INFORMATION 108

SEPTEMBER 2008



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Cover Illustration

Stewartby Brickworks which closed in 2008. Oxford Clay was dug from the ground and bricks were fired on the site from 1921 onwards. It was operated by the London Brick Company for many years before the company was taken over by the Hanson Corporation and the firm became Hanson Brick.

Editorial: Stone House, Brick Garden Walls

Some years ago, Compton Verney, a stone-built eighteenth-century house near Warwick, found a new use as the art gallery of the Peter Moores Foundation. The house was begun in 1714 for George Verney, the twelfth Lord Willoughby de Broke and Dean of Windsor, to the designs of an unknown architect. In 1760, Robert Adam was called in and remodelled both the exterior and the great hall. North of the house, set on elevated ground, are stables of before 1741 by James Gibbs. These like the house are of locally-quarried white lias stone.

The art gallery specialises in five distinct areas: the art of Naples in the sixteenth to eighteenth centuries, medieval German art, English portraits of the sixteenth and seventeenth centuries, and ancient Chinese bronzes, of which it has the third largest collection in the world. It also houses the Marx-Lambert collection of English naïve art. Two galleries are devoted to temporary exhibitions.

On a visit to the exhibition, 'Opulence and Anxiety', held in Spring 2007, the writer was struck that whilst the house and its accompanying stables and coach house are of stone, set back from the house and the stable block is a long brick wall. This brick wall is part of the kitchen garden, again of eighteenth-century origins. A brick-built dovecote can also be seen within the area of the kitchen garden.

Elsewhere in the grounds of Compton Verney is an ice house, a brick structure cut into the slope on the south side of the lake. In August 2008, this was being repaired and reconstructed. Neatly-stacked piles of bricks were outside the protective fencing; they included some stamped 'LBC' suggesting repairs after the 1920s: the house was still a family home until the 1960s. Brick-built icehouses at large country houses whether constructed of brick or of stone are not exactly uncommon. Amongst brick-built houses, that at Holkham Hall, Norfolk, may serve for the many. The ice house provided both materials for refrigeration in the game larger and the meat store as well as blocks of ice being used to make ice-cream. They were most commonly built in the eighteenth century, towards the end of the Little Ice Age.

Those interested in brick and its uses are accustomed to brick-walled kitchen gardens at brick houses. To quote some at random, Burton Agnes Hall, Yorkshire East Riding, where the house is of the early seventeenth century but the walls to the present kitchen garden are perhaps a century later; elsewhere in the same riding, Scampston Hall has a brick-walled kitchen garden of about 1740; while at Felbrigg Hall, Norfolk, where the present house was built in two distinct phases, forty years apart in the seventeenth century, the kitchen garden seems to date to the late eighteenth century.

A precisely dated late-seventeenth-century brick garden wall is that at Whitmore Hall, Staffs., for which 34,000 bricks were purchased in 1685. The kitchen garden included three vines and various fruit trees; nearby is a brick-built dovecote but apparently no orangery. The man ordering the vines, Edward Mainwaring, was clearly optimistic. During his youthful residence in London, he saw the Thames freeze more than once. The house had been remodelled by Edward's father before his death in 1675. The father had provided a formerly H-shaped, mainly timber-framed house with a flat brick front, making the enclosed space into a hall, which a later generation made more elegant with the addition of a classical screen in 1756. The brick façade of before 1675 is pierced by sash windows, nine on the main front and four on the sides. This remodelling of the house apparently involved a reduction in the number of fireplaces: in 1666, a charge was made for nineteen but only fourteen were assessed in the late 1670s.

Seeing the brick walls of the kitchen garden at Compton Verney prompted the editor of *British Brick Society Information* to think of other stone-built houses with a brick-walled kitchen garden. An obvious example near to his current place of residence is Batsford, Glos., just north of Moreton-in-Marsh, now within Batsford Arboretum. The house is late Victorian, being built in 1887 to 1893 for Arthur Freeman-Mitford, later the third Lord Redesdale, on his retirement from diplomatic service, mostly in Japan. Preserving plants and trees from Japan was among Lord Redesdale's aims in creating the wild garden to the north of the house. The brick-walled kitchen garden is distant from the house, being outside the area of the arboretum and it and the nearby apple store (now café) may be part of the arrangements of the preceding early-nineteenth-century house or even a predecessor. The bricks of the walls of the kitchen garden and the apple store are hand-made rather than machine-cut.

Another stone-built house with a brick-walled kitchen garden in Castle Howard, Yorkshire North Riding. The first set of brick walls are contemporary with a stone gateway of 1705. To cope with the demand for vegetables and cut flowers, the kitchen garden was doubled in size and further brick walls were built. When members of the society visited Castle Howard in 2004 we were told that the kitchen garden walls were almost the only brick on the estate. The editorial to *British Brick Society Information*, **95**, November 2004, also noted brick-walled kitchen gardens in the North Riding of Yorkshire: at Helmsley Castle, now the Helmsley Walled Garden; at Thornton Hall, Thornton Dale, where the bricks are set against a stone wall; and at Ailslaby Hall, which terminates in a summer house, three of whose sides are brick while the fourth is stone.

This editorial has drawn attention to two stone-built houses in the Midlands and has reminded readers of some of those in Yorkshire with a brick garden wall. In both Gloucestershire and Yorkshire, and probably in other counties where the primary building materials has always been the local stone, there must be many other kitchen gardens with brick walls.

Perhaps others based in these counties might search for those in Derbyshire, Lancashire, Lincolnshire and Northamptonshire. Probably, the only way to find the brick garden wall at a stone-built house is to observe as one travels through an area.

The British Brick Society has held three meetings in the early part of 2008. On Saturday 26 April 2008, we visited Coleford Brick in the Forest of Dean. This was followed by the society's Annual General Meeting at Amberley Working Museum, in West Sussex, on Saturday 21 June 2008. On Thursday 14 August 2008, members visited the City of Coventry ending at the Herbert Museum and Art Gallery to see the Basil Spence exhibition: Sir Basil Spence was born in 1907 and the exhibition began its tour in Edinburgh, his birthplace, in 2007 before moving to London and then Coventry. Reports of these meetings are to be found elsewhere in this issue of *British Brick Society Information*.

The society has one further meeting in 2008, a visit to west London, viewing Hillingdon Town Hall and places on Uxbridge High Street in the morning and in the afternoon visiting the gatehouse of West Drayton Manor and the barn and church at Harmondsworth. All of these three are threatened with destruction or enforced movement by the projected third runway at London Heathrow.

The British Brick Society sponsored Session 701 on 'Brick and Other Building Materials in the Middle Ages' on Tuesday 8 July 2008, at the Leeds International Medieval Congress. Three members — Thomas Gurling, Sophie Blain and Moses Jenkins — spoke, the first two of whom updated and extended the results of their work on the dating of bricks and brick structures by

optical spectroscopy luminescence (OSL). This gave further insights to subject of their presentations at the 2007 congress, both of which were written up in articles in *British Brick* Society Information, 107, June 2008.

Thomas Gurling spoke on Dating of Brick Structures in Medieval Essex and Adjacent Counties', concentrating on three case studies, all from Essex: Nether Hall, Roydon, and the churches at Earl's Colne and Woodham Walter. Using OSL, a date for bricks at Nether Hall, Roydon, of 1458 ± 34 years was obtained, which shows the potential for the method. The conventional date for the building is before 1467, when Thomas Colte, the builder, died and was buried in the local church; this agrees with stylistic dating for the elaborations within the brickwork of the late 1450s or early 1460s. However at Earl's Colne church, the accepted date for the brickwork of the tower of 1534 could be challenged by the OSL date of 1422 ± 39 years, but this new dating agrees with the known production of bricks at Earl's Colne Priory in the 1420s. Woodham Walter church has a conventional date of 1562-64, following a recorded request to relocate the church in 1562. Many of the materials in the church are known to have been re-used from the existing church, certainly the belfry timbers, the font, glass and stonework from the windows, and other stone work including the arcade and the doorways. The new church follows closely the layout of its predecessor. However, the brickwork has conventionally been considered to be new material of the mid sixteenth century. The OSL date of 1482 ± 34 years, thus between 114 and 46 years earlier than the erection of the new church. At the site of the former church there are brick fragments lying around, strongly suggesting that like other materials, not least the stone, the brickwork was transported from the old site to the new one. Brick, we must remember, was a precious commodity in the late fifteenth century and, indeed, throughout much of the sixteenth century. Leland records that in Warwickshire Sir William Compton could take building materials, both stone and brick, from John Duke of Bedford's Fulbrooke Castle of before 1435 to his new house at Compton Wynyates in the 1480s and his son after him in the early sixteenth century. The Tower on the Moor at Woodhall Spa, Lincs., was largely demolished not long after its initial construction to provide bricks for repairs at nearby Tattershall Castle.

Sophie Blain's subject, 'Ceramic Building Material in early Medieval Churches of South-East England and North-West France: A Scientific Dating Approach', extended her work on Notre-Dame-sous-Terre at Mont-Saint-Michel to include three other churches in France and four in England: three in Kent — St Martin's, Canterbury, and the churches at Darenth and Lower Halstow — together with Holy Trinity, Colchester, Essex. Her results showed that in Normandy bricks were re-used from Roman sites but that elsewhere in North-West France, brickmaking was an established industry in the tenth century. In England, the bricks are re-used Roman ones.

Moses Jenkins spoke on 'Turf Construction in the Medieval Building Tradition' using Scottish examples. Turf is earth held together by living vegetable matter, which could be grass heather or ferns. It is a poorman's's building material, in direct contrast to brick which until the nineteenth century was very much a building material chosen by and affordable by only the elite groups in society. Stone footings were used and timber, either as roofposts taken to the ground or as wattles holding the turf in place, were not uncommon.

The society's thanks are due to the three speakers for their most interesting presentations. As in 2007, the discussion which followed was lively and good humoured elucidating further information. We hope very much that in due course papers will be offered by the speakers for inclusion in a future issue of *British Brick Society Information*.

Outside of the session sponsored by the British Brick Society, brick featured in at least one other presentation. In a session on 'The Medieval Town in North West Europe and its Natural Resources', Johannes Renes of the Faculty of Geosciences, Universiteit Utrecht, gave a paper on 'Medieval Towns in the Netherlands: Resources and Transport' in which he gave an indication of the geographical specialisation of brickmaking in the Netherlands in the fourteenth and subsequent centuries and how the waterways throughout the country, both natural and manmade, facilitated the easy transport of bricks to Dutch towns.

To complete this record of the Leeds International Congress 2008, it should be remarked that the editor of this journal, David H. Kennett, gave a short paper entitled 'The Walrus and the Rhinoceros: Albrecht Dürer and the Exotic'. The presentation arose indirectly from the juvenile walrus which ended up in the Wash in August 1988, following which a list of sightings in Britain, Ireland and the North Sea littoral was compiled, a list which has subsequently been found to be incomplete and requiring updating.

As this issue of *British Brick Society Information* was being put to bed, in late July 2008, it was announced that the designs for the extension to Tate Modern had been completely revisited and instead of being in glass, a series of boxes piled above each other, it would now be a pyramid of brick, giving the art gallery more than sixty percent extra exhibition space. Tate Modern has been called "the building project" for the onset of the third millennium, Let us hope that Hertzog & de Muren's new concept will enhance rather than detract for their magnificent conversion of the turbine hall into an art gallery.

Certainly their creation of jagged edges in Minneapolis does the latter, perhaps because it is clad in totally inappropriate metal. Metal cladding is much more a whim than an enduring material designed to last more than a few decades. To test the validity of the claim, one need only look at the brick buildings of Mesopotamia (modern day Iraq), or at least their survival until (illegal) military action was ravaged on that region of the world.

And while writing about the fate of former power stations built of load-bearing brick, one could legitimately ask, if it is not time that new uses were found for Battersea Power Station, sitting as it does forlornly beside the railway tracks out of London Victoria.

The editor is working on a fourth issue of *British Brick Society Information* in 2008; this projected December issue will be devoted to the subject of 'Brick in Churches' partly to allow us to record the brickwork of Westminster Cathedral in depth. The issue has a small amount of space for one or two short articles on brick churches.

DAVID H. KENNETT Editor, British Brick Society Information Shipston-on-Stour, Warwickshire 12 July 2008 and 23 August 2008

Reporting on Brick and Tile in Commercial Archaeology

Pat Chapman

Northamptonshire Archaeology, for whom I work, is a commercial archaeological contractor attached to Northamptonshire County Council. We are wholly developer-funded through contract tendering, carrying out fieldwork ahead of residential and commercial developments that range from single house plots to infrastructure projects such as road building and pipelines covering many hectares. Our work takes us anywhere in the country, although the bulk of it is in Northamptonshire and the surrounding counties.

Within the unit, building recording is carried out by those with specialist training and is based upon the recording levels specified by the Royal Commission on Historic Monuments. In these the field team record the brickwork noting any patterns, string courses, type of brick and other details.

Every now and then, I am asked to write a report on brick and/or tile that could be of any period from the Roman through to the post-medieval that has come from one of our excavations. It is a pleasant change to handle material, as quite a bit of my work concerns the proofreading and editing of fieldwork reports, as well as preparing reports for publication and occasionally writing up backlog excavations. These latter are excavations that have taken place, but have not been written up because the person directing has left, or the pressure of work has meant that he or she have more sites to report on than they can feasibly complete. Occasionally this means that site analysis has to be done from the beginning, but more usually that the initial analysis has been done, some of the specialist reports – eg on pottery, animal bone, individual finds – are finished, some of the drawings are done, but everything needs putting together.

Although when reporting on tile, fabric is an important part of the analysis, it is what can be deduced about the appearance of the roof that I find interesting. For example, on Roman sites in Northamptonshire the *tegulae* (under-tile) are sometimes covered with a black or maroon wash that would have created colour patterns together with the shellywares and plain orange red or pink earthenware tiles. However, a Roman site we have recently excavated in Leicestershire has an almost uniform orange red roof tile, but also significant quantities of blue and green diamond-shaped pegged Swithland slate tiles. So individual buildings would have been roofed in differing materials, but overall would have had a striking appearance.

Medieval buildings of course, when not roofed with thatch, slate or stone also had ceramic tiles, however, many of these would have been glazed green or yellow. The transparent lead glaze would either be laid over a white slip for the yellow colour or have had copper added for the green. The roof of the twelfth-century Abbey of St James (demolished in 1536) in Northampton was originally roofed in the mid-eleventh century with large heavy shouldered tiles glazed mainly in green and some yellow. We know this because after the abbey had been reroofed the early tiles had been used as lining for quite a number of graves in the abbey cemetery, while some large ridge tiles were used as part of a drain¹. Similar tiles of the same date have been found in London and at Waltham Abbey.

Roof tile was found during the excavation of waster pits at Stanion, a village which was part of a medieval pottery industry in the north-east of Northamptonshire near Rockingham Forest. These pits contained the debris, amounting to about half a tonne of pottery dated to the fourteenth and fifteenth centuries, from nearby medieval pottery kilns possibly still surviving under nearby house plots². There was a substantial quantity of green-glazed ridge tiles, 44.8 kg, mainly concentrated in two pits, virtually all with an 'anvil' design crest, some 'decorated' with



Fig. 1 Ridge tile from Stanion, Northamptonshire.

slashes similar to those seen on jug handles, a device for decreasing firing time on thicker areas of clay (fig 1).

This is in contrast with a thirteenth- to fourteenth-century medieval tile kiln in Warwick which was built with and produced plain flat roof tiles which were nibbed and had pegholes, but with little glazing, and only a few ridge tiles.

The Warwick tile kiln was 2.90 m long and 2.40 m wide and divided by a central axial wall into two semicircular vaulted flues supporting a single firing chamber (fig 2). The walls were built entirely of whole and broken roof tile and tile wasters laid narrow side on into the kiln giving walls about 0.26m-0.30m thick. The floor in each of the flue chambers had been constructed as a mix of sandstone slabs and clay roof tiles laid on a bed of lime mortar. Forming part of the floor of one of the chambers were 49 stamp decorated (encaustic) floor tiles set into the lime mortar base of the kiln³. A second similar kiln was built over this one in the fourteenth or fifteenth century.

Within the kiln broad flat bricks were used as kiln furniture, either perforated or angled at the corners to allow for the flow of air. These types of construction bricks are interesting, as often they are not recovered. The perforated bricks are typically 160 to 170mm ($6\frac{1}{4}$ to $6\frac{3}{4}$ inches) square and 40 to 45mm ($1\frac{1}{2} - 1\frac{3}{4}$ inches) thick (fig 3). All the surviving edges are chamfered, indicating that they were cast in a mould. They have all been pierced quite deeply on one face with either 8mm square or 10mm in diameter round holes set in a fairly regular pattern, which have become clay filled after being pushed onto a soft surface.

The corner-angled tiles are about 150mm (6 inches) square (fig 3). When laid together the space left by the missing corners would form a diamond, allowing for the circulation of air through the floor of the kiln. These are similar to the structural tiles found in the contemporary thirteenth- to fourteenth-century tile factory at Danbury in Essex⁴. A similar style of tile was also recovered from the seventeenth-to eighteenth-century pottery kiln at Donyatt in Somerset, indicating the longevity of this element of kiln furniture⁵.

Although I do not have the same scope with standard bricks, as I see relatively few of them, opportunities do occur. My first archaeological report was on a small assemblage of bricks



Fig. 2 Tile kiln at Warwick

from Norwich, the first time I saw skintlings, the diagonal, or occasionally horizontal marks left on the stretcher of a brick from the edge of another brick placed upon it in a stack for drying. According to *The Norfolk Skintling Survey, Results 1995-2003* (E James and E Rose) skintlings date to between the mid sixteenth century and the late nineteenth century.

My only substantial brick assemblage to date has been a sample collection from a series of excavated medieval and post-medieval limekilns at Barrow on Soar in Leicestershire, a site with the slightly unfortunate name of Catsick Hill. Three of the excavated 'pot' kilns were circular and between 3m-4m in diameter, 1.8m-2m deep, tapering to a base diameter of 1-1.3m diameter. At the base of each kiln, up to eight courses of bricks survived *in situ*, buried by the demolition debris, showing that the whole internal surface of the kiln had originally been faced in this way. The bricks were bonded with hard white lime mortar and bedded on a floor of bricks. Archaeo-magnetic samples taken from the burnt brick lining of two of these kilns give the dates of last firing in the range 1795-1840 and 1825-1860. The largest kilns uncovered on the site were a development of the brick-lined 'pot' kilns but with the addition of a ring flue around the base and vertical flues up the walls to allow more efficient use of fuel and more economic production of lime (fig 4). These kilns were up to 5m in diameter, tapering to 1.3m at the base and up to 3.5m deep. They each had a steep ramp with steps to allow access to the kiln entrance and working area. The last firing of these kilns was between 1870 and 1910. ⁶

The bricks used in these kilns were plain with no frogs, stamps or makers' marks, presumably produced locally just for this purpose. Those that survived without being vitrified have a slightly friable fabric, pale red to orange brown in colour with inclusions of small gravel in varying degrees of density. The majority of these bricks were, however, highly vitrified from use, thus distorting most of their attributes. At least one stretcher surface, and a few headers, of most of this sample of bricks were subjected to intensive and prolonged heating until the exposed face became blackened and bloated, expanding beyond its original dimensions, often to the point of being vitrified. In some cases this is of a glassy green nature. Many of the bricks were reused as both stretcher surfaces are vitrified. Many of the bricks have streaks or lumps of lime mortar on their top and bottom surfaces. The table gives the dimensions of the bricks.

Approx date of final firing	Dimensions (mm)	Dimensions (inches)		
1750	220 x 110 x 67	8 ³ / ₄ x 4 ³ / ₈ x 2 ⁵ / ₈		
1825-60	215 x 115 x 60	8 ¹ / ₂ x 4 ¹ / ₂ x 2 ³ / ₈		
1870-1880	230 x 100 x 73	9 x 4 x 2 ⁷ /8		
1885-1910	220 – 263 x 108 x 70	8 ³ / ₄ - 10 ¹ / ₄ x 4 ¹ / ₄ x 2 ³ / ₄		

Joseph Wilkes is the name most associated with what was one of the most prosperous periods for Measham in north-west Leicestershire, including brickmaking. I found out about him whilst writing a desk-based assessment (after a planning application this is a preliminary report that may lead to an excavation). He was the first man to employ steam winding with a Boulton and Watt engine at one of his collieries, introducing a similar engine at a corn mill on Measham High Street, both in 1787. He was a major promoter of the Ashby Canal, opened in 1804 from Coventry Canal to the River Trent. As a method of gaining an advantage over the brick tax introduced in 1784 he made double-sized bricks called 'Wilke's gobs', more commonly known as 'jumbies'. The drying sheds of his brickworks on Bosworth Road, now converted into houses with garages beneath, were built of 'jumbies' with the blind arcading characteristic of his buildings. He also used these in 1802 for the construction of two canal warehouses where barges loaded and unloaded under the warehouses where the turnpike road crossed the Ashby Canal, now filled in. Buildings along Measham High Street and Navigation Street contain many more



Fig. 3 Perforated brick used as kiln furniture at the Warwick tile kiln.

of these large bricks, but rendering makes detection difficult^{8,9}. However, the advantage gained by the 'jumbies' was short-lived as a double tax on double bricks was introduced in 1803.

I attempt to give some idea of the date from the dimensions, colour, appearance and fabric of the bricks. It is by finding out those facts that my personal interest in bricks has grown. However, seeing them in buildings from the plain to the ornate, and the range of colours and patterns used is the real fascination.

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Fig. 4 Brick-lined lime kiln under excavation at Barrow-on-Soar, Leicestershire.

SOME BRICK KILNS AND BRICK MAKERS OF EAST LINCOLNSHIRE

Ken Redmore

INTRODUCTION

The technology of brickmaking took a significant step forward in the middle years of the nineteenth century with the introduction of permanent kilns of a standard, reliable design.

This paper looks at four surviving kilns of this period in east Lincolnshire: at Baumber, Farlesthorpe, Stixwould and Sutton on Sea. These four east Lincolnshire examples, though closely related to the common Scotch kiln, are of a type rarely found outside the county. They are very similar in basic design to each other but also differ in one or two respects. It is not known who constructed these kilns or how many others of this type were built which have not survived.

The succession of men who worked at the four brickyards reflects changes in the occupation of brickmaking that occurred during the second half of the nineteenth century. Before that period the skilled brickmaker still commonly travelled from site to site making bricks in clamps or in simple kilns on the building site. His labourers were usually employed on a part-time, seasonal basis. By the end of the century permanent brickyards with kilns supported resident brickmakers who supplied bricks to the local area. Many brickworks were owned by builders or were bought as business investments.

The Process of Brick Making at the East Lincolnshire Sites

Clay was dug from the surrounding brick pits by hand in the winter and left in heaps to be tempered by weather and frost. In the spring it was passed through a pug or clay mill to create uniform plastic clay of the required consistency. Hand-made bricks were moulded by hand in wooden moulds (usually lined or edged in brass or iron) to create brick-shaped blocks. These 'green' bricks were then stacked in well-spaced rows in large open hacks or drying sheds (fig. 1).

The main period of firing the kiln was in the summer between May and September. The kiln was loaded with approximately 30,000 bricks or maybe a combination of bricks in the lower part of the kiln, with roof tiles and drainage pipes higher up. The bricks were carefully laid in a varied series of courses, a precise arrangement necessary to create a network of fire channels between the bricks, thus ensuring uniform firing. Coal, the preferred fuel, was burnt at the eight fire-holes along each side of the kiln. Most kilns had simple firing sheds which provided shelter for the coal and the stoker. These were lean-to structures, sometimes open-sided, approximately three metres (about 10 feet) wide and running the full length of each kiln side. The complex process of firing and cooling to control brick quality and colour took about eight days (five for heating, three for cooling).

THE KILNS

Baumber

The Baumber kiln (TF 195752) was built in c1870, possibly to replace an earlier kiln, and is situated at the extreme western edge of the parish on land formerly owned by the Livesey family



Fig.1. Brickworks at Sutton on Sea, 1906 (Photocopy from 25" OS map 1906, annotated.)

of Stourton Hall. As is the case for all four kilns, it is constructed in local brick (red, in this instance) with fire-brick only used to line the fire-holes. The kiln was operated until the mid-1890s. In 1986/87 extensive restoration work created a new roof with an array of small vent chimneys, lean-to firing sheds and a pair of openings or wickets, one above the other, on the front (south-west) elevation. These changes were designed by the foremost authority on historic kiln features at the time, but it is not clear to what extent they were speculative (fig.2).

Farlesthorpe

The kiln at Farlesthorpe (TF 480739), built in local yellow brick in about 1855, is coincidentally in one of the few villages where the Livesey family, minor gentry, owners of the Baumber site, also had an interest. The kiln was in use until about 1905, after which time it was probably used as a simple agricultural store almost up to the present day. At some point in the twentieth century a wide opening with sliding door was created on the south-west end of the kiln and the firing sheds abutting either side were re-roofed and restored; they too have served some agricultural purpose. The internal structure of the kiln is currently quite sound; the external roof is covered in vegetation, including tree saplings. The earthen ramp to the wicket (opening) at the rear of the kiln (north-east) was removed in 2006 (fig.3, fig. 4).

A row of red bricks along the sill of the wicket at the rear of the kiln stamped 'KINSLEY' is not part of the original structure. The kiln at Kinsley near Wakefield in West Yorkshire first operated in 1903 shortly before the Farlesthorpe kiln was last fired, so these bricks were presumably used to repair or modify this part of the structure.



Fig.2. Baumber kiln: from the south, 2006 (Photograph – K. Redmore)



Fig.3. Farlesthorpe kiln: north-east elevation, 2006 (Photograph - K. Redmore)



Fig.4. Farlesthorpe kiln: interior, 2005 (Photograph - K. Redmore)

Stixwould

The Stixwould kiln (TF 185664) was probably built in the late-1850s, and it was from here that red bricks were provided for building almost every house, farmstead and other building in the village. The Turnor family of Stoke Rochford and Panton owned the whole of Stixwould in the nineteenth century, as well as the kiln itself. The last bricks were fired in the mid-1890s and the kiln and its associated buildings then became part of a farm small holding. When the Turnor estate was sold in 1911, the tenant bought both the former kiln and the brickyard cottage alongside, which had been rented from the estate. During the course of the twentieth century the former ancillary buildings (drying shed, pug-mill) were removed from the site and one end of the kiln was modified to convert it into a store or workshop. The footprint of the building on the 1905 edition of 25-inch OS map suggests that there were firing sheds on either side of the kiln. Like the Farlesthorpe kiln, the internal structure remains largely intact, though vegetation on the roof is becoming increasingly invasive (fig.5).

Sutton-on-Sea

The kiln at Sutton on Sea (TF 504808) was constructed at about the same time as the other three kilns but was in use for a much longer period, until just after 1930. At one point later in the twentieth century it served as a workshop for making firelighters; most recently is has become a simple store on a caravan park. This kiln, in bright red brick, is closest to its original condition; it has neither been restored nor modified. The shape and size of the kiln on the 1906 OS map suggests that there were firing sheds here too, and there are brick paved areas on either side of the kiln today which indicate their extent. Some vegetation on the roof and over one end is beginning to threaten the building but the general condition of external brickwork appears to be sound (fig.6; see also fig. 1).

There is an additional feature of interest on the site at Sutton. A small wind pump was erected during the nineteenth century to drain water from the clay workings. Presumably the water table is relatively high at this location and the brick pit would have been prone to flooding.



Fig.5. Stixwould kiln: from the south, c. 1975 (Photograph - D.N. Robinson)



Fig.6. Sutton on Sea kiln from the west, 2006 (Photograph - K. Redmore)

The "East Lincolnshire" Kiln (fig. 7)

The four kilns are correctly described as vaulted updraught intermittent kilns. The enclosed or vaulted roof is what differentiates them from the much more common Scotch kiln. Combustion of fuel occurs at the base of the kiln and hot gases pass through the bricks by updraught. The process of making bricks is intermittent rather than continuous; the kiln is operated on a loading/heating/cooling/unloading cycle.

The four east Lincolnshire kilns differ in a number of respects, apart from variations in brick colour and state of preservation. The Sutton and Stixwould kilns are constructed in English bond; the other two are in English garden-wall bond. Only Farlesthorpe is without buttresses but is constructed with massive plain walls. Each kiln is extensively reinforced with tie-rods and timbers, though these vary between kilns. There is evidence that all four had attached firing sheds. The large difference in wickets between the kilns is discussed below.

The interior space of each kiln is very similar. Internal dimensions are as follows:

	Baumber	Farlesthorpe	Stixwould	Sutton on Sea
Length	8.05m	8.14m	8.00m	8.00m
Width (at floor level)	3.00m	3.00m	3.23m	2.88m
Height (to apex)	4.90m	4.59m	4.40m	4.95m

Firebricks have only been used to line the fire holes and there are variations in the way they are incorporated in this element of the structure: the source of the firebricks is unknown; they would

not have been made locally. The vaulted roofs are each constructed in similar fashion using header bond, but the number and arrangement of vent holes in the roofs differ. The principal vents at the side of the kiln are immediately above fire holes at Farlesthorpe, whereas, perhaps more logically, they are staggered between fire holes at the other three kilns. There are eight central vent holes at Farlesthorpe, nine at Baumber and Stixwould, and eighteen at Sutton-on-Sea.



Fig. 7 The 'East Lincolnshire' Kiln
The drawing combines actual measurements of the kilns at Farlesthorpe and Sutton-on-Sea together with an impression of the vents as originally proposed by Martin Hammond for the restoration of Baumber kiln in 1986.
(Drawing by K. Redmore)

The Wickets

Loading and unloading the kiln was a lengthy process. Bricks were brought from the drying sheds in hack barrows (sturdy open-sided wheel barrows) and wheeled into the kiln through the wickets (openings) at the ends of the kiln. In order to fill the kiln to the top, each kiln had two wickets, one at ground level and one in a higher position. When the lower part of the kiln had been filled, access was made through the higher wicket either via a permanent earthen ramp

where the wicket was at the opposite end of the kiln, or along a makeshift ramp of planks where the wicket was immediately above the lower one. Prior to firing, a temporary infill of bricks and clay would be used to seal the wickets.

The positioning or design of the wickets is markedly different in each of the four kilns. At Baumber the wickets are one above the other on the south-west end of the kiln; they were reconstructed in the 1986/87 restoration of the kiln. The other three kilns each have wickets at opposite ends, though the shape of the wicket is different in each case. Both wickets at Sutton on Sea survive, but the earthen ramp to the higher wicket on the north-east end has been removed. The ground level wicket at Farlesthorpe was lost when the south-west end of the kiln was converted into a large door opening. The other wicket remains at this kiln but the ramp was removed in 2006. At Stixwould the ground level wicket in the north-west end was bricked up when the kiln was converted into an agricultural building – perhaps because of the opening's awkward shape and size. The second wicket at a higher position in the opposite end of this kiln was completely destroyed together with any external ramp when a conventional door and window were inserted (fig. 8, fig. 9).

THE BRICK MAKERS

Stixwould

The story of the brickmakers is most simply told at Stixwould, where for about 45 years the kiln on the north-east edge of the village produced red bricks, tiles and drainpipes for the Turnor estate. Not a single brickmaker was recorded here in the 1841 census; ten years later there were no fewer than eight brick- and tilemakers plus two labourers. This coincided with the beginning of the rebuilding of the village over a thirty year period from about 1845, as indicated by the date plaques on houses and farmsteads. It is tempting to assume that the new kiln was built at this time, *i.e.* 1845-50, but a date close to 1860 is much more likely. Regrettably, apart from the rentbooks, which give limited information, the Turnor estate records for this period have not survived.

From 1859 William Parker was the principal brickmaker in Stixwould, having previously worked at Langworth for a short period. He remained at the Stixwould kiln until his death in 1893 at the age of 77, after which the kiln was no longer fired. Parker was born at Fenny Stratford in the Buckinghamshire brickmaking area, which intriguingly is also close to his landlord Turnor's ancestral home. When he first moved to Stixwould, he was joined for a short time by his younger brother James (who was later brick maker at Edlington Moor, South Reston and Baumber); later William's own sons, John and James, worked with him.

Baumber

The names of Hutchinson and Jordan are associated with brickmaking at the Baumber kiln during the forty or so years of its operation. Richard Hutchinson was the brickmaker on site in 1841, thirty years before the new kiln is thought to have been built. Ten years later Crispin Hutchinson, son of Richard, was the only brickyard worker recorded at Baumber, whilst Richard's wife, Charlotte, was one of the eight brickmakers listed at nearby Stixwould. None of the directories for the period 1850 to 1870 mentions a brickmaker and most unfortunately the 1861 census record for the parish is lost. In the 1871 census, the next available record, the brickyard provided work for three brickmakers: Richard Hutchinson, James Parker (brother of William Parker of Stixwould), and George Bourn (one of four Bourns who had been making



- Fig. 8 Wickets at East Lincolnshire Kilns
 - A. Baumber: south elevation
 - B. Stixwould: north-west elevation
 - C. Sutton-on-Sea: south-west elevation
 - D. Sutton-on-Sea: north-east elevation

bricks at Stixwould in 1851). This is probably about the time when the kiln was built. Richard Hutchinson continued as brickmaker in Baumber for a short time longer; his son Crispin meantime had become brickmaker first at South Reston and then at neighbouring Great Carlton in the 1860s and 1870s.

In the mid-1870s William Jordan and his two sons, William and Thomas, took over the Baumber kiln. They had previously worked in brickyards in Prospect Street, Horncastle, but the move to Baumber was not a lasting success for the family. William senior died within ten years and for a while his widow and William junior continued with brick making alongside farming. The 1891 census does not record their brickmaking activity at all, though it is probable that the kiln was still occasionally fired until the middle of the decade before finally closing.

Farlesthorpe

The excellent brickmaking clay at Farlesthorpe, close to the town of Alford, was known and exploited long before the 1851 census returns recorded a brickmaker, William Evison, assisted by his two sons and his son-in-law. The potential of this site was fully realised in about 1855 when William Spalding, master brickmaker, took over. This is the probable date of the building of the new kiln. Spalding retained ownership until about 1871, but with his interests from time to time in at least three other brickyards (Sutton on Sea, Hogsthorpe, South Reston), he exercised probably no more than a supervisory role. At the time of the 1871 census, when he was living at the South Reston brickyard, William Spalding employed ten men and three boys, of whom three of the brickmakers and one of the boys were at Farlesthorpe.

In the following year the Farlesthorpe kiln was taken over by Edward Hasnip, builder and joiner of Alford, and it was to remain with the Hasnip family until about 1900. The Hasnips had an office in West Street, Alford, and used the distinctive yellow Farlesthorpe bricks in many building projects in the town. They employed a foreman to run the brickmaking operation at Farlesthorpe, and the census records indicate that there was usually at least one other brickmaker employed at the kiln. For the last five years of the brickyard's operation until its closure in about 1905, Walter Forman, local farmer and Alford RDC dikereeve, ran the kiln as part of a brick and tile business.

Sutton on Sea

The brickyard at Sutton on Sea was the largest of the four and, as noted above, it operated until the 1930s. It is not known when brickmaking started here but the first detailed UK census of 1841 records two brickmakers: William Spalding and William Barton. Spalding stayed at the Sutton site until the 1860s, i.e. until about the time the new kiln had been built. It was his son, also William, recorded as a tilemaker journeyman at Sutton in 1851, who later became master brickmaker at Farlesthorpe, South Reston and Hogsthorpe. Thomas Spalding, from another branch of the Spalding family and, like the William Spaldings, originating in north Lincolnshire, had been making bricks at Hogsthorpe in the 1850s.

In a similar way to Farlesthorpe, the Sutton brickyard was taken on as a business venture in about 1870. Each of a succession of owner/investors employed master brickmakers to manage the day-to-day work of the brickyard. First Schofield Dauber took ownership, to be followed a decade later by John Motson Thompson, builder and brickmaker of Grays Road, Louth, whose business employed a total of sixteen men and three boys. After his death two of Thompson's sons continued running the brickyard before selling out in about 1896 to William Haddon Owen of Little Grimsby Hall, and later of Louth. Owen was a Louth solicitor and the Superintendent Registrar of Births, Deaths and Marriages, but also a businessman. For the final few years of its life, from 1922 to about 1930, the brickworks became the Sutton on Sea Brick & Tile Company, with Arthur Cox as manager. Its heyday was 1880-1914, when the small coastal village, with its new railway, grew to become a significant seaside resort. Today, rows of red brick villas in Sutton on Sea are a fine tribute to the local kiln and its brickmakers.

CONCLUSIONS

It is not known for certain how the 'East Lincolnshire' kiln originated and why it is mainly confined to Lincolnshire. Probably it was developed from the Scotch kiln in order to achieve better control of combustion and hence more uniform brick quality.

The four surviving examples suggest that each kiln was based on an accepted standard







Fig.9. Farlesthorpe kiln: north-east elevation showing wicket and plan. Scale 1:100 (Drawing - K. Redmore)



Side elevation





layout and was constructed using local bricks with some features (e.g. vents, wickets) modified to suit the preferences of the local brickmaker.

It is known that a large number of kilns were built in Lincolnshire in the second half of the nineteenth century; perhaps many of these were of the 'East Lincolnshire' type. For example, the movements of the master brickmakers to South Reston and Hogsthorpe, mentioned above, suggest that such kilns were located in those two villages. Other 'East Lincolnshire' kilns have been positively recorded at the Humber Bank brickyards around Barton and South Ferriby, although they have not survived. There were also several conventional Scotch kilns, *i.e.* 'open topped' kilns, operating at the same time in that area, though they were probably constructed at an earlier date.) There is also a record of an 'East Lincolnshire' kiln at Swanage in Dorset.

Brickmaking was traditionally a peripatetic occupation and this pattern continued to be followed up to the twentieth century at the four east Lincolnshire sites, where, apart from Stixwould, there were frequent changes in brickmakers recorded at successive censuses. The master brickmakers (the Parkers, Spaldings, Hutchinsons) also moved between sites, possibly as the new kilns were introduced and first fired. Maybe it was the role of men such as these to spread expertise to other brickmakers who later ran the kilns. The kilns at Stixwould and Baumber were sited in villages where the local need for bricks ran out in the 1890s. By contrast the kilns at Farlesthorpe and more particularly at Sutton served communities that were still growing at the end of the century. Thus businessmen or firms of builders considered it a good investment to buy the kilns at these locations and employ brick makers to work for them.

BRICK DOTS: A FURTHER NOTE

Terence Paul Smith

More than two decades ago, M.G. Reeder drew attention, in these pages, to impressed dots – one to five in number and arranged like the spots on dice – formed with fingertips in brick faces. He estimated that the bricks, which were observed in Suffolk, were of late-eighteenth- or earlynineteenth-century date and suggested that the dots 'were presumably added for counting purposes'.¹ In response, W.J. Wright reported further examples, from Sawbridgeworth, Herts., although some of these were rather different – by having some of the dots raised rather than impressed and/or by combining them with dashes.² The matter was returned to in 1992 by Roger Kennell, who reported on bricks at Hadleigh, Suffolk, impressed with one, three, four, five, six, seven, eight or nine dots. The 'practice was widespread', he notes, 'for these marks have been observed in many parts of the country' He conjectures that they were 'were made by the brickmaker to indicate the quantity of bricks made ... It is believed that each single mark represents one thousand bricks'. He concludes by asking for further information on the topic. 'Confirmation of the suspicion that each dot is equivalent to a thousand bricks would,' he adds, 'be valuable'.³

Such confirmation is offered in a nineteenth-century publication, although this indicates a *slightly* different explanation of their purpose, and I am grateful to my former colleague, Ian M. Betts of the Museum of London Archaeology Service, for drawing this source to my attention.

In an appendix to the 1876 edition of his *Curiosities of Natural History*, Francis T. Buckland quotes a letter he had received in response to an earlier edition.⁴ Buckland had supposed that the dots were made playfully by boys employed at the brickyard – a conjecture that I myself have sometimes entertained. But Buckland's correspondent, a Mr Soulby of Chancery Lane, London, noted that bricks 'were formerly liable to a duty (repealed a few years since [in fact in 1850⁵]), and the thimble-shaped impressions you noticed were not, as you suppose, made by boys, but were the numbers marked by the Exciseman, when counting them by thousands to ascertain the amount chargeable'.

The claim, coming so close to the period of the Brick Tax, seems plausible enough. On the other hand, the rather different marks observed at Sawbridgeworth must have an alternative explanation, for one example has J. DAY / B^P STORTFORD in the frog, and this 'refers to a brickmaker of that name who was working two pits of dates 1899 and 1919' – long after the repeal of the Brick Tax.⁶ Perhaps, in this case, the marks were added by the moulders, either as a means of counting the quantity made or as a way of indicating the individual moulders. The various arrangements of dots and dashes and the fact that some of the former were raised – and must, therefore, have been formed by depressions cut into the stockboard – do, I think, rather

suggest the second of these possibilities. But the *former* was the practice at the Jubilee Brickworks, Lytchett Maltravers, Poole, Dorset, in the early twentieth century. The "last brick in each barrowload was marked: this helped with counting the number of bricks [manufactured]"; since, at this yard, a barrow held 36 bricks, they were clearly counted in batches of three dozen.⁷

NOTES AND REFERENCES

1. M.G. Reeder, 'Brick Marks', BBS Information, 40, November 1986, p.3.

2. W.J. Wright, 'Dots and Dashes', *BBS* Information, **41**, February 1987, p.14.

3. R.B. Kennell, 'Discovering Brick Dots', *BBS* Information, **55**, March 1992, pp.5-6.

4. F.T. Buckland, *Curiosities of Natural History Second Series*, 6th edn., London: Richard Bentley, 1867, p.339

5. The best account of the Brick Tax is N. Nail, 'Brick and Tile Taxes Revisited', *BBS Information*, **67**, March 1996, pp.3-14.

6. Wright, 1987, p. 14; in 1899, the brickmaker is recorded as Joseph Day of South Street, Bishop's Stortford, and in 1919 as J. Day & Son of 98 South Street Bishop's Stortford: L. Perrins, 'Hertfordshire Brickworks: a Gazetteer', *Herts., Archaeol. and Hist*, 14, 2004-5, p.194.

7. 'Brickmaking at Jubilee Brickworks, Lytchett Maltraves, Poole, Dorset: Some Recollections by Mr William George Short, as recorded by Martin Hammond', *BBS Information*, **55**, March 1992, p.8. and see David Kennett's comments in his editorial, 'Sidelights on Manufacture', in the same issue, p.2.

Exhibition: Stewartby Brickworks

From Wednesday 6 August 2008 to Saturday 20 September 2008, the BCA Gallery on High Street, Bedford, is showing an exhibition 'The Long Look', a collection of photographs by Michael Collins of the demolition of Stewartby Brickworks and the redevelopment of the site. Four of the chimneys will remain as a reminder of the once thriving brick industry in central Bedfordshire, exploiting the riches of the natural world for the benefit of Mankind.

Hopefully, this issue of *British Brick Society Information* will reach members to give sufficient time for some to be able to go to Bedford to see it. The BCA gallery is open Tuesdays to Saturdays from 11.00 a.m. to 5.00 p.m. (closed Sundays and Mondays).

Book Review

Maurice Howard, The Buildings of Elizabethan and Jacobean England, New Haven CT and London: Yale University Press for the Paul Mellon Centre for British Studies, 2007 viii + 228 pp., 100 illustrations. ISBN 978-0-300-13543-5, Price £45-00

Two decades ago, Maurice Howard gave us *The Early Tudor Country House: Architecture and Politics, 1490-1550.* Now he has extended his range temporally to the later Tudors and their immediate successors and enlarged the scope from country houses to a wider range of building types. The author tells us that he is writing on

a timespan stretching between two periods of political experiment. During the first, the 1530s and 1540s, England's religious establishment was overturned by Henry VIII and the country's relationship with Europe for ever changed thereby ... During the second, the 1630s and 1640s, the Personal Rule of Charles I Both periods were marked by destruction of the built environment that left very visible signs, namely ruins in the landscape.

One might consider first that the author's title does not completely reflect his time span. There is much on the first period of destruction, but to write on 'Elizabethan' England implies to this reviewer only a brief review of the mid-Tudor crisis. Buildings of Mary Tudor's reign might be included but surely not those erected in the last decade of the reign of the two half-sisters' father.

Once one progresses beyond the author's chapter one on 'Bare Ruin'd Choirs' Revisited, (pp.13-45) the focus is much more on the period between 1553 and 1625. The urban landscape is the subject of the longest chapter, 48 pages (pp.47-93) including 32 illustrations. The urban landscape was changed by new building as the population began a long period of expansion and, equally, new building types became necessary. Town councils needed a meeting place, often combined with use of the same space for educational purposes although schools themselves were built anew. One which the author discusses was at Ashbourne, Derbys., founded in 1585, building until at least 1603 where the street frontage is stone but the side and back walls are of brick. Built of brick with stone dressings are the schools at Godmanchester, Hunts., of 1561, and at Oakham, Rutland, where the grammar school has the inscription *Schola Latina* – *Graeca* – *Hebraica Ao 1584*. There is a long discussion of almshouses illustrated by the splendid brick-built Jesus Hospital at Bray, Berkshire, endowed by William Goddard in 1627.

Two short chapters review architectural language (pp. 95-119) and the representation of buildings (pp. 165-180). Illustrations to the latter chapter included a splendid red diagram of the Old Schools at Cambridge. done in 1574, in preparation for the first major series of repairs after their completion in 1470. The repairs were effected in the mid 1580s. For the burgesses of Barking, Essex, a market house and sixteen shops had been built in 1567-68 with the crown paying for the former and the townspeople for the latter. But in 1595, an enquiry was held into the lack of upkeep of the market house which led to the creation of a schematic diagram with copious annotations. The burgesses felt that they did not control the use of the market house.

Perhaps the most illuminating chapter of the book is that on the role of patrons (pp. 121-163). Several individuals dominate the chapter: the Cecils in London, Hertfordshire and around Stamford; Robert Dudley at Kenilworth, Warwks.; Richard Rich in Essex; William Sandys at Basingstoke, Hants.; John Whitgift at Croydon, Surrey; John Williams at Thame, Oxon. With these, there is a pattern: one or more houses, on the country estate and/or in London; a burial place in the church attached to the principal estate, if not a private chapel as with William Sandys; and then almshouses and a school. Richard Rich, the nemesis of Sir Thomas More, illustrates this perfectly. Rich built in brick on former monastic property at Leez Priory and is buried at Felstead where he also founded an almshouse and in 1564 the school. A school built in brick is Whitgift's School, Croydon, endowed by the Archbishop of Canterbury from 1583 to 1604. The final section of the patronage chapter is devoted to the role of women as architectural patrons. Elizabeth Shrewsbury, Bess of Hardwick, is well-known but the Sidneys are not. Frances Sidney (1531-1589) was left a wealthy widow when her husband, Thomas Radcliffe, Earl of Sussex, died in 1583. Her wealth bas the seed money for a new benefaction at Cambridge: Sidney Sussex College, built on the site of the former Greyfriars. Her kinswoman, Mary Sidney, Countess of Pembroke (1561-1621) used her widowhood to commission a remarkable building, Houghton House, near Ampthill, Beds., begun in 1615, and embellished with loggias, one possibly to a design by Inigo Jones.

Houghton House is one of the significant brick houses of the period 1553 to 1635. There are many others, mostly demolished like Wimbledon House for the elder son of Lord Burghley or the father's Theobalds. What would be valuable is a complete list of all the major houses built in the Elizabethan and Jacobean decades. It would not be impossible to compile at least for England. There is at least one complete record or, as with Nottinghamshire, two overlapping records of the Hearth Tax levied between 1662 and 1689. Because of the way in which the tax was collected, surviving records are most common for the period 1662 to 1664 and again in the mid 1670s. There are omissions, royal houses especially but also others, and of the houses recorded about one third are partly or completely demolished without replacement and another third have been replaced by an eighteenth- or nineteenth-century house. However, early illustrations do illuminate the form and often the building materials of demolished houses.

If one has a second criticism of Maurice Howard's book, it is that this reader has gained no sense of the prevalence of materials, either temporal or geographical. This is not to say that *The Building of Elizabethan and Jacobean England* does not provide valuable insights into building activity in the late sixteenth and early seventeenth centuries. As a starting point for future researches, it can be recommended.

DAVID H. KENNETT

BRICK IN PRINT

Between February and July 2008, the Editor of the British Brick Society received notice of a number of publications of interest to members of the society. This is a now regular feature of *BBS Information*, with surveys usually twice in a year. Members who are involved in publication and members who come across books and articles of interest are invited to submit notice of them to the editor of *BBS Information*. Web sites are also included. Unsigned contributions in this section are by the editor.

DAVID H. KENNETT

1. David Eve, 'Shaws of Darwen',

Picture House, 32, 2007, pp.27-39.

In 1995, the British Brick Society visited the terracotta works of Shaws of Darwen in Lancashire. Their products are many and various. The article records a visit to the works in 2005 by the Cinema Theatre Association North. An advertisement notes cinemas supplied with their products in 1929. Illustrations include a whole series of Odeon Cinemas decorated with Shaws terracotta or their other product, faience. These range from Blackpool to Boston and Falmouth to Norwich. Helpfully the present status and state of the building is also noted: that in Lancaster is standing but disused but the one in Burnley is demolished.

The same issue of *Picture House* has an article on Edward A. Stone who designed cinemas in the decade before the Great War using both brick and plaster as external cladding and one on the welfare halls and institutes of the Swansea and Amman valleys in South Wales.

 Mark Griffiths, 'A Love Affair with a Garden', Country Life, 14 February 2008, pages 66-69. Richard Hewlings, 'Kelmarsh Hall, Northamptonshire', Country Life, 4 June 2008, pages 158-163.

In north Northamptonshire, James Gibbs built Kelmarsh Hall, a seven-bay house in the Palladian style. The house, built between 1727 and 1732, is in a warm red brick. The article by Mark Griffiths includes a small photograph of the house (page 66 to left) whereas that by Richard Hewlings includes an opening double-page spread demonstrating how the house sat between two subsidiary pavilions, also of brick.

Kelmarsh was built for William Hanbury, who inherited a Jacobean house described as "a miserable old house" in May 1728: it had lasted little more than a century. The brick shell of the new house was completed in 1732, according to rainwater heads, but payments for interior work continued throughout and beyond the 1730s. According to an inventory, the future saloon in 1739/40 contained a salting tub, hooks for meat and a chopping block.

Mark Griffith's article is about the creation of the garden by Nancy Tree (later Nancy Lancaster) who with her then husband, Ronald Tree, created the garden there between 1927 and 1933 and again between 1948 and 1953. The gardens are open to the public and it is certainly the chance to see the house in an area of England where stone would be more likely.

Elsewhere in the issue of 4 June 2008, an article on the sporting art collection of another Northamptonshire house, Cottesbrooke Hall, includes a small photograph of Sir John Langham's brick house ornamented with giant stone pilasters which was built between 1702 and 1713.

3. Karen Lynch, 'Taking great notice: Dorothy Richardson's account of ornamental buildings on the Boynton Estate, East Riding of Yorkshire,

The Follies Journal, 7, Winter, 2007, pp.1-22.

Between 1761 and 1801, Dorothy Richardson (1748-1819), the daughter of a Yorkshire clergyman, made a number of tours in England. She recorded her journeys in a series of journals, now in the John Rylands Library, the University of Manchester. Her accounts of country houses and parks that she visited are an invaluable resource for researchers. On the Boynton estate, Yorks. East Riding, she describes both a prospect tower and an ornamental farm. The octagonal prospect tower, called Carnaby Temple, is built of "pale coloured brick". The tower, of two storeys and a semi-basement with an attic top, became the dwelling of an agricultural labourer and his family in the 1840s and was occupied by them until after 1881 and then by other similar families until the military took it over in 1940. For domestic use, a small addition was built.

AUTHOR'S SUMMARY (with additions)

4. Hans van Lemmen, 'Ceramic Follies', *The Follies Journal*, **7**, pp.23-40.

A profusely illustrated account of folly buildings constructed using Coade-stone, terracotta, tile, Doulton faience. Building types include cinema façades, garden temples, ornamental gateways, even a chapel, but then the Watts Chapel is well-known. Not so prominent in the literature is Alfred Waterhouse's Parrot House of 1881 at Eaton hall, Cheshire. The Doulton faience includes two fishes and a devil on the top of washing line posts on the Sidney Estate, Camden, London, designed in the 1930s by Gilbert Bayes. To show that the spirit is not dead, two bats at Batley adorn the top of an arch constructed in 1995.

This issue of *The Follies Journal* is available from Buckland Books, Holly Tree House, 18 Woodlands Road, Littlehampton, West Sussex BN17 5PP.



- Fig. 1 Holme Pierrepoint Hall as shown in Robert Thoroton's *History of Nottinghamshire* when the original early-sixteenth-century house was still complete and its chimneys intact. The substantial tall structure behind is the seventeenth-century addition; demolished in the 1730s.
- 5.. W. Palin, 'Home Pierrepoint Hall, Nottinghamshire', Country Life, 7 February 2008, pages 52-56.

In the first edition of Nikolaus Pevsner's *Buildings of England: Nottinghamshire*, which appeared in 1951, the second volume in the series to be published, Holme Pierrepoint Hall was described as early seventeenth century, with some windows of that period, and subsequently enlarged, castellated and sweepingly stuccoed in 1790. A subsequent demolition was noted.

We now know that to quote William Palin, "the removal of the stucco during restoration exposed the fine 16th-century red brick that gives Holme Pierrepoint its character". The early Tudor house has clear dates: William Pierrepoint inherited from his father Henry in 1499 and died in 1534 although any political favour he enjoyed under Henry VII was lacking in that king's son's reign. There is dendrochronological evidence of 1509 for the gatehouse range, the principal survival from Sir William's building activity. Additions and remodelling for Robert Pierrepoint between 1615 and 1640 gave the house its seventeenth century appearance, clearly visible in the view in Robert Thoroton's *History of Nottinghamshire* of 1677 (fig. 1). The Marquess of Dorchester, Henry Pierrepoint, lived in a house with 63 hearths in 1664. There was a major reduction and refurbishment in the 1730s and again in after 1806 when the stucco was added.

Recent work in 1979 and 1980 has removed the stucco on the Tudor gatehouse and the surviving east wing, and the ground floor of the courtyard wings. It also involved internal remodelling including the creation of a long gallery. The staircase of 1660 has analogies with that at Sudbury Hall, Derbys., visited by the society after its 2007 annual general meeting.

6. Alan Powers, 'St Pancras Station, London',

Country Life, 25 June 2008, pages 138-141.

St Pancras Station, London, has featured both as visits of the British Brick Society in November 2001 and February 2002 and as the principal subject of *British Brick Society Information*, **96**, April 2005, when various members commented on the building materials of the station and the former Midland Grand Hotel which fronts it on the Euston Road.

To reiterate Vincent Scully's magnificent phrase — "One entered the city like a god" — which I cannot confirm for Penn Central, New York, although I share some but not all of the feelings about the modern station there — "now one scuttles like a rat" — appropriate, however, for that modern English disaster London Liverpool Street, it is interesting to see that the excellent colour photographs which accompany Alan Powers' text bring out the total grandeur that *is* St Pancras. The station and the hotel, even when the latter was sadly transmuted into offices or mothballed like some ancient warship awaiting her last, speak of the primacy of the engineer, the architect and the builder over the accountant and cost-benefit analysis.

London's new Eurostar terminal has been created out of what has always been London's friendliest terminus. It is justly celebrated in Alan Powers' article, a splendid photograph which accompanied a scare story about building new trains in *The Guardian* on 15 April 2008. The fullest new account has been given by Simon Bradley, *St Pancras Station*, (London: Profile Books, 2007, paperback, 2008).

Brick for a Day

The British Brick Society has held three meetings in the early part of 2008. In April, members visited Coleford Brick. The society's Annual General Meeting was held at Amberley Working Museum, Sussex, in June and in August, members visited Coventry. Reports of the second and third of these follow, both unsigned contributions by the editor. We hope to include an account of the visit to Coleford Brick and the Forest of Dean Heritage Centre in a future issue of *British Brick Society Information*.

DHK

Amberley Working Museum, Sussex

The Annual General Meeting of the British Brick Society was held at Amberley Working Museum, Sussex, on the morning of Saturday 21 June 2008. Amberley Working Museum is set in former chalk pits with various types of lime kiln built either freestanding or into the hillside.

In addition to buildings wherein visiting craftsmen work, there is also a nature trail which members were free to explore at their leisure.

In the afternoon following the meeting, members were conducted round the site by BBS member Ron Martin and viewed the various buildings and exhibits at the museum. Two buildings were of particular interest. A twelve-sided horse gin from Arundel was constructed from a variety of materials, including hard chalk, stone and brick. The two-story former wheelwright's shop from Horsham had a ground floor of stone to the side and brick to what had been the street frontage. The upper part of the front continued in brick in a plain bond. On the first floor, the side walls and part of the back wall of the shop were in rat-trap bond. The upper part of the gable itself was one brick think in stretcher bond.

The museum contains exhibits on both the history of concrete and brickmaking. The concrete exhibit included a model of the Glenfinnan Viaduct on the railway line from Fort William to Mallaig, designed in 1897 by Simpson & Wilson and completed in 1901. The twenty-one semi-circular arches were built on a curve allowing the line to cross the Finnan river and almost turn back on itself. This is both the longest concrete bridge in Scotland and among the an earliest.

The brick exhibit which Ron Martin had arranged and labelled included tools and moulds, photographs of brickmaking processes and kilns. Exhibits include coping bricks and moulded bricks. The decorated bricks include a reproduction of a series of square bricks with a large coat of arms made for Hampton Court Palace. Arranged along the opposite side are a large selection of brickmarks from Sussex. A selection of mathematical tiles includes ones placed on the Marine Pavilion by Henry Holland in 1786-87 when he converted an existing farmhouse for the Prince of Wales (the future George IV) to something more appropriate to his client's station. One of the other exhibits of mathematical tiles shows how they were affixed to an existing building, usually timber-framed with wattle-and-daub infill.

The society's thanks are due to the society's Honorary Secretary, Mick Oliver, for organising the visit and in the absence of the museum's director, who was indisposed, very much to Ron Martin for being an impromptu guide and leading us round the various parts of the museum.

Coventry

On Thursday 14 August 2008, members visited Coventry, walking across the city from the south at King Henry VIII School to the Canal Basin, north of the inner ring road. Sandstone walls defined the medieval city, similarly the ring road protects the modern one.

Churches of three nonconformist denominations were viewed externally, each of which is heavily involved in community outreach. Local architects, the brothers George and Isaac Steane designed Queen Street Baptist church in 1883-84, red brick with a prominent south-west tower, moving on to do what is now Warwick Road United Reformed church in 1890 where the worship space is elliptical and the frontage is crowned by two pepper-pots on dwarf octagonal towers. The buildings for outreach at these churches demonstrate different approaches to the original Victorian church buildings. On the south side, the Baptist church is swamped beneath a wave under which is a high glass front to their café. Good quality bricklaying only partly seems to offset the poor overall quality of the new addition to what was a carefully thought-out original design. Their brethren at the United Reformed church had blotted the copybook with an insensitive glass porch to the façade in the 1960s, but chose to use the early-nineteenth-century house next door as the basis of the outreach work, with a new building behind; red brick, not quite matching that of the church, accompanied by bands of stone, echoing its neighbour, on the ground floor, but the half-storey above is yellow brick which has no relationship to the original building. The Central Methodist Hall was designed by a little-known C. Redgrave and opened in 1931, a very late example of the type more usually constructed in the two decades before the Great War. Being large and with multiple rooms, no additions were made for outreach.

Behind Warwick Road is Greyfriars Place where a large house of 1887 has been turned into offices, now awaiting new tenants. An ornamented terracotta panel proclaims the date. The L-shaped building has a dragon on the junction of the two hipped roods.

Despite large-scale and long-standing civic indifference to its historic environment something documented by Gavin Stamp in *Britain's Lost Cities*, London: Arum Press, 2007, pages 44-53 — and despite the activities of the Luftwaffe, Coventry retains several eighteenthcentury brick houses of high quality: Kirby House of c. 1700 and one other, number 7, on Park Street and the group on Priory Row, including the Deanery. On Hay Lane, sixteenth-century timber-framed buildings have brick façades put up in about 1800, a common practice in Coventry as historic photographs demonstrate.

Again of eighteenth-century date is County Hall, a civic building at one time used as the criminal court. Regrettably the building is closed and boarded up, awaiting an unknown fate. Designed in 1783 by Joseph Eglinton (1746-1810), the east front is good quality ashlar but the seven bays of the south side with a central pediment were constructed of red brick. Also used court purposes for is the stone-fronted Drapers' Hall of 1829-1832 by Rickman & Hutchinson, to which a brick addition was made soon after the hall was opened.

The wealth of Coventry was derived from a succession of industries. One silk mill survives in the city centre with the adjacent manager's house and across the city the canal basin, originally designed by James Brindley for the Coventry Canal Company in 1797 and subsequently extended into a Y-shaped termination for the Coventry Canal. Warehouses of various dates on the south side accompany an original, if restored, gatehouse and a small building with one its two original weighbridges surviving.

Modern Coventry is a centre for many things, not least education. The brick buildings of the city-centre Coventry University include those reusing old factories and several which are completely new. Prominent among these is the yellow-brick, climatically friendly library which was Brick Building of the Year in 2002. It is hoped to include an article on the brick buildings of Coventry University in a future issue of *British Brick Society Information*.

BRITISH BRICK SOCIETY MEETINGS IN 2008

One further meeting is planned for 2008

Saturday 4 October 2008 London Autumn Meeting West London: Hillingdon Civic Centre, West Drayton manor, Harmondsworth Church and Barn

Meetings in 2009

Preliminary thoughts for visits in 2009 include Bury St Edmunds, Suffolk, and the Tilbury forts. We hope also to arrange a visit to a brickworks.

The Annual General Meeting in 2009 will be held in Boston, Lincolnshire, England, on either Saturday 13 June 2009 or Saturday 20 June 2009.

Full details of the London Autumn Meeting were in the last mailing

Details of meetings in the first part of 2009 will be included in either the December 2008 mailing or the February 2009 mailing.

The British Brick Society is always looking for new ideas for future meetings. Suggestions of brickworks to visit are particularly welcome. Offers to organise a meeting are equally welcome. Suggestions please to James Campbell, Michael Oliver or David Kennett.

Changes of Address

If you move house, please inform the society through its Membership Secretary, Dr Anthony A. Preston at 11 Harcourt Way, Selsey, West Sussex PO20 0PF.

The society has recently been embarrassed by material being returned to various officers from the house of someone who has moved but not told the society of his/her new addess.