suffering by any section of the community. An analysis of the age of victims likewise does not indicate a heavy preponderance of child deaths. The figures are:

1	Children under ten years old	66	
2	Those between 10 and 15	40	
3	Those between 15 and 20	32	**138**
4	Adult deaths (i.e. over 21)		**122**
	Total deaths		**260**

In addition there were 16 other deaths in the parish (14 in Eyam) that were not attributed to plague, of which six were minors and ten adults.

Such medical books as were likely to pass into the hands of the generally literate reader, as opposed to the medical scholar, do themselves give the modern reader an idea of the extent of medical knowledge that might be available to the more general reader. *The Family Dictionary or Household Companion* published in London in 1695 is a good example of what might be found in a literate household. It advises on treatment for both measles and plague, and in particular how to induce the plague carbuncle to swell and thus to burst thereby enabling the poison to be drawn off, whereas spots and pustules should be left well alone. The cure may sound worse than the disease, but like the more scholarly work of Dr Meade, is precise in its recommended treatment for two very different diseases. Meade wrote of plague "*The eruptions must not be left as in smallpox or measles*".

There may have been a measles outbreak in the eighteenth century. In the records for the years around 1780 there were certainly an unusual number of child deaths. Measles was endemic, certainly was a deadly disease, and there have been serious outbreaks in the past causing many fatalities, and if we turn our backs on the present attempts to control it, may yet again show its power.

Bubonic Plague is characterised by swellings, usually in the area of the lymph nodes in groin, armpit and neck. Though referred to variously as carbuncles, protuberances of the flesh, tumours, or simply as swellings, it is clear that one of the symptoms was the bubo (the swelling that gives the disease its name). Such swellings would not occur in measles, and if such a growth appeared it would be recognised as a plague symptom and give cause for alarm. William Mompesson, the Rector, writing in 1666 in a letter to his children informing them of their mother's death, tells them that shortly before she died, she was treating him for an "*issue on his leg*" which was discharging "*a green matter..., which she fancied a symptom of the distemper raging among us had gotten a vent that way .... I think she as mistaken in the nature of the discharge ..., certainly it was the salve made it look so green*". In another letter to his uncle, John Bielby he writes "*My Man had the Distemper and upon the appearance of the Tumour I applied several Chymical Antidotes which had a very kind operation and with ye blessing of God kept the venom from the Heart and after the rising broke he was very well*". This does not accord with the appearance of measles, nor with the recommended treatment for the spots associated with that complaint. Clearly Mompesson was looking for buboes or carbuncles.

Brian Robinson hopes to establish that measles was the true cause of the Eyam mortality in the seventeenth century by testing the D.N.A. of one of the plague victims. This may well prove once and for all how one of the deaths was caused, but it may still prove inconclusive. Just as George Viccars' death cannot positively be linked with the arrival of the tailor's materials, so equally it will never be known for certain that the known cause of the death of one victim will incontrovertibly be established as the cause of death of all the victims in the fourteen months of the outbreak.

This may well be a question that cannot be completely and satisfactorily be answered, but whatever happened in Eyam, the important aspect of the story is the way the people reacted to it, and of their faith in God and reliance on their leaders. If it was measles one is left wondering why it was relatively easily controlled, and why it only struck once in this area. How did the infection arrive in 1665 and how could it centre on Eyam without affecting any other communities in the surrounding area? However whether the people of Eyam accepted quarantine to control the spread of bubonic plague, anthrax or measles does not alter the importance of their sacrifice, and the traditional account of those fourteen months will surely survive, whatever the pressures. Their heroism is not diminished or demeaned according to the nature of this disease. One might add that in a similar way, the works of William Shakespeare would be in no way altered by a different signature. They stand, as do the sacrifices of the Eyam people, on their own merit.

Dr Robinson is quite correct when he describes William Wood, the nineteenth century village historian as a romantic. He was writing in the manner and style of his age, and he was carried away by sentiment, and his work contains inaccuracies, largely because he did not have access to contemporary material which is now available. He made two fundamental errors, which have long been accepted as the basic facts of the story.

The Parish Register, clearly shows that Mary Cooper, in whose house the first victim died, had remarried within six months of her bereavement to Alexander Hadfield, himself a much later victim of the epidemic, and this is substantiated by her father's will in which she is named as a nominal beneficiary. Mosley left his children and grandchildren equally a mere shilling (five pence) each, the rest of his reasonable estate passing to his widow. Mary had been substantially provided for by her late husband, who far from being a poor labourer was described as a yeoman. He was literate, and his will and inventory show that he had books in the house, that he signed his own will, and had wealthy friends. Mary, with her first husband's estate and a new husband as well, would not be in want.

When Hadfield died towards the end of the plague his unwritten testament bequeathed his whole estate to Mary, but more importantly it describes him as the village tailor, which underlines the accuracy of George Mompesson's original description of the arrival of the plague as quoted earlier. Viccars, described by Mompesson as a servant was probably a journeyman tailor, who would be a skilled employed craftsman, not a travelling man.

Wood's other mistake resulted from his misreading of William Mompesson's letter to John Bielby, a mistake made earlier by Ebenezer Rhodes in his *Peak Scenery*, 1818. Mompesson wrote that "*76 families have been affected by the plague*". From a study of the parish register it has been possible to recreate these 76 families and they number in total about 350 people "*of whom*", as Mompesson wrote, "*259 have died*". What Wood was probably unaware of was that the Hearth Tax Assessment levied on Eyam Township in 1664 assessed 160 households, of whom 59 were liable to tax and 101 were exempted. Again by reconstruction, a village of around 800 persons has been established. It was neither wilful deceit nor romanticism that led William Wood astray. If the documents had been available for public scrutiny he would have had neither the time nor the means for conducting extensive research in London. Modern technology has been a great boon to researchers of past times.

A final misconception about the Eyam story centres about those who fled. Dr Robinson is correct when he says that the poor would not be able to run away. Truly they were tied to by their poverty, but equally there were those who were tied by their affluence. A person with a thriving farm or lead mine would certainly be unable to leave it untended, or afford to abandon his source of income. Those who could escape were those who had an alternative source of income, like the landowners with more than one estate. There have been serious doubts cast (by their descendants) on the time of the departure of the Bradshaw family, who have long been cited as the prime example of the wealthy family who fled when those around them agreed to stay. In a sense there was a spirit akin to that of the people in London during the war, the "*We can take it*" spirit, whereas in reality, there were few people who could forsake their livelihood, be they postmen or teachers or doctors. Their home was near their work. In theory, as long as the road was open, they had a chance to go when it was really necessary. That was probably the case in Eyam. What the villagers did when they gave their word to stay put and accept quarantine was to give up the hope of escape. To give up that hope called for a magnificent sacrifice, which they made in answer to their rector, supported by their deep Christian Faith. To give up the possibility of escape in exchange for what must have seemed like certain death was no mean offering, and many of them paid the full cost, and we should honour them for it.

The Symptoms of Plague

Below are listed the symptoms of the disease that is known as plague, that a doctor making a diagnosis in the early eighteenth century would be looking for, as recorded by Dr. Joseph Browne. Set beside them for comparison is a modern diagnosis as published in Manson's Tropical Diseases published in 1987.

The order has been changed for ease of comparison and the specialist medical vocabulary modified for the general reader.

DR BROWNE 1720	MANSON 1987
Horror coldness on the extremities and heat within.	A feeling of chilliness and aching in the limbs. Temperature rising to 39.4^0 40.0^0 or even 41.7^0.
Unquenchable thirst.	Thirst is intense
Oppressive heaviness of body, lassitude of limbs and lack of strength.	Extreme prostration and utter debility
Headache and syncopy (faintness)	Intense headache and giddiness
Sleep and immoderate wakening and a deadly sleep (coma)	Coma, convulsions, sometimes of a nature associated with tetanus
Delirium and troublesome dreams	Sometimes delirium or sometimes low delirious muttering
Pain in the heart and profusion of damp cold sweat.	Palpitation
Frequent vomiting and nausea and abhorrence of food.	Vomiting
Pulse languid and irregular or swift and furious or intermittent.	The pulse at first is full and bounding but rapidly loses tone, becoming small, fluttering and intermittent.
Urine thick and muddy and ill scented and difficult to pass.	Inability to pass urine or urine is scanty.
Stinking breath, hoarse mouth, difficult breathing, bitterness in the throat or mouth.	Sordes (impure matter, crusts or a foul accumulation) form on the teeth and about the lips and nostril. The voice is reduced to a whisper. Coughing and difficulty in breathing.
Belly swelled and pulled up as in a timpani Swelling or fullness about the heart or pain in the bowels	Considerable swelling around and usually severe pain around the gland.
Blood from the nostrils or mouth, stools or bladder.	Profuse watery, blood tinged sputum. Extensive haemorrhaging after death from all organs including the stomach, bowel, throat, etc..
Inflammation of the liver, pleurisies or frenzy.	The spleen and liver are usually enlarged
Costiveness (constipation) or else diarrhoea or body flux	Some patients have diarrhoea. Others may be constipated.
Carbuncles seated under the chin, tongue, palate, throat, stomach, breasts, and buboes behind the ears. Most form in the groin, particularly on limbs.	Plague buboes vary very much in size from less than that size of a walnut to something larger than a goose egg. Most form in the groin, particularly on the right side of the body, some in the arm pit, occasionally under the chin but rarely in the tonsil or limbs.

DR BROWNE 1720	MANSON 1987
Stench & putrefaction great Body tinged with a blue dye.	A powerful stench from a burst bubo
Black, livid, bluish spots or pustules striking inward from the skin to the heart.	Occasionally there are furuncles (boils), pustules and abscesses.
Buboes at first livid and lead coloured or reddish brown from black.	
Frightful countenance of the corpse. The body not stiff, soft and yielding, i.e. lank as a rag dipped in water.	

Dr Richard Meade added that the tumours showed a blackish spot in the centre, which was the beginning of gangrene which spread more and more as the tumour increased. Manson notes that in a very small proportion of cases, what are usually described as carbuncles, are in reality small patches of moist gangrenous skin. Sometimes they slough and lead to extensive gangrene. Should life be continued sufficiently long the vesicles become converted into pustules resembling small pox. These observations confirm in a remarkable manner the old writers who described manifestations in the Plague of London of 1665 as "blains".

EXTRACTS FROM 'A JOURNAL OF A VISIT TO LILFORD, JULY 1812' (cont'd)

2. Chatsworth and Middleton Dale

They informed us here that our road lay within a mile of Chatsworth, the far famed seat of the Duke of Devonshire, we therefore concluded to devote part of the afternoon to visiting it. We left the gig at Baslow and walked to the house. We soon gained admittance. It is built in the form of a large square with an open area in the centre. The first room we entered was paved with black and white marble with a handsome staircase of the same materials. The walls and ceiling represent the life of Julius Caesar. From thence we ascended the stairs to the state rooms (viz) 2 dining rooms, 2 drawing rooms, music room and picture gallery which is occasionally used as a dancing room. They so far exceeded any idea I had formed of them, in grandeur & elegance that I was completely dazzled. I find it impossible to describe them, all the walls and ceilings are covered with paintings by the most eminent masters representing the actions of several great personages. We were next shewn the ancient state rooms which remain yet as they were first furnished when the house was built. They must then have been very elegant. They contain many valuable paintings and the carving in wood and stone of which there is a great deal is said to be the best in the kingdom. The unfortunate Queen of Scots was confined here some years, she was allowed three rooms only. In one of them is a bed which she used. It is of crimson velvet with silver fringe, it is fast going to decay and is a sad emblem of a fallen greatness. That room is never used but the other two have lately been fitted up for use. The bedrooms are in a stile of elegance equal to the visiting rooms. The walls of all are either covered with paintings or tapestry in a high state of preservation. In the dressing room of the late Duchess are 2 Cabinets of fossils and plants, one filled entirely with productions of Derbyshire, the other are principally foreign. They are very neatly arranged and have a very pretty effect. We were next conducted to the chapel which has been lately finished and is equal if not superior to the other parts of the house. The walls, ceilings represent all the miracles, the Crucifixion and Resurrection of our Saviour. The pulpit and seats are covered with crimson velvet edged with gold. We next went to the garden & water works and renamed to the inn highly gratified with our afternoon's excursion. We then went to Stoney Middleton where we slept.

On Saturday we left early and had a delightful ride through Middleton Dale. You here see nature in reality, rock rising above rock many hundred feet, huge pieces hang seemingly without support as if ready to drop and bury forever the traveller beneath them. We breakfasted at Peak Forest, visited a short time at Chapel in the frith, drank tea at Bullock Smithy and arrived at Ardwick at 8 o'Clock without meeting with any incident worth recording.

Reference: Hodgkinson Papers: Lancashire Record Office DDX.211, Manchester Central Library Archives L15/2

REPORTAGE OF THE MICHAELMAS CHEESE FAIR AT DERBY IN THE *DERBY MERCURY* 1780-1880

(by Roger Dalton, Department of Geography, University of Derby, Kedleston Road, Derby, DE22 1GB)

Introduction

Cheese making on the farm was a major activity in southern Derbyshire and adjacent counties from the eighteenth century onwards until replaced by the liquid milk trade during the 1870s.[1] In common with other towns in cheese making districts Derby was an important centre for the marketing of cheese and fairs were regular features of the economic and social life of the town. The largest fair was held at Michaelmas and its status is confirmed by the annual reportage of marketing conditions in the *Derby Mercury* newspaper. The information contained in the reportage is variable but frequently includes:

(a) the average or range of price obtained in shillings per hundredweight with differentiation on the basis of quality and colour.

(b) comment on trading conditions in a particular year and any special features of the fair.

(c) comparison between conditions and prices at Derby and other centres mostly located in the north Midlands.

The aim of this paper is to analyse the information contained in the reports of the Michaelmas Cheese Fair for the period from 1780 to 1880, in combination with other cheese related advertising which also featured in the *Derby Mercury* with a view to identifying aspects of the economic, environmental and technical contexts within which the local farming community operated. However a serious omission in the reportage from a research viewpoint is the lack of information as to the quantity of cheese sold. Only in 1826 (DM 4.10.1826)[2] is there reference to the 300 tons sold being two thirds of normal, i.e. an implied 450 tons. Unfortunately there appears to be no other source from which this can be rectified.

Trends in cheese prices

Figure la shows the trend of average price per hundredweight for non coloured cheese on an annual basis from 1780 to 1880. The complexities of the annual trend pattern have been smoothed by using the five year moving average technique as shown in Figure 1b which eliminates the more extreme variations. Overall the price obtained by those trading cheese increased by almost three times during this period rising from 25/- to over 70/- per hundredweight. However the level of price fluctuation from year to year is striking and it was unusual to find the same price being achieved in successive years. The greatest oscillations occurred between 1816 and 1821 such that 1818 was the year of highest price at 84/- a hundredweight. All those involved with cheese including farmers, retailers and the itinerant cheese merchants known as factors therefore worked in conditions of considerable price uncertainty and annual margins of profitability or loss would have been difficult to predict.

In broad outline the shape both graphs shows many of the classic features of the price curves for food stuffs, and indeed for other commodities, during the late eighteenth and nineteenth centuries. In the earlier stages the steep inflationary rise in prices was the result of food shortages and the demands of the army and navy during the years of disruption of trade and armed conflict associated with French Revolution and its aftermath. During this period average cheese prices at Derby moved from under 25/- a hundredweight in 1780 to a maximum of 77/- in 1811. At the end of hostilities in 1815 a sharp fall in cheese prices occurred so that, discounting the exceptional price achieved in 1818, prices declined to 42/- in 1821, a level still substantially greater than 1780. The ensuing period strongly reflected the national cyclic patterns of trade revealed by price indices such as the Sauerbeck index and Gayer, Rostow, Schwartz index also included in Figure la[3]. An approximate ten year price cycle is indicated by the sequence of peaks in 1826, 1838, 1847 and 1855 separated by troughs in 1821, 1831, 1843 and 1851. However apart from these cyclic swings the period was one of overall flatness with no general advance in price. By contrast between 1855 and 1880, although the cyclic movement continued, an upward trend is evident reflecting increased demand relative to supply from a population which was continuing to

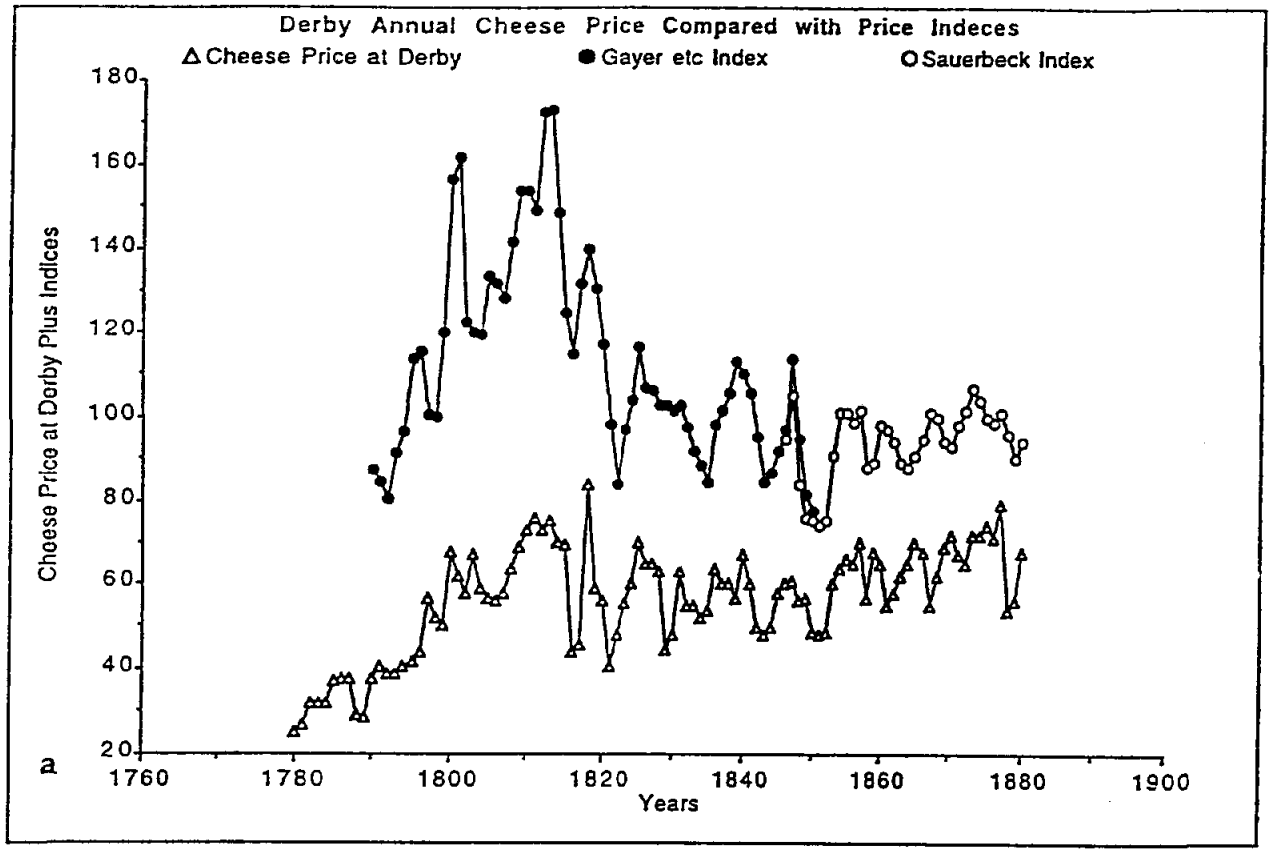

Fig 1a: The Price of Cheese at Derby 1780-1880 Compared with Standard Prices Indices.

Note: the cheese price is expressed in shillings per hundredweight and is calculated as the average of the range of price quoted for a given year. The Gayer, Rostow and Schwarz index is for domestic commodities and is based on the monthly average for 1821-5 = 100. The Sauerbeck index is for animal foodstuffs and is based on 1867-77 = 100.

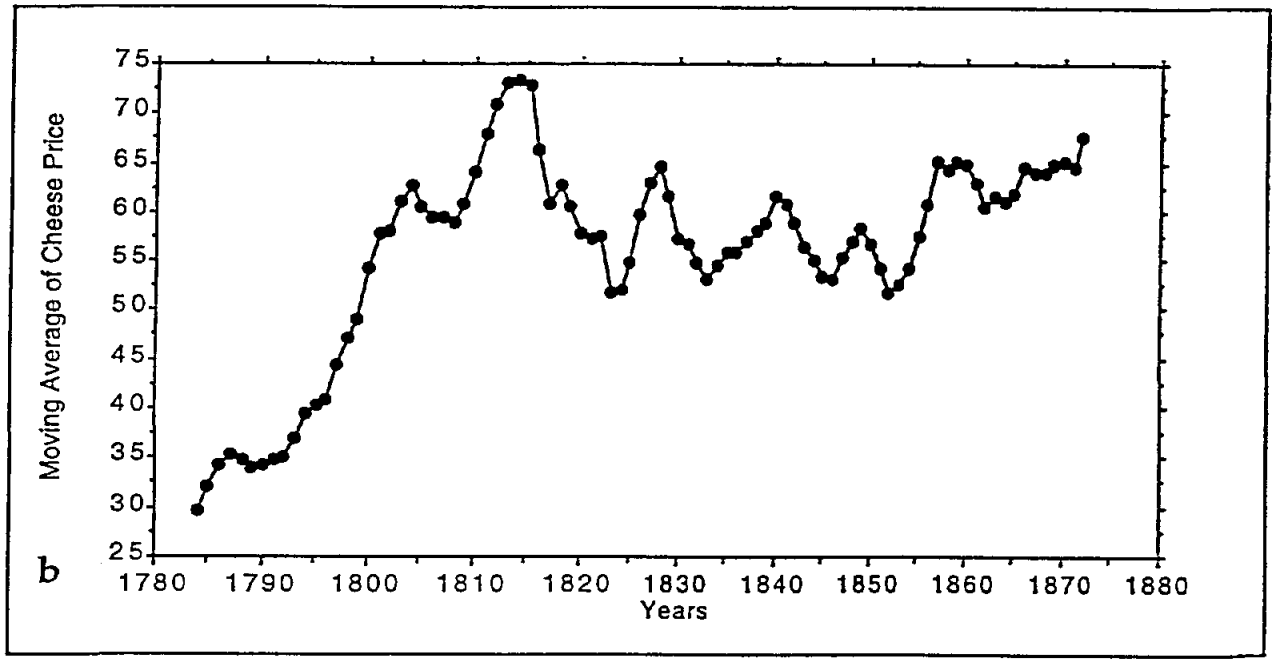

Fig 1b: Five Year Moving Average of Derby Cheese Price in Shillings per Hundredweight

grow but also enjoying improved living standards. The 1870s marked the declining years of farmhouse cheese making as the markets for liquid milk in urban areas were opened up by the railway companies, notably the Midland. Foreign imports also began to penetrate the British cheese market making the factors less dependant on home production, a point noted in the *Derby Mercury* (3.10.1860) in connection with trans-atlantic and Dutch cheese. Railway milk became more profitable than farmhouse cheese while surplus output was diverted to the new local cheese factories which were established in southern Derbyshire and neighbouring Staffordshire. The sharp drop in prices for 1878 and 1879 may indicate a growing lack of competitiveness and also coincides with the beginnings of the deflationary period which lasted until the First World War.

The responsiveness of a localised cheese market, as at Derby, to national conditions is matched by the *Derby Mercury* reportage of prices at other fairs held during the Michaelmas period. Fairs held at Chesterfield, Loughborough, Nottingham and Ashbourne show a close approximation to the Derby price for a number of years. An exception is the variance of the 1826 price for Newark while unusual drought conditions resulted in low output in the Derby area. Single references to more distant fairs at Northampton, Shrewsbury and Worcester all match the Derby price exactly.

The impact of shared national influences on prices is evident from data relating to other English cheese regions but with interesting differences of general price level. Partially complete sequences of prices for Lancashire cheese and Cheshire cheese between 1820 and 1860[4] are shown in Figure 2. The Lancashire trend (Figure 2a) has many of the features of that for Derby but at levels some 5/- to 10/- a hundredweight lower, perhaps indicating a lack of national standing for Lancashire cheese which, according to Cheke[5], enjoyed a high local regional preference on the basis of its toasting qualities. Cheshire prices (Figure 2b) match the Derbyshire and Lancashire less closely but a higher price was commanded. This strong relative standing for Cheshire is in line with comment as to the character of Derbyshire cheese. Sheldon of Bradley near Ashbourne writing in 1883[6] regarded Derbyshire cheese as a middle class cheese lacking the reputation of Cheshire, Cheddar and Stilton. Brigden[7], however, expressed a markedly unenthusiastic opinion: '*Derby cheese was a locally popular nourishing but unpretentious product that remained largely outside the ranks of polite society*'. Nevertheless it is clear that Derby cheese was marketed nationally in increasing quantities from the late eighteenth century onwards with London as a major outlet. Pilkington[8] suggested 2,000 tons were being sent out of the county annually. By the mid nineteenth century Rowley[9] and White[10] indicated production at 10,000 tons, although it has been argued by Dalton[11] that this figure is exaggerated.

Variation in Price on the Basis of Quality

The manner of reportage in the *Derby Mercury* as to the range of cheese price secured at the Michaelmas Fair indicates clearly that the quality of product was extremely variable. In the late eighteenth century the differential between good and poor quality cheese averaged at 2/- to 3/- but by the 1870s with substantially higher prices it widened to exceed 10/-. Comment on trading conditions in particular years shows that the poorer quality cheese was marked down in price and may have been difficult to sell but there was always a market for quality especially coloured cheese.[12] In 1819 for example the sale of cheese was stated as being '*exceding brisk for 58/- to 60/- a hundredweight: a prime dairy or two of coloured cheese fetched 65/-, inferior cheese was scarcely saleable at 55/-*' (DM 2.10.1819).

Two factors appear influential in determining the quality and level of cheese output in any year. Firstly there were the widely differing circumstances of cheese making on the large number of farms contributing to the Derby market the majority of which were smaller than 50 acres. Dairy management was fundamentally women's work and the skills of the farmer's wife were the key to success. However Cheke[13] has shown that before 1850 the work of the dairy proceeded in the absence of understanding of the biochemical processes involved and methods were therefore inevitably empirical. Consequently many continued '*to produce cheese both good and bad with no knowledge of the cause of such variation*'. Such comment appears appropriate to the Derby area as according to Sheldon in 1883[14] '*thirty years ago the cheese making appliances in Derbyshire were as a rule very primitive in character*'.

Secondly local conditions varied seasonally as weather influenced the abundance and nutritional value of grazings and hay and hence the output and quality of cheese. It was also possible to store cheese for periods up to eighteen months and more affluent farmers may have exercised some choice as to when to market their product. However reportage clearly indicates deficiency of supply on only four occasions in 1826, 1831, 1854 and 1859 perhaps suggesting real shortage in these years. In the acknowledged dry year of 1826 (DM 4.10.1826), the price was also lower than anticipated i.e. '*5/- less than looked for by dairymen*' which begs the

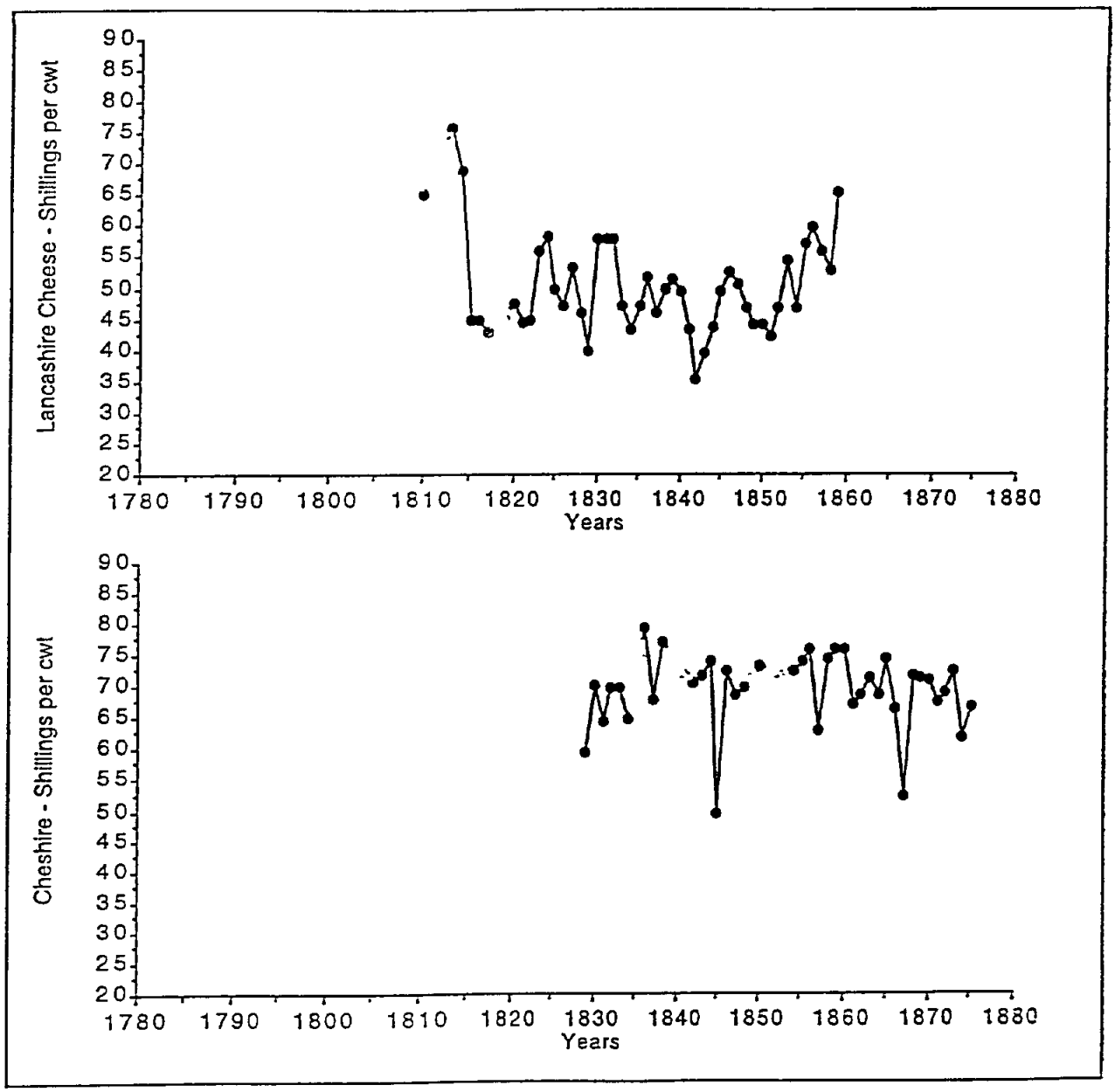

Fig 2: Cheshire and Lancashire Cheese Prices

question as to whether quality was deficient as well. In 1831 (DM 1.10.1831) when the spring weather was dry the supply was not large owing to *'deficiency of make'*. 1854 was another dry year with annual rainfall at Derby only 70% of average so that at the Cheese Fair: *'there was rather a small supply which was sold rapidly in the morning at from 60/- to 68/-.... a few superior dairies were priced at 70/- upwards but they had great difficulty in meeting with purchasers and some went home unsold'* (DM 1.10.1854). At the 1859 fair not only was the supply of cheese below average but buyers were few as Rugby fair was on the same day so that *'high prices were asked for at the commencement but later in the morning sales consequently slackened'* (DM 30.9.1859). The record price achieved in 1818 drew no specific comment from the *Derby Mercury* other than that the quantity was *'larger than expected'* (DM 1.10.1818). Given the prolonged drought through June, July and August of that year this may imply some anticipated difficulty in supply which was not fully realised.

In some years it is apparent that the market was over supplied. The report on the 1816 fair reads *'our fair was crowded with cheese and although the buyers were full as numerous as usual we were sorry to note a great flatness.... general prices were 44/- to 48/- with best at 50/-.... small lots only 40/-, cheese not sold and was taken home again'* (DM 3.10.1816). In 1823 *'our fair on Monday was unusually crowded with cheese the supply being greater than in any former year within our recollection - a less depreciation of prices took place than might be expected - buyers were numerous'* (1.10.1823). 1828 was another year with unusual supply: *'very early on Monday morning great numbers of wagons and carts laden with cheese were brought into town, and prior to business being commenced the market place and streets leading there to were jammed.... the quantity offered for sale was very considerable and the sales were rapidly affected.... William Woodward of Egginton, an elderly person, had his pocket picked of one shilling and sixpence'* (DM 2.10.1828). In 1851 when the price was the lowest since 1829 *'we are informed that there were upwards of 600 wagons and carts laden with cheese forming an enormous train of vehicles which extended through several streets'* (1.10.1851).

On other occasions, as in 1842, the market did not fit the expectations of the Derby Mercury reporter as the fair was *'numerously attended by buyers and with a plentiful show wagons remained unsold; at 48/- to 52/- the price was surprisingly low'* (DM 27.9.1842). The quality issue is apparent in 1848 when large quantity of inferior cheese was made possibly as a consequence of unusually wet conditions such that the market was depressed and large stocks continued to be held by the factors (DM 28.9.1848).

Attempts to Improve Cheese Quality

Towards the close of the 1850s the *Derby Mercury* provides evidence of moves to improve both productivity and quality through the partial mechanisation of cheese making. Consequently higher prices might be obtained but the inroads into the home market being made by imported cheese from the Netherlands and more especially the United States might also be combatted. The newspaper advertised the curd separating machines invented by Keevil of Lacock in Wiltshire (DM 20.6.1858). This was described as a 'Patent Cheese Making Apparatus' for cutting, filtering and pressing: *'it is the most perfect invention hitherto applied to the manufacture of cheese and effects a great saving in time, labour and material producing large quantity and better quality'*. Reportage also emphasised parallel efforts by local dairymen, Travis of Mercaston and Thompson of Radbourne. In 1857 (DM 3.10.1857) one dairy achieved 77/- per hundred weight which was some 10% above the average for the year:

> *'This was Mr Travis of Mercaston who also exhibited the new cheese making machine invented by him and with which his cheeses have been made. We understand this apparatus is now being used by several of the best dairymen in the county among whom is Mr Smith of Birdsgrove who obtained Mr Meynell Ingram's prize of £5 and a silver medal and Mrs Smith £2 at the Stafford Agricultural Show for exhibiting the best cheese. The machine caused considerable interest even more so than at the last fair and Mr Travis received several orders. They are manufactured by Mr Dunn of King Street, Derby and from what we hear are the cheapest cheese making apparatus before the public'.*

In the following year of 1858 (DM 5.5.1858) Mr C. Travis took great pleasure in stating that his apparatus, now available in five sizes between 36 and 120 gallons, *'was being used by several large dairy farmers in southern Derbyshire and could be seen at Mercaston, Hopton, Wirksworth, Derby and Tutbury'*. Potential reward for investment is evident in 1859 (DM 5.10.1859) when five or six dairies, including that of H. Chandos Pole of the Radbourne Estate Home Farm, produced cheese *'the greater part of which was made by machines such as Keevil's and Travis's'*. The price obtained was 76/- to 80/- a hundredweight as compared with 65/- for middle quality in that year. It was claimed in 1860 (DM 3.10.1860) that using the Travis apparatus *`the milk that would make 27*

lbs of cheese by the old method of manufacture will make 30 lbs by this process thus enabling an increase in income of between 5/- and 7/- a hundred weight'.

Further local development had been reported in 1858 (DM 14.4.1858). Thomas Thompson also of Radbourne announced *'that he has now completed his patent cheese making apparatus which exceeds all others for simplicity of construction real utility and expedition. To complete the whole process from time of putting in the rennet is two hours and 40 minutes for 70 lbs weight curd'*. Other basic cheese making problems were also being tackled as J. G. Haywood of Market Place, Derby was advertising in 1860 *'stoves for cheese and rooms'* in order to maintain a constant heat (DM 7.11.1860). Temperature control was clearly critical and inadequate conditions in cheese dairies in south Derbyshire and east Staffordshire had been noted by Andrew Thompson[15] in his assessment of claims for improvement grants for example on at least one farm cheese was made in the kitchen where food was prepared. Although innovative approaches to cheese making by more significant dairy farmers, aided by small manufacturers, mark a shift towards a better and more uniform quality of product, there must remain significant doubt as to the level of take up. An anonymous *Derby Mercury* report (6.10.1869) severely criticised dairies for being *'small and ill ventilated with no means of regulating temperatures'* while Sheldon[16] noted that machines had only been adopted in a few advanced dairies.

Derby Cheese Fair and Local Cheese Prices

Derbyshire cheese was consumed within the farm community and in its immediate vicinity, it could be sent to the local markets, which operated weekly in towns such as Derby, Ashbourne, Ashby, Burton and Uttoxeter and could be traded using the services of the itinerant factors. Additionally Henstock[17] has emphasised the role of local cheese managers and provision dealers and the resultant sales into urban and industrial communities such as those based on lead and coal mining. In these arrangements cheese fairs, like the Michaelmas Fair held towards the end of the summer cheese making season, were of prime significance in fixing the local seasonal price of cheese. They also provided a general yardstick for the prices offered in the individual deals made between farmers and the itinerant factors who played a key role in the marketing of better quality cheese.

Some farmers won a particular reputation from factors with respect to their cheese so it was noted of Mrs Smith of Clifton near Ashbourne *'the factor never omitted speaking of good cheese'* (DM 6.2.1833). Other factors were members of the local farm community who combined cheese production with marketing but clearly others were independent and exploited their position. William Smith, who farmed at Swarkestone, reported in 1833 that the farmer generally sold his cheese to one cheese factor and that *'where a man is steady in letting him have his cheese he will advance money for his rent .... cheese is advanced at 10/- a hundred/weight'*.[18] But in other circumstances the relationship between farmer and factor appears to have been less happy irrespective of events at the Cheese Fair. Druce[19] saw one of the benefits of the promotion of a cheese factory system in the 1870s to be the break up of the monopoly of the old cheese factors, *'who often advanced the farmer money on the cheese before he actually bought it and who therefore had the farmer in his power when settling day arrived and the cheese was fit for market and could dictate almost what he pleased'*.

Conclusions

Derby cheese market was an important focus for cheese trading for the local farm communities during the period 1780 to 1880. Price movements strongly reflected the wider national influences which impacted other cheese and food wholesaling and retailing. In detail fluctuations from year to year have been shown to have been sharp and potentially unpredictable. Identifiable local factors influencing both level and range of price were the potentially interrelated weather conditions and also variation in quality of make. Evidence for several years indicates the occurrence of drought and resultant reduced feed availability as the cause of both shortage of supply and inferior quality although the latter might equally relate to problems of temperature control in the dairy if the weather were also hot. Variation in quality is also shown to have been a consequence of lack of consistency in dairy practice where techniques were essentially empirical. It is clear but not surprising that poor cheese was difficult to sell in certain years. On the other hand quality cheese commanded higher prices and reportage indicates that developments in cheese making apparatus enabled certain dairies to make significant progress in the 1850s and 60s.

Notes and References

1. The rise of the liquid milk trade in Derbyshire is discussed in G.A.Tomson, *Dairying in South West Derbyshire in the Late Nineteenth Century*, 1986, unpublished M.Phil thesis, Loughborough University of Technology.
2. Reference to Derby Mercury reportage is indicated in brackets throughout the text by DM plus the date.
3. For tables see G.E. Mingay ed., *The Agrarian History of England and Wales, Vol. VI, 1750-1850*, p1001-2, Cambridge.
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5. V. Cheke, *A History of Cheese Making*, 1959.
6. J.P Sheldon, *Dairy Farming*, 1883, London.
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9. J.J. Rowley, 'The Farming of Derbyshire', *Journal of the Royal Agricultural Society of England*, 14, p395-424.
10. F. White, *History, Gazetteer and Directory of the County of Derbyshire*, 1857, Sheffield.
11. R.T. Dalton, *Agricultural Change in Southern Derbyshire 1770-1870 with Special Reference to the Dairy Industry*, 1995, unpublished Ph.D thesis, University of Nottingham.
12. Cheese was dyed orange/yellow using a substance called anatta derived from the fruit of bixa orelana and imported from Central America.
13. Cheke, 1959, *op cit*.
14. Sheldon, 1883, *op cit*, p234.
15. see Sneyd mss *1858-64*, Keele University Archive.
16. Sheldon, 1883, *op cit*, p236.
17. A. Henstock, 'Cheese Manufacturing and Marketing in Derbyshire and North Staffordshire 1670 - 1870', *Derbyshire Archaeological Journal*, 1969, p89.
18. W. Smith, 'Report of the Present State of Agriculture and of Persons Employed in Agriculture', *British Parliamentary Papers, 1833*. See also G.A Tomson, 1986, *op cit*, chapter 2.
19. S.B.L. Druce, Reports of the Commissioners - Royal Commission on Agriculture, *British Parliamentary Papers, 1880-82*.

ADDENDUM TO

CIVIL WAR DERBYSHIRE: SIR JOHN GELL'S 'TRUE RELATION' RECONSIDERED

(*Derbyshire Miscellany*, Vol 14, Part 6, Autumn 1997) by Andrew Polkey.

In discussing the Gell manuscript narrative the following reference and acknowledgment were omitted:

"Derbyshire County Council: Derbyshire Record Office D3287/1/1. Reproduced by permission of the County and Diocesan Archivist."

TORR VALE MILL AND THE TORRS, NEW MILLS

(by Derek Brumhead, New Mills Heritage and Information Centre, Rock Mill Lane, New Mills, SK22 3BN)

In May 1997, the 53rd East Midlands Industrial Archaeology Conference (EMIAC) hosted by Derbyshire Archaeological Society was held in New Mills, a former cotton town on the gritstone fringe of north-west Derbyshire. It is in an area of spectacular natural beauty standing astride the river Goyt at its confluence with the river Sett, both rivers being deeply incised into an impressive sandstone gorge eighty feet deep, known as the Torrs. The talks and guided excursions paid particular attention to the cotton industry and the influence of the Torrs. The Royal Commission of Historical Monuments in England and English Heritage, who at that time had recently conducted surveys of mills in north-west Derbyshire, made a detailed study of Torr Vale Mill in particular. Much of the physical detail of the mill and its structures in this article are derived from the excellent report.[1]

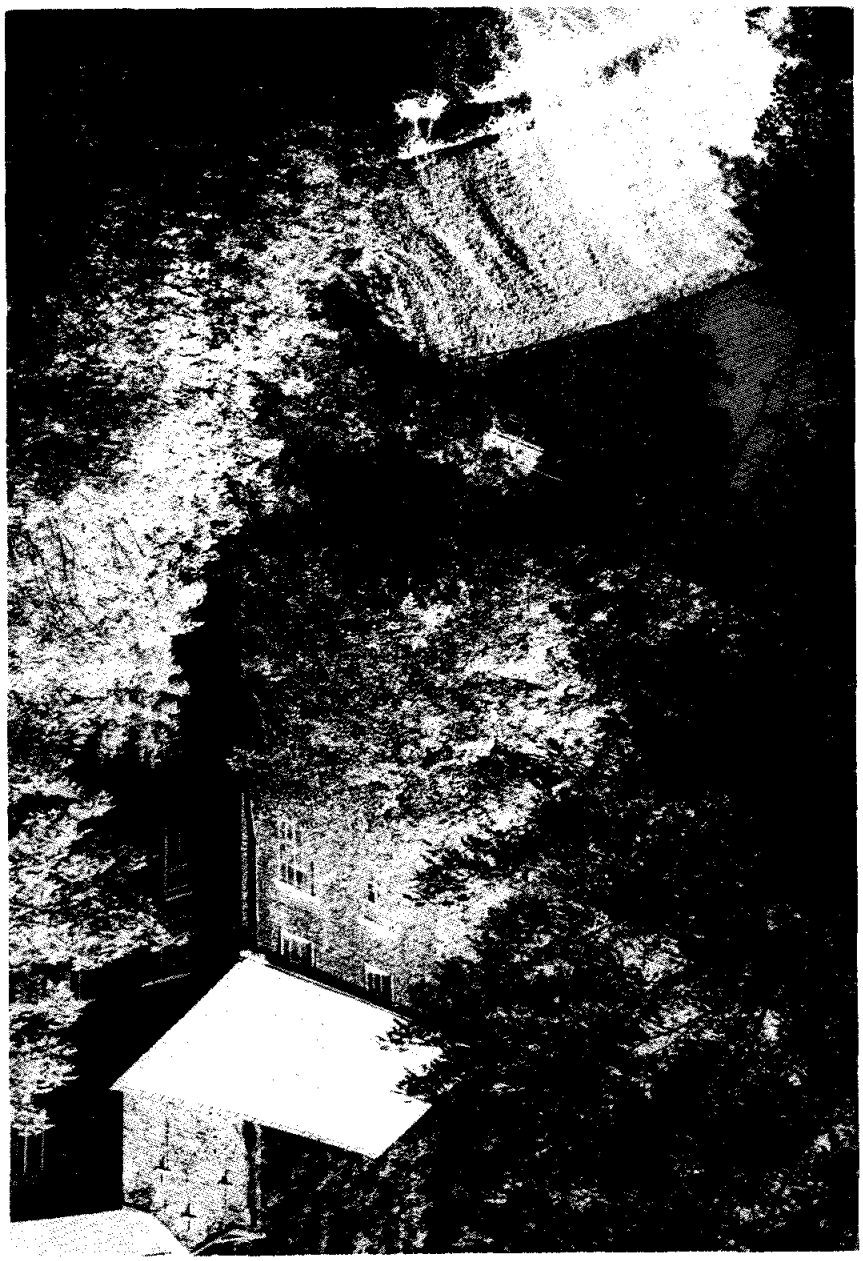
It is apparent that the first factory masters in New Mills were local men, switching to cotton with the introduction of the new carding and spinning machines, a development paralleled in parts of south-cast Lancashire.[2] Thomas Beard, described as a woollen manufacturer with a warehouse in Manchester,[3] and from a family with a long history as woollen drapers, started the first cotton mill in New Mills in 1785, on the same site as his woollen mill in the Torrs. The premises were leased to two cotton spinners Crowder and Goddard. It was insured for £1200 (utensils, stock, goods, two warehouses and cotton mill). In the same year there is another policy for his two tenants for £1,600.[4] This mill is an example of evolution from the woollen trade to the cotton trade.

In 1789 a three-storey stone building adjacent to the former duchy corn mill alongside the river Sett at the entrance to the Torrs gorge was being advertised for letting, being described as *'lately employed for the purpose of carding and spinning cotton'*.[5] The corn mill, a separate building, was also for advertised for letting, so it is clear that the cotton mill was a new building or a converted one, and would appear not to represent a switch of capital from corn, but new capital. At this time, the water-powered corn mill was a common focus for the new cotton mills, and in the case of New Mills corn and cotton milt made use of the same artificial water course. In 1790-91 Edward and Ralph Bower, who had owned the corn mill for twenty years and were from the local family of clothiers and tanners, were described as the proprietors and occupiers of both the cotton mill and the corn mill.[6]

In 1788, Daniel Stafford, who at that time occupied the corn mill, took out a 99 year lease on a plot of land in the Torrs containing 30 perches within a bend of the river Goyt for the purpose of building a cotton mill. The Torrs gorge - formed by glacial meltwater about 15-20,000 years ago - was particularly suitable for mill construction.[7] Rocky waterfalls and cascades in the river beds allowed the construction of weirs and a steady supply of water; there were good mill sites on a rocky terrace several feet above the water; and the sides of the gorge provided sandstone for building. Indeed, the removal of quantities of sandstone made ample room for the mills. Today, disused quarries in the Torrs are most probably the source for stone for the mills construction.

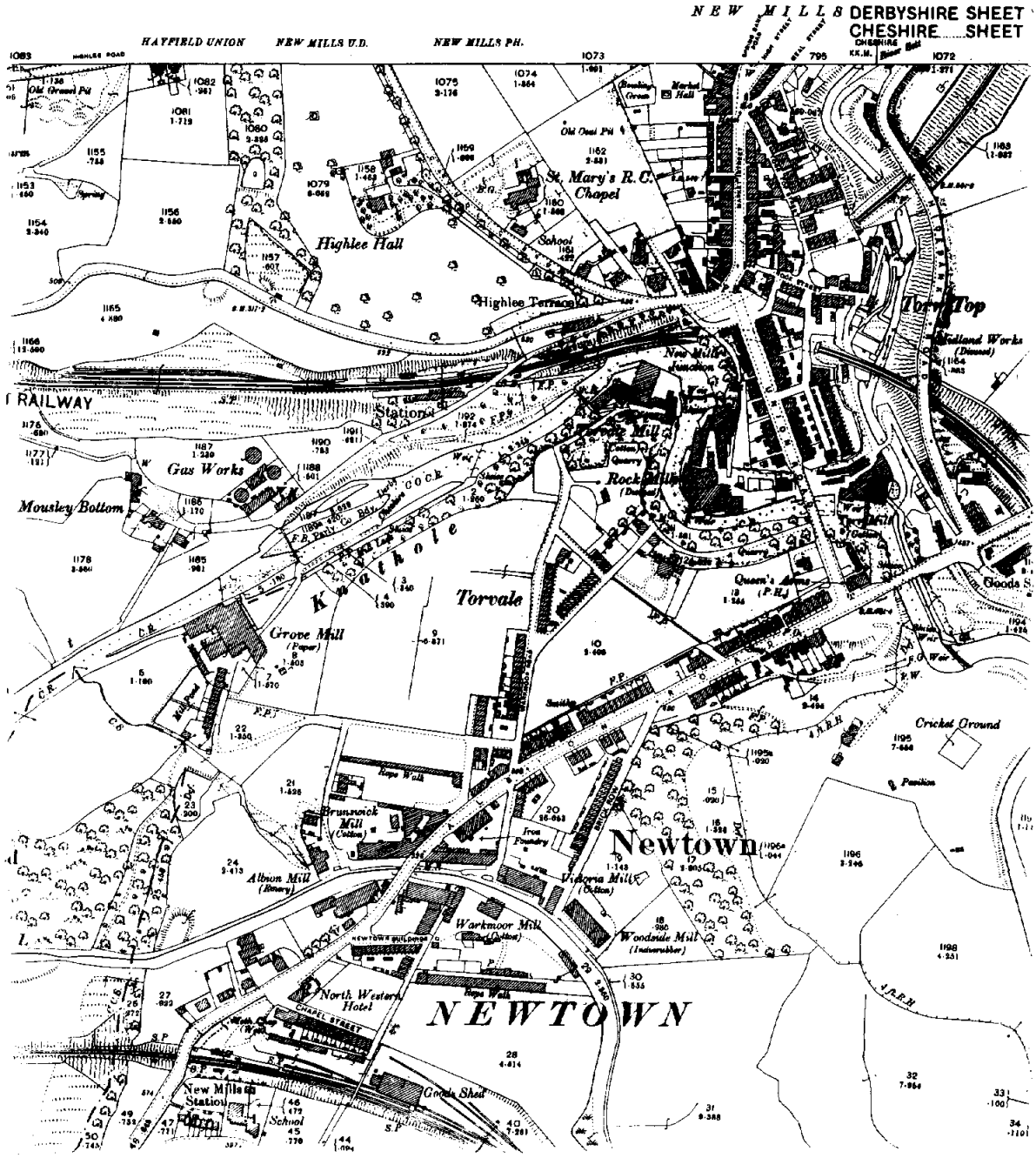
The mill, which became known as Torr Vale mill, was built for water-powered cotton spinning and weaving in 1788-1790 when it was recorded that there was a weir, a water course cutting through the promontory on which the mill was built, a bridge over the river, a mill and two other buildings used as dwelling houses and factories. No early plans have been found but physical evidence of early surviving structures suggests that a building identified as the 'old mill', partly survived the rebuilding of 1860s. Today, it can be seen that this building is too high above the river to have been water-powered, hence the conclusion that it was an unpowered loom shop (or spinning shop ?).

Torr Vale mill was extensively rebuilt in the 1860s to use a combination of steam and water power. The difficulties of access (there were only steep paths down into the gorge) and the cheapness of water power delayed the introduction of steam in such mills until the mid-nineteenth century. Manufacturers in semi-rural sites were discouraged by the high cost of purchasing and installing steam engines, the large amounts of coal they used, the cost of an engine man, and the difficulties of access.[8] However, periodic problems did arise from the irregular flow of rivers from the gritstone hills around - the river Sett rose on the flanks of Kinder Scout.



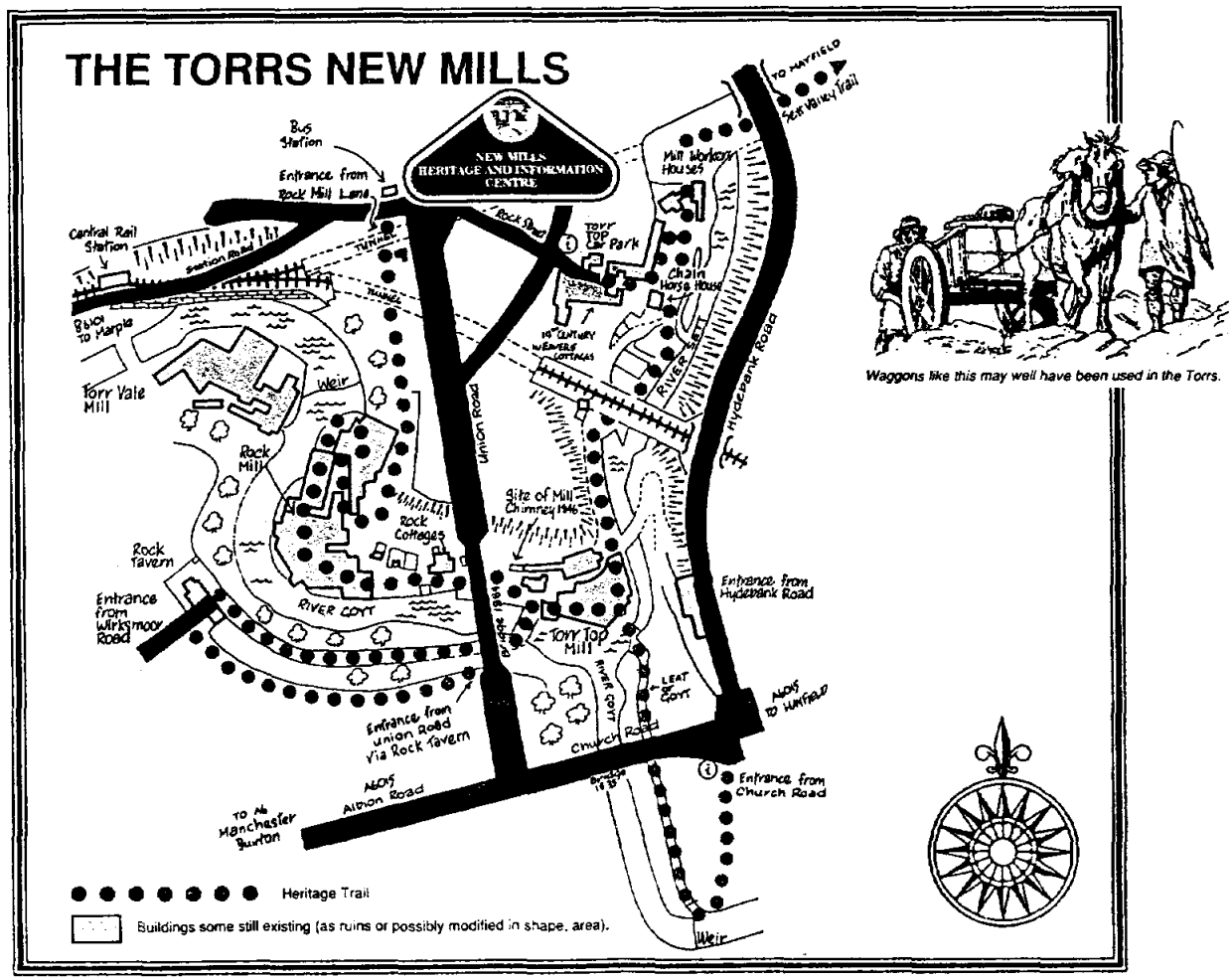
The 'Old Mill' and the weir and leat on the River Goyt, taken from outside the Heritage Centre. As can be seen, the building is set to one side and higher than the leat.

(Derbyshire Libraries, Archives and Arts Department)



The Torrs and its mills in 1896. The map shows Torr Vale Mill at its maximum extent.

(Ordnance Survey 25 inch map)



The Torrs today. Rock Mill and Torr Top Mill are ruins.

(New Mills Heritage Centre)

Thomas Barnes, who opened a new water-powered mill in New Mills in 1805 reported that:

> *"the degrees of irregularity, the liabilities are various; first, in the summer the water in a dry season is subject to great scarcity, and at other times, from the mountainous part of the country subject to heavy floods, which causes the water-wheels to be impounded, and a loss of time to the hands. The various stoppages of water as stated will average a loss of one twelfth part. Extent of the power fifty-five horse.*[9]

Yet even after the steam engines were installed in the mid-nineteenth century, the water wheels were not taken out of use, proving more economical when production level was low. When the water level was low, water wheel and steam engine were often coupled. It is interesting therefore that the RCHME survey of Torr Vale Mill confirms that in the basement is evidence that the steam engine, which was installed in 1856, was flanked by two wheel pits. Steam engine and water wheels were coupled by means of a clutch until about the 1940s. The engine was manufactured by Hick, Hargreaves of Bolton. Originally it had a low pressure single cylinder but was compounded in 1862 following the rebuilding of the site. It ceased operation in 1952 and was removed soon afterwards.

By the late nineteenth century the site functioned as an integrated cotton mill with, unusually, both spinning and weaving in the multi-storeyed mills. This was probably determined by the constricted nature of the site which prevented the construction of single-storeyed buildings. Most of the buildings date from the second half of the nineteenth century, but significant structures survive from the original mill. There still remains an intact and relatively well-preserved complex of mills and ancillary buildings covering a wide date range, which include the 'old mill', a five-storey cotton mill, a four-storey weaving mill, boiler house, chimney, offices, workshop and smithy. The mid-nineteenth century rebuilding included a terrace of workers housing named 'Torr Vale 1863' alongside the access road, with a manager's house at one end. In addition to its architectural significance, Torr Vale Mill is an outstanding example of the influence of topography on early industrial development, retaining a weir with related tunnels and watercourses. Listing by English Heritage is under consideration.

Torr Vale Mill is the last extant mill in the Torrs. It has been in continuous use since 1788-1790 to the present day, cotton towelling still being manufactured from imported yarn. Until the recent survey was made, it had not been realised that this is probably the longest period of continuous use of a cotton mill site still in use in England. However, the current business has suffered problems, putting future production and the building at serious risk. The search for funding is being pursued by the New Mills Conservation Area Partnership for conserving the mill, funding its repair, and ensuring its future without new employment opportunities. An approach has been made to the committee of the Prince of Wales' personal initiative 'Regeneration Through Heritage', a part of his Business In The Community organisation, to engage the interest and support of its members in finding a solution to this important problem building.[10]

After cotton spinning ceased in the Torrs in the early 1900s, the gorge and its mill ruins became neglected and overgrown remaining in this state for many decades. In the 1970s and 1980s, the town council in association with the county council took measures to improve the environment and open up the area for public access. The area was promoted as 'The Torrs Riverside Park - the park under the town', and it was at this time that attention was turned towards establishing a heritage centre. The establishment of New Mills Heritage and Information Centre in July 1988 - opened officially by Brian Redhead in April 1989 - was part of a wider strategy to develop the local potential for tourism and to assemble for the townspeople's benefit the story of their historical heritage. A recent fillip to this strategy has been Derbyshire County Council's successful bid to the Millennium Commission for funding a spectacular aerial walkway which will be cantilevered out over the river from the huge gritstone wall supporting the railway on the opposite bank to Torr Vale Mill.

Notes and References

1. The survey was partly funded through the New Mills Conservation Area Partnership (English Heritage, Derbyshire County Council, High Peak Borough Council). 1 am grateful to Mike Williams and Alan Stoyel of RCHME for providing me with a copy of their report and for allowing me to quote from its findings. It can be consulted at New Mills Heritage Centre (Tel: 01663 746904).
2. D.D. Brumhead, 'The early cotton industry in New Mills, Derbyshire', *Manchester Region History Review*, Vol XI, 1997, pp24-33.

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3. E. Raffald, *The Manchester and Salford Directory*, Manchester, 1781.
4. Guildhall Library and Art Gallery, Sun Fire Insurance Company records, Ms 11936/326, Policy number 500129, 1784-5, and Ms 11936/334, Policy number 513319, 1785-6. An index has been prepared by D.T. Jenkins.
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7. The glacial origin of the Torrs gorge is discussed in D.D. Brumhead, 'Geology and Transport History in North West Derbyshire', *North West Geologist*, No 2, 1992, pp21-32.
8. The building and equipping of a steam engine cost £20-24 for every horse power. Report by James Stuart, *Reports of Inspectors of Factories* (P.P. 1835-41, XX), p99.
9. Answers given by Thomas Barnes and Company of Disley and New Mills. *Factories Inquiry Commission. Supplementary Report, Part II: Lancashire District*, (P.P. 1834, XX), p37.
10. 1 am grateful to Allan Morrison of the Department of Environmental Services, Derbyshire County Council, for this information.

An impression of how the Millenium steel walkway in the Torrs gorge will look. Torr Vale Mill is on the left.

(Ian McKay, Derbyshire County Council)

SOUTH NORMANTON POST MILL - A SAD STORY

(by Alan Gifford

Having first become interested in Derbyshire windmills in the 1970s, one of the first mills I visited was the post mill at South Normanton. The skeletal buck (or main body) of the mill stood at that time in the garden of a bungalow, just off the Alfreton Road, in what was known 'Windmill Estate' (SK 442561). I have subsequently maintained an interest in the mill and this note serves to record the history, and subsequent fate, of the structure.

The oak timber structure of the post mill was probably newly erected in 1805 (it is not marked on the Enclosure Map of 1797- 1804), although it has been suggested that it was moved here from Riddings. It stood close to the site of another earlier post mill, built about 1600/30, which was almost certainly blown down since the remains were offered for sale at auction in 1810. The builder was probably Thomas Wass, a millwright from Sutton-in-Ashfield. Trade directories show that it remained in the hands of the Wass family throughout its life, the last miller (1871 to 1908) being another Thomas Wass. The late Mr Gibson of South Normanton recalled how 'the mill was pushed round by the tailpole and how Mr Wass used to hold his handkerchief up to test the wind'. When Thomas Wass died in 1908 the mill had ground its last corn and was left to decay in the middle of a field.

Perhaps the greatest molinologist of all time, Rex Wailes, reported on the structure and associated machinery in 1960.[1] He noted that mill had lost most of its cladding and that the tail ladder was offset relative to the centre of the buck. The roof had a rounded shape in order to be able to permit a larger diameter brake wheel to be used. This wheel was of clasp arm construction and had had 56 wooden cogs. There were two pairs of over driven stones, both used with governors, and in the tail of the mill was the remains of a wire flour dressing machine. The sails had been mounted in a cast iron poll end (or canister) on the end of wooden wind shaft.

The mill deteriorated over the years, the progressive decay being evident from various photographic evidence and eventually it stood in the garden of a bungalow, surrounded by other bungalow and houses. When the owner of the property, Mrs H Samson, died in the mid 1970s it was sold at auction for £ 12 0s 10d and was reputed to be fast heading to being used for fire wood. There was much local outcry and the structure passed into the ownership of Bolsover District Council who gave it a Grade 2 listing to ensure its safety. By 1980 the structure was considered unsafe and Bolsover District Council decided to dismantle it and put it into safe storage, pending re-erection elsewhere. Detailed, numbered, drawings of the structure and timbers were made and the advice of a millwright was sought on how it should be stored. He indicated that the timbers should be stored off the ground and separated from each other in a well-ventilated, covered, area. The structure was carefully dismantled by contractors, each piece given a unique number and removed from the site.

Various proposals for re-erection were made over the ensuing years, including one to site it at Junction 28 of the M1, on the property of Swallow Hotels. This was rejected because 'drivers would be distracted by the structure'. Eventually attempts to find a site ceased and the mill fell from the public eye.

Nothing was known towards the end of the 80s by local mill enthusiasts of the whereabouts of the timbers. When I retired in 1993 I started to press Bolsover District Council for information on what had happened to the timbers. I was told they had been given to the Midland Railway Trust - but enquiries there soon showed that although discussions to this effect had taken place they did not have any of the material. Eventually, in 1995, Bolsover District Council reported they had located the timbers in a builders yard in South Normanton which had previously been council property. A visit to the site in February of that year could hardly have been more distressing. The timbers were lying, scattered, on open ground, surrounded by grasses and bushes. The windshaft lay at the bottom of an embankment. Everything was wet through and there was much evidence of rot. It was impossible to give other than a cursory appraisal of the condition of the mill whilst lying in such conditions.

No help to move the timbers was .available from Bolsover District Council, who further advised that the mill had in the interim, been 'de-listed'. Midland Mill Group therefore agreed to finance moving the heavy timbers to an area at the Midland Railway Trust, which organisation was very sympathetic to the idea of saving

whatever could be salvaged of the mill. The beams and other timbers were to be moved and set up on old railway sleepers and then left for a time to partially dry out, after which they were to be carefully examined to determine their future.

An initial concept had been to erect the main post on the cross trees, supported by the quarter posts, at the farm on Midland Railway Trust property. Plans were drawn up but had to be scrapped when the examination showed that both of the cross trees and two of the quarter posts were totally rotten. Much of the other framing crumbled when moved!

To ensure that South Normanton Post Mill is not totally lost it is now planned to salvage the main post, the best quarter post and one of the sheers and display them, in due course, at Heage Windmill . They will be stored in the meantime by the Midland Railway Trust. The rest of the mill, unfortunately, will have to be scrapped.

In Alfreton Road, South Normanton, the stone piers, on which the mill had stood, have been assimilated into the gardens, one forming part of a waterfall into a pond. Two of the mill stones are still in one of the adjacent gardens.

And so the sad saga comes near its end. Are there lessons to be learnt? In this instance, the Listed Building process did not provide the protection needed to ensure the survival of the structure and clearly there needs to be continual monitoring of structures dismantled for intended re-erection elsewhere if further disasters of this sort are to be avoided.

References

1. Baker, P.H.J. & Wailes, R., 'The windmills of Derbyshire: Leicestershire and Nottinghamshire, Part 1, Post mills', *Proceedings of the Newcomen Society*, Vol 33 (1960-1).