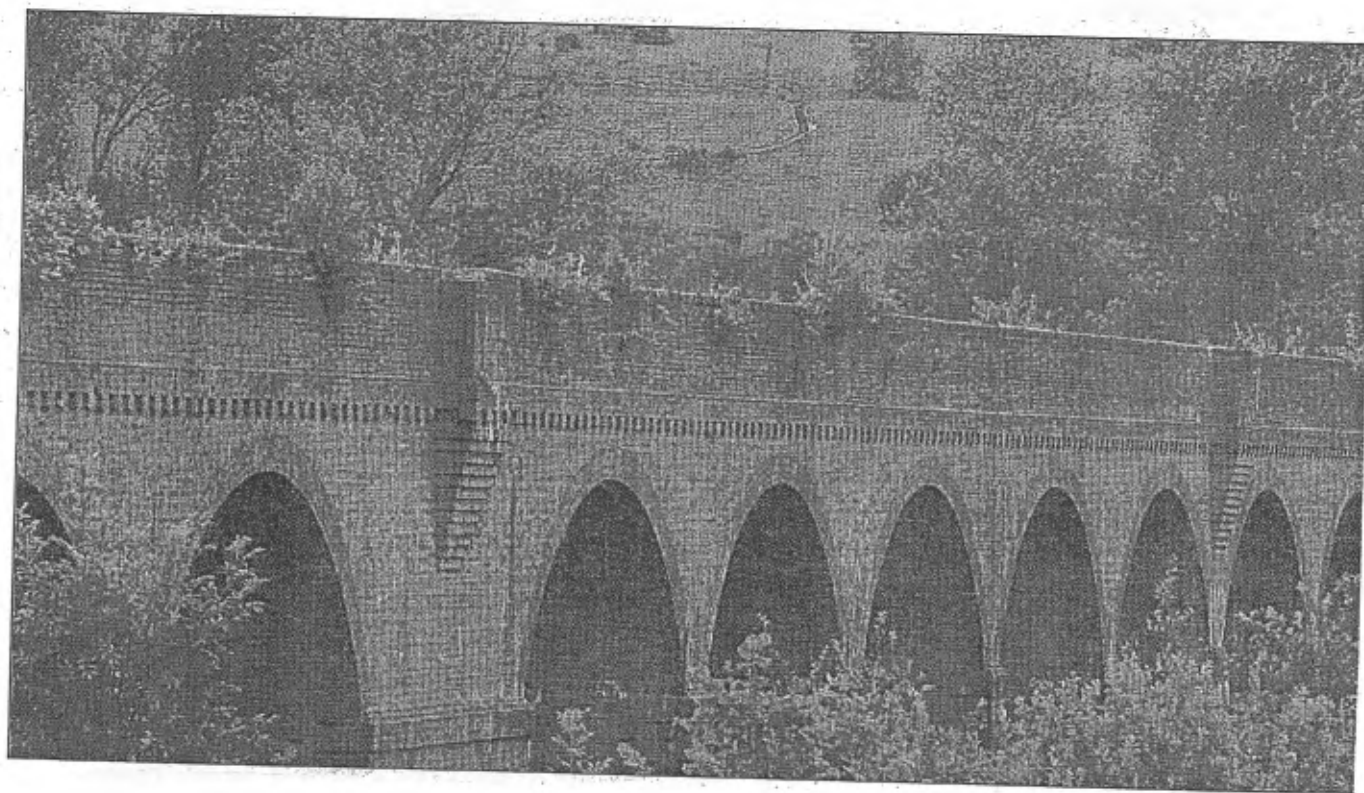


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BRITISH BRICK SOCIETY

# INFORMATION 103

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*Cover:* Hockley Viaduct, near Winchester, Hampshire  
Brick facing an early concrete structure

## Editorial: Brick from the 1930s under Threat

Battersea Power Station (fig. 1) was open for inspection from Thursdays to Sundays during October and early November 2006; during this period a number of pieces of modern Chinese conceptual art were displayed in its east hall. This was the sole period of being able to view the site prior to an anticipated total closure for redevelopment which envisaged turning the power station itself into an arts centre. The open model on display in the 2002 Serpentine Pavilion by Toyo Ito showed ambitious plans for a large theatre and smaller spaces. New buildings, including housing and an hotel, were planned for the west, south and east sides of the site. Planning permission for these was granted in late November 2006, two weeks after the period of opening ended with a spectacular firework display on for the residents of Battersea on Sunday 5 November 2006 with the power station lit up and as a backdrop.

However, on 1 December 2006, the broadsheet newspapers reported that the Hong Kong property company, the owner of the power station site for thirteen years, has sold it to the Irish property development company currently redeveloping the waterfront in Dublin. This transaction has left a shadow over the future of Battersea Power Station although it appears that the new owners have fairly similar ideas for the site as were shown in a model and drawings on display in October 2006.

Ominously in March 2007, national newspapers reported that the new Irish owners had rejected the agreed renovation and development plans. Demolition of the four chimneys is now envisaged without their eventual reinstatement as was agreed in the planning consent.

The largest brick structure in Europe deserves better than this.

Property transactions turning the common resource into a lucrative means of making money by leaving a site idle and undeveloped do not strike even the most moderate as other than immoral, especially when such financial gains are largely untaxed.

The one saving grace about Battersea Power Station is that the building itself is listed and any redevelopment or demolition of the structure would require listed building consent.

Threats to 1930s brick buildings come in many forms. A lack of listing can be one and near total internal redevelopment to meet the changing needs of the building's function can be another. Equally, the function for which the building was constructed may no longer be viable, as was seen by members of the society in the great big hole where once had been the Granada Cinema in Bedford, the largest 1930s brick building in the town.

Battersea Power Station was a coal-fired power station designed to produce electricity for south and south-west London. It consists of three separate spaces. A west turbine hall was built first with the central boiler house. These were completed in 1935. The western pair chimneys were constructed during the early 1930s. The east turbine hall with its pair of chimneys were always intended to be part of the design; they followed between 1944 and 1955, with the final chimney being erected at the very end.

The western part closed in 1974 and the eastern in 1983. The site has been disused since then. Ancillary buildings have been demolished and the site has become increasingly forlorn and derelict.

Battersea Power Station was commissioned by the London Power Company in 1927 with S.L. Pearce as engineer-in-chief and H.N. Allott of the Manchester firm of C.S. Allott & Son as consulting engineer. Only in 1929, was the Manchester-based architect James Theodore Halliday brought in with the idea of creating architectural features including a brick exterior to the steel framing. Halliday was responsible for internal decorative elements such as the marble-covered control room and the interior for the pilastered western turbine hall using a grey-green terracotta



Fig. 1. Battersea Power Station from the west, with the River Thames on the left. The photograph shows the exterior of the western turbine hall and the central boiler house with the four white chimneys. The decorative use of brick on the upper parts of the unpainted sections of the chimney stacks is clearly visible as is the unroofed nature of the central portion of the structure.

from Shaws of Darwen. Members of the society visited their works in October 1995 (see *BBS Information*, 68, July 1996, pp. 16-19). The western turbine hall is roofed and the interior is largely intact with the terracotta is fairly good condition, with a few minor chips.

Unfortunately, before J.T. Halliday had done much work on the structure, he was taken ill and later, in 1933, died. Although the younger man, Theo Halliday was the senior partner of Halliday & Agate and the latter knew little of the London commission. He was also on the verge of retirement. With Halliday's illness, what appears to have happened was that G.C. Agate approached Sir Giles Gilbert Scott to find a person with sufficient competence to design the outer skin of the power station. Scott volunteered to take over the project and reworked ideas about the brickwork. The brickwork was completely Scott's work but Sir Giles' involvement in Battersea Power Station was as consultant for the brickwork, for which he was paid a flat fee, not as architect with a fee based on a share of the final building costs. Drawings and sketches have been published of Scott's working towards the design (see G. Stamp, editor, *Britain in the Thirties*, being *AD Profiles*, 24, n.d. but 1978, page 80, with illustrations pp. 78-81, especially those on pages 78 and 79).

Soon afterwards, Scott was designing the great brick-covered concrete structures at Park Royal, in west London, for Guinness Brewery, sadly now no longer dominating the view from Western Avenue as one approaches London. At Battersea, Scott designed the exterior brickwork but not the structure itself.

The brickwork at Battersea Power Station uses Blockley bricks in a dark straw colour

with straw-coloured mortar. It is laid in a variety of bonds but mostly English Bond and English Garden Wall Bond. There are prominent soldier courses. Much of the attention to detail in the brickwork comes from the use of fluting in the upper parts of all four sides of the chimneys and almost to the base on the north face of the north chimneys and the south face of the southern pair of chimneys.

These fluted chimneys, in particular, are in poor repair and need urgent attention. The brickwork remains good although obviously with continued disuse it could deteriorate. The saving grace is that it is massive, up to five bricks thick, despite being only a skin: this is to take the weight of the height, without a batter. The internal terracotta, as noted, is in good repair.

The Guinness Brewery has gone: its replacement a weak imitation. Further out on Western Avenue, the Aladdin Building, for some years the management training centre of a prominent do-it-yourself firm, is again disused and open to new tenants, if any can be found. Again there has been serious deterioration even in a short space of time. When the writer first became aware of the building in the late 1990s, it was occupied and in a good state of maintenance. Since becoming vacant, each time the Oxford-London bus takes the editor past the structure, it shows greater signs of a lack of care.

An equal lack of care and a savage new threat has been proposed for what in the eyes of the writer and those of the society's former chairman is the most significant school building of the 1930s. This is the building which both knew as Luton Grammar School (fig. 2), which since 1966 has been used for Luton Sixth Form College.

Designed by J.L. Turok, then senior assistant at the London office of Marshall & Tweedy, an architectural practice originating in Newcastle-upon-Tyne, the building was the winning entry in a competition of 1936 to design a new boys selective school for the growing town of Luton. This is a building one knew intimately and about which one can only be extremely personal.

Opened on Thursday 15 September 1938, the very day Mr Chamberlain flew back from Munich with the now infamous piece of paper, as the then local evening paper, *The Luton Evening Telegraph*, recorded in columns almost side-by-side, the building served to inspire several generations of articulate schoolboys. Although almost eighteen years after the low-key opening of the building, the child who would become the man was only dimly architecturally aware at eleven, the first sight of the building with the great sweep of classroom going off into the middle distance told this writer that here was a building which was special, different to anything seen before.

The thrill of that first glimpse of his *alma mater*, the only academic institution to which he has ever felt an overwhelming allegiance, has never left this writer.

As a teaching career, incredibly broken yet intermittently spanning more than four decades, draws to its final conclusions, it is possible honestly to say that no educational institution in which one has taught has been as well designed or had such thoughtful consideration for the users, both pupils and staff. Others have been tormenting ovens with acres of plate glass facing due south; some have been so cold that staff and students have required coats and in some cases gloves to keep warm. Yet others, more recent in one's experience, are so arranged that strong sunlight makes impossible to read the whiteboard (the modern equivalent of the good old blackboard) without blackout. Luton Grammar School presented no such problems.

The building now looks very unlike that first day in 1956. The great sweep of classrooms is lost beneath later accretions, mainly for administrative not scholarly purposes, and certainly out of keeping with the original design. Additional classrooms and laboratories were added on the back during the writer's years there (1956-1963) but the front remained unsullied.

Now, barely two years the centenary of the institution was celebrated on Saturday 25 September 2004, there is a proposal that would involve the demolition of the school. The idea

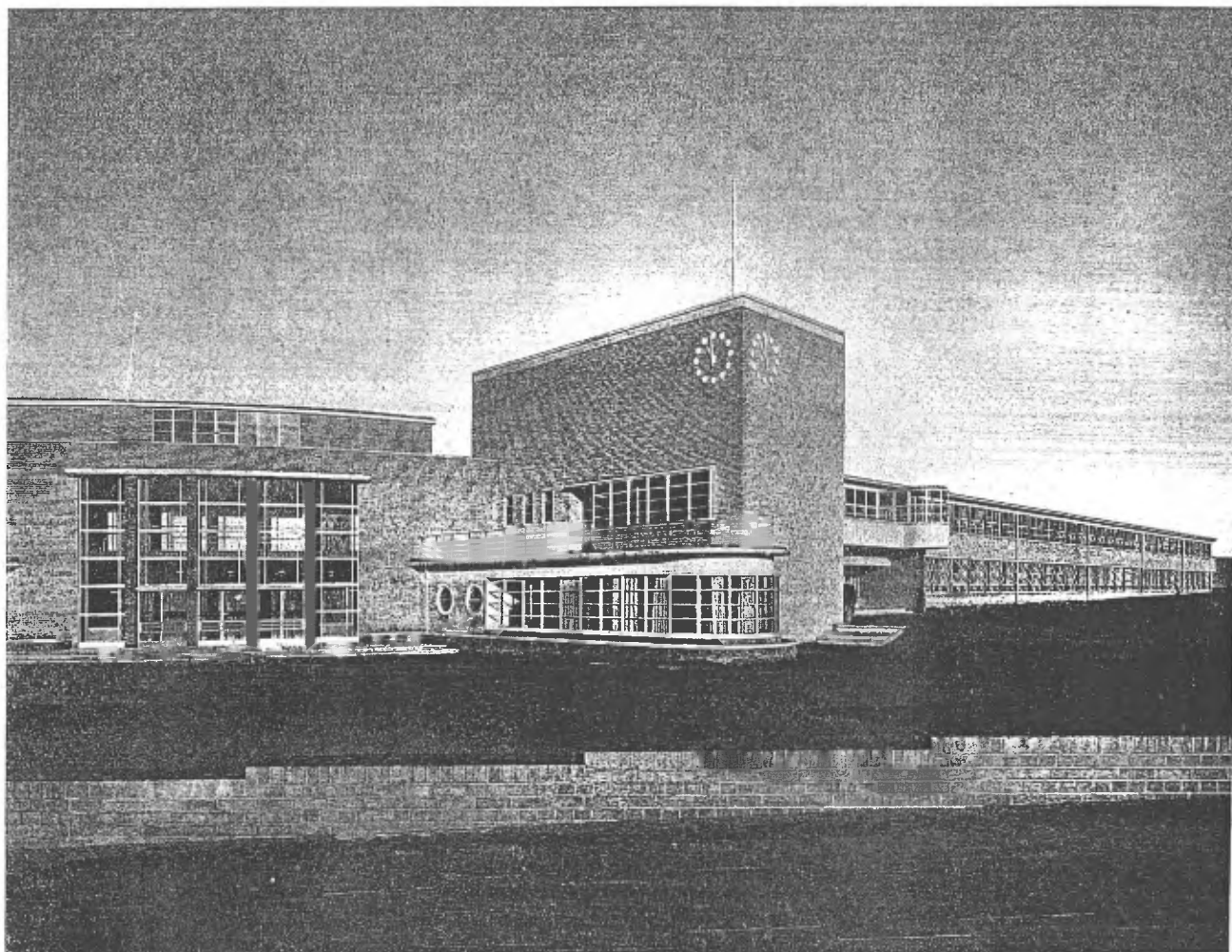


Fig. 2 Luton Grammar School for Boys, as originally built.

is to build a new sixth-form college on a field to the north and to sell as housing land the existing site with its extensive playing fields so large that it was possible to house two cricket squares and a full-scale athletics track and within these a plethora of rugby pitches.

The building is unprotected by any form of listing despite the south-west portion – hall, stage, changing rooms and gymnasium – remaining largely as built. An organ chamber was added to the hall in the late 1940s; sixth-form division rooms were constructed on one side of the gymnasium. That is all. The interior of the hall with its wood panelling is intact; outside the hall, the great circular staircase, reminiscent of that in the De La Warr Pavilion in Bexhill-on-Sea, remains at the western end. There have been losses: in the foyer, the well-filled academic honours board was wiped clean more than two decades ago.

Educational buildings change as needs and fashions in education develop. The building for Luton Grammar School has undergone more changes than most school buildings in its comparatively short life, as one writes a something under seventy years. The Edwardian building for the original Luton Modern School which catered for both girls and boys was demolished four decades ago: it had lasted a mere sixty years serving a variety of different institutions.

Power stations can become art centres. Despite problems caused by changes in ownership, Battersea did at one point seem set to follow Bankside.

Once there was a good school which nurtured men who went on to spend their working lives diverse pursuits: finding one of the potential cures for cancer, or mapping the genetic



fingerprint of DNA, or the public presentation of science, or the interpretation of Japan to the readers of English broadsheet newspapers. It even found space to encourage those who go on to use their leisure time to write about bricks and brick buildings. Surely an educational building in which many generations of schoolboys were taught, which gave them a good grounding in understanding the ethics of conflict and served four full generations admirably deserves a better fate than to be cast on the scrapheap and merely to be reduced to a pile of bricks like the façade of a Best Supermarket.

The tragedy is that the building which served Luton Grammar School so well is largely unknown to the literature of the history of architecture. The results of the competition were announced in the weekly periodicals in late June 1936. *The Architect and Building News*, *Architects' Journal* and *The Builder* all have accounts of the competition and the winning entry. But no record is to be found in these of the completion of the project and its opening. Hence, the building is omitted by major architectural books and guide books. It is for example omitted most recently from Alan Powers, *Britain Modern Architectures in History*, (London: Reaktion Books, 2007). There are no surviving architects' documents. The London premises of Marshall & Tweedy were struck by a wartime bomb. The building firm which constructed it, H.C. Janes Ltd., was the subject of a successful take-over some three decades ago and as far as this writer can recall, there was no extensive archive there relating to its construction, although the personal papers of Sir Herbert Janes, now in Bedfordshire County Record Office, do contain some items.

Those who write about this building have tended to be those who had the great privilege to attend the school. The oldest of whom, Dennis Farr, died recently. Dennis drew attention to the building in *English Art 1870-1940*, which he wrote for the *Oxford History of English Art* series. It was one of the few buildings which he was able to illustrate.

A similar theme to this editorial is found later in this issue of *British Brick Society Information* where we record the longest railway viaduct in Hampshire, the now disused Hockley Viaduct, south of Winchester, which has recently been refused statutory listing for the second time. I am grateful to BBS member Kathleen Clarke for drawing my attention to this viaduct which I have seen a number of times from the M3 motorway. I am also grateful to another BBS member, Brian Pegden, to sending me other cuttings, one of which has been used to help make up the contribution on 'Miscellany: Hampshire Brick - Nineteenth Century to Modern'.

This issue of *British Brick Society Information* has taken longer than usual to appear. Practically all was finished in late December 2006. However, the editor's paid employment took up all his time during the following three months: his work colleagues agree, it has been a hard term. Thankfully, there are only four weeks teaching plus coursework and examination marking remaining for this academic year.

DAVID H. KENNETT

Editor, *British Brick Society Information*,

Shipston-on-Stour, Warwickshire, 27 December 2006 and 2 April 2007.



# An Italian Carved Brick found in Australia

Kerry Randell

## INTRODUCTION

From time to time, the British Brick Society receives enquiries about bricks, brickmaking, other ceramic building materials, and brick buildings. These are usually printed when space is available in *British Brick Society Information*. Responses are also included when these are forthcoming. The present item was originally sent by Kerry Randell as an enquiry to the society's Hon. Enquiries Secretary, Michael Hammett.<sup>1</sup>

The response included with it is designed to eliminate the confusion which surrounds the term "ballast" bricks.



Fig. 1 Brick found as part of a cargo in Sydney, Australia, of Italian origin: general view.

## AN ITALIAN CARVED BRICK FOUND IN AUSTRALIA

The brick illustrated in Figure 1 derives from a collection made by my great-great-grandfather in the 1860s. He would buy "ballast" bricks from ships arriving in Sydney Harbour and use them to build houses. He built many houses in Sydney from these bricks.

This brick is smaller than most and had curious symbols on it, therefore he retained it. It has been passed down from father to son and has been in my possession for over twenty years. The brick has two shields on one face, which were clearly meant to be visible. Of the two shields, one has the Albanian crest and the other a two-headed snake. The brick is dated 1566. It has a tower in the middle with the letters 'LG', which may be a builder's mark. There is also

a Latin motto: *Maxim Dilige*, for which a rough translation is "If we trust in God, we can do what ever we please".

My belief is that the symbolism of the brick's two shields denotes the marriage of two families but I have little inkling of who may be celebrated. A search in the Australian National Library, more than twenty years ago, revealed a possible parallel but the photocopies I took have now become indistinct. This brick also had the letters 'LG' on it and came from a building of c.1550.

I have been unable to find any possible source for the brick other than Italy but contact with Italian museums which have been sent photographs has not provided any concrete information. I would welcome information from members of the British Brick Society.

KERRY RANDELL



Fig. 2 Brick found as part of a cargo in Sydney, Australia, of Italian origin: the face with the shield.

## "BALLAST" BRICKS

These "ballast" bricks are *not* ship's ballast. All ships carry ballast to stabilise the vessel; usually this is gravel or other *round* stones; it is *not* something with sharp edges, like bricks.

There is another meaning to the word "ballast", which is the one used here. The idea of "ballast" bricks derives from ocean-going ships being "in ballast" when without a cargo or with a very light cargo. Thus they are carrying a large quantity of bricks or stone<sup>2</sup> to ensure that the vessel does not ride high in the water: in effect a Plimsoll Line in reverse. In the eighteenth century, the Spanish took building materials from Spain to the West Indies and central and south America, precisely for this reason: bricks to Havana, Cuba, and stone to both Leon, Nicaragua, and Lima, Peru, have been recorded.<sup>3</sup> 'Stately Spanish galleons' had to arrive intact in order to convey

... a cargo of diamonds  
Emeralds, amethysts,  
Topazes, and cinnamon, and gold moidores<sup>4</sup>

safely to the quays of the Guadalquivir.

Whether going from Spain or to Australia, these "ballast" bricks are designed to prevent the vessel capsizing. They would be disposed of when cargo is loaded for the return voyage. If they could be sold for money, so much the better. Very similar in intent was the stone from the eastern Baltic which was used in the east part of the town wall at King's Lynn.<sup>5</sup>

Confusion has arisen because the word "ballast" has these two distinct nautical meanings which have been misunderstood by brick enthusiasts.<sup>6</sup>

DHK

## NOTES AND REFERENCES

1. Mr Kerry Randell can be contacted as follows: by post at PO Box 1114, Mount Gamier 5290 South Australia; telephone. +61887234277 e-mail: krandell@icisp.net.au

2. For an example of this practice using stone, see P.G. Hoare *et al.*, 'Re-used Bedrock Ballast in King's Lynn's 'Town Wall' and the Norfolk Port's Medieval Trading Links', *Medieval Archaeology*, **46**, 2002, 91-106 where geological evidence suggests that Baltic rock is re-used in the surviving portion of the east wall of the town.

3. M. Binney, 'The Governor's Palace, Havana',

*Country Life*, 12 January 2006, pp.50-55. Stone for the cathedrals at Leon and Lima is noted in the 'Notes and Queries' column of *The Times* on Fridays in July 2006.

4. John Masfield 'Cargoes', first published in 1912; conveniently in Helen Gardner (ed.), *The New Oxford Book of English Verse*, Oxford: Oxford University Press, 1972, p.845, poem 798.

5. See note 2.

6. Cf. T.P. Smith, 'Bricks, Tiles and Ballast: an Sceptical View', *BBS Information*, **85**, October 2001, 5-9.

# 'UPON AN ADVENTURE WITH OTHERS':

## John Evelyn and Brickmaking after the Great Fire of London

Terence Paul Smith

### Introduction

In 1615, twelve years after uniting the throne of England with that of Scotland, James I and VI expressed the wish that 'Wee whom God hath honoured to be the first King of Great Britaine, might be able to say ... , That Wee had found Our Citie and Suburbs of London of Sticks, and left them of Bricks[,] being a Meteriall farre more durable, safe from fire, beautiful and magnificent'.<sup>1</sup> By 'Sticks', of course, he meant the timber of which the City was largely built, a situation complained of by the diarist and polymath John Evelyn (1620–1706) in his *Fumigumium*...<sup>2</sup> This was in 1661 and reflected the fact that the wish of the first Stuart monarch had not been fulfilled. It was not, in fact, until the reign of his grandson, Charles II, that London became a 'Citie ... of Bricks', and then only because of the accident of the Great Fire of 1666. This destroyed the greater part of the City, only a portion in the north-east being spared (fig. 1). Regulations concerning rebuilding exhibited an understandable anxiety about fire, and stipulated that stone or brick only were to be used.<sup>3</sup> Stone had to be brought in from elsewhere: it was therefore expensive and was largely restricted to some of the churches and other public buildings: housing – the *bulk* of the rebuilding – was almost entirely of brick.

### Bricks for Rebuilding the City

The size of the rebuilding project created a demand for brick on an unprecedented scale. As Evelyn himself noted in the immediate aftermath of the Fire, '... for the better expediting of this great design ... store of all materials may be provided betimes [= in good time, soon] (bricks and tiles especially) because all seasons are not fit for it...'<sup>4</sup>

Evelyn was a member of the Royal Society, which immediately after the Fire took some interest in brick manufacture. At a meeting on 31 October 1666, various members spoke on the topic, including a 'Mr Wylde' (almost certainly Edmund Wylde FRS of Glaseley Hall, Shropshire), who claimed that he 'had a way, by mixing several sorts of earth together, to make hard and lasting bricks'. Amongst others who spoke was the Society's Curator of Experiments, Robert Hooke (1635–1703), who stated that clays which vitrified made the most durable bricks. The Society ordered Hooke to 'make trials of several earths by burning them in a wind-furnace to see which kind would yield the best brick'.<sup>5</sup> He was reporting on his results in April and May 1667, although 'these ... experiments did not, so far as we know, yield practical results'.<sup>6</sup> The Society, in any case, shifted its interest to other matters.

To further the provision of bricks, the City's previous control of brickmaking was relaxed and the City Council encouraged those in the suburbs to 'digg and cast upp the ... ground for the making of Bricke'; on 22 December 1666 the *London Gazette* appealed for written tenders from those 'willing to serve and furnish this City with timber, brick, lime, stone, glass, tiles, slates and other materials for building'.<sup>7</sup> The required bricks were made largely, though not exclusively, in the immediate vicinity of the City, with Whitechapel to the east being an especially important, but by no means the only, brickmaking centre.<sup>8</sup>

With such a demand for the product, it might seem that the industry was a good one to be involved with, and some brickmakers did indeed supply large quantities: Henry Tindall, for

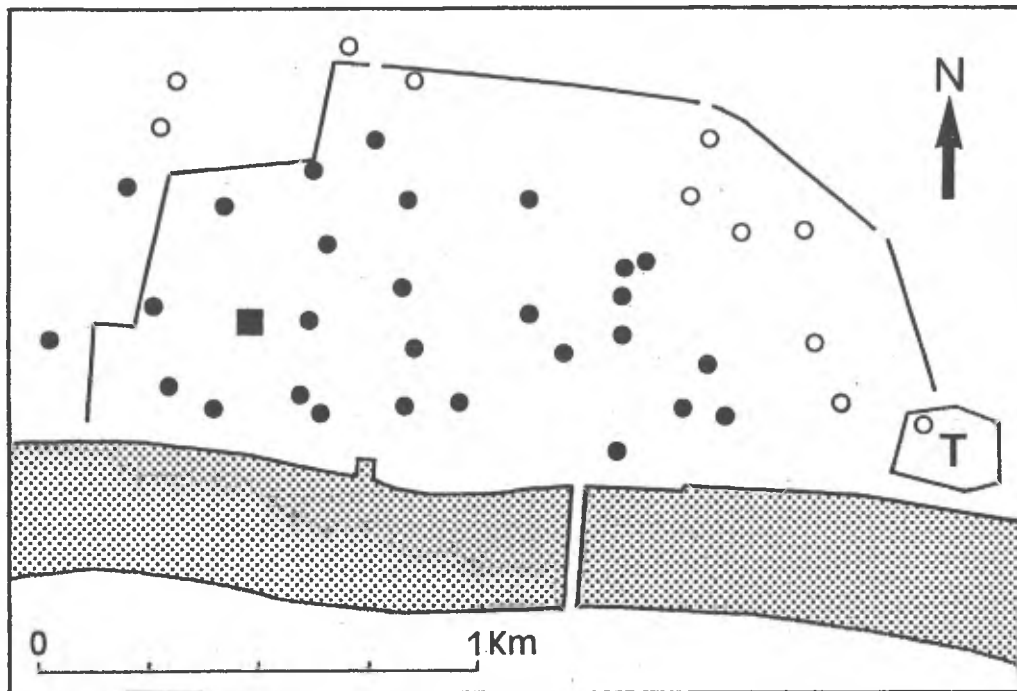


Fig. 1 The area of the City of London destroyed by the Great Fire (1666) as reflected in existing churches: open circles mark those spared by the Fire, black circles those destroyed and rebuilt (some others were destroyed and *not* rebuilt); the black square marks St Paul's Cathedral, also destroyed and rebuilt; T = Tower of London.

Source: G. Milne, *The Great Fire of London*, 1986, p.80

example, made bricks in Bunhill Fields, the lower Mallowfield (*cf.* modern Mallow Street, EC1), the 'Millhillfield' and 'the meadow', all in Finsbury. In 1666/7 he provided only 6,400, but in the following three years he supplied 1,406,000, 1,400,000, and 2,700,000 respectively – a total of over 5½ million bricks.<sup>9</sup> But there were failures as well as successes.

### John Evelyn's Involvement with Brickmaking

John Evelyn (fig. 2) was one of the failures. On 23 September 1668 his friend Samuel Pepys (1633–1703) noted in his diary: 'At noon comes Mr. Eveling [*sic*] to me ... and ... tells me of his loss, to the value of 500l [£500: perhaps something over £50,000 in current value], which he hath met with in a late attempt of making Bricks upon an adventure with others, by which he presumed to have got a great deal of money – so that I see that the most ingenious of men may sometimes be mistaken'.<sup>10</sup> The 'adventure' – or *venture*, as we would now say – had its origins almost two years earlier, on 2 December 1666, when Sir John Kiviet – a Dutchman who had fled to England for political reasons and was knighted by Charles II – journeyed to Evelyn's home at Sayes Court in Deptford, Kent (now Greater London): his purpose, Evelyn informs us, was 'to examine whether the soil about the river of Thames would be proper to make clinker-bricks and to treat with me about some accommodation in order to it'. Nothing further seems to have been done, however, until 26 March 1667, when Kiviet dined with Evelyn at Sayes Court. On that occasion the two men 'went to search for brick-earth, in order to a great undertaking'. On 7 September of that same year, Evelyn notes, 'Came Sir John Kiviet to article [= arrange] with me about his brick-work speculation'.<sup>11</sup> Interestingly, a plot of land belonging to the king and adjoining Sayes Court was known as the Brick Close, although when this was granted to Evelyn

on 14 August 1668 it was merely 'to enlarge my fore-court'.<sup>12</sup>

We have no details of the brickyard beyond its existence and failure, and do not even know what types of bricks were produced. Kiviet's original intention, noted in the previous paragraph, was to produce 'clinker-bricks' – that is, the small buff-yellow bricks made in his native Netherlands and used principally for paving, their hard, dense character being especially suited to this. They have indeed often been called 'clinkers', although the Dutch term *klinkers*, from which the English word derives, had a different usage: in the Netherlands, these small bricks were called *IJsselstenen* (IJssel-bricks) or *Goudse-stenen* (Gouda-bricks), reflecting the principal areas of manufacture along the River IJssel in the province of Holland, on which river the town of Gouda is itself situated. *IJsselstenen* (or *ijsselstenen*) is the term normally employed by Dutch historians and archaeologists. They were manufactured from dredged-up river mud.<sup>13</sup> Evelyn himself had admired these bricks on a visit to Amsterdam in 1641, commenting on 'the margin of that goodly aqueduct [in fact, the Keisersgracht, one of the city's *grachten* or canals], so curiously wharfed with clinkered brick, and which likewise paves the streets, than which nothing can be more useful and neat'.<sup>14</sup> But it is improbable that material suitable for such bricks would have been found at Deptford.

It seems more likely that the products involved were red bricks, for which the Thames-side materials were suited, and which had been used in London since the fifteenth century – though mostly for chimney stacks, boundary walls, wells, and the like minor uses, including, sometimes, 'nogging' to timber-framing, and only occasionally for complete buildings: as noted previously, London on the eve of the Fire remained a predominantly timber-built city.<sup>15</sup> In the period after the Fire these brick types were rapidly superseded by others of a darker red or plum colour, often with a yellowish surface tinge (Museum of London brick fabrics 3032 and 3034), which were manufactured by adding domestic ash and cinder ('Spanish'), derived from London fireplaces, to the clay. But according to the Company of Tylers and Bricklayers in 1714, it was not until *after* the failure of the Deptford yard with which Evelyn was involved that this new method of brickmaking was discovered: 'the practice of using ashes commonly called Spanish [was] begun about forty years since [hence not until the early 1670s], occasioned by digging up several fields contiguous to the city after the great fire which fields having ben much dunged with ashes it was observed the bricks made with earth in those fields would be sufficiently burned with one half of the coles commonly used'.<sup>16</sup>

Bricks, at the time, were often covered with straw during drying, a practice to which Evelyn himself refers in a diary entry of 30 August 1680, more than a decade after the failure of the Deptford yard, but perhaps drawing on his own earlier experience: '... the straw which the Egyptians required of the Israelites [Exodus 5], was not to burn, or cover their rows of bricks, as we use, but being chopped small to mingle with the clay, which being dried in the sun (for they bake not in the furnaces) would else cl[e]ave asunder'.<sup>17</sup> English bricks could be damaged by a hot sun if they were not covered during drying, as in an incident in Romford, Essex reported by Richard Neve in the early eighteenth century: some uncovered bricks 'burst to pieces'; in his second attempt, the brickmaker took care that he '*thackt* them (*i.e.* cover'd them) over with Straw'.<sup>18</sup> (Mats, hurdles, or wooden shutters were also used for covering the drying bricks, with the added advantage of providing better protection from heavy rainfall.)

One may fairly safely assume that the bricks at the Deptford yard were fired in a clamp rather than a kiln. Clamp-firing was long the norm in north Kent, and the remains of a clamp dated archaeomagnetically to 1690–1730, together with remains of another dated by pottery to c. 1730–1800, have been excavated at New Cross, only about ¾ mile (1.2 km) south of the site of Sayes Court.<sup>19</sup> (Down to the nineteenth century, it may be noted, the terms 'clamp' and 'kiln' were commonly used interchangeably.)



Fig. 2 John Evelyn (1620–1706)

### **The Failure of the Deptford Brickmaking Enterprise**

In April 1668, Evelyn subscribed 50,000 bricks ‘towards the building of a Coll[ege]’ (which was never in fact built) for the Royal Society.<sup>20</sup> If this means that he donated bricks from the Deptford yard, which seems likely, then the ‘great undertaking’ was clearly going well enough only six months before Pepys recorded its ultimate failure.<sup>21</sup>

*Why* the brickyard failed is not known. Its location cannot be to blame since Deptford was well placed for supplying bricks and tiles to the metropolis. Brickmaking had been established there in the early fifteenth century, after some Dutchmen were engaged to inspect and test the local clay; a small dock was constructed to aid in transport of the products.<sup>22</sup> And towards the end of the seventeenth century, by 1697 at latest, a builder, Thomas Lucas, ran a successful tileyard there.<sup>23</sup> Its particular advantage – from which the nineteenth-century brickyards of north Kent and south Essex certainly benefited – was the ease with which the bricks could be delivered to London using the River Thames, the barges taking the bricks upstream and returning downstream laden with the ‘Spanish’ for intermixing with the raw material. Thus, although Deptford was somewhat more distant from the City than some other brickyards – those of Henry Tindall in Finsbury, for example – the possibility of using water transport rather than carts or wagons should have been ample compensation: not only could the bricks be moved in greater bulk, but they were also less liable to damage when being moved by water than when being trundled along often poorly made-up roads. Location on the Thames would also have made it easy to obtain fuel for firing, which was usually coal rather than wood by this date, the changeover from the one to the other occurring early within the seventeenth century. At Hatfield House, Herts., for example, the change came within the period of building,



1607–12: at first, wood from the Hatfield estate was used, but towards the end of the period coal was brought in from London.<sup>24</sup>

That the brickyard failed despite these advantages may mean that it suffered a mishap of some sort – a serious misfiring, perhaps (always a particular hazard with clamp-firing) – or that it was mismanaged. Or perhaps the ever-busy Evelyn was just too involved with other matters to give it his proper attention. On the other hand, Evelyn's diary entries suggest that Kiviet was the prime mover in the project, and – if human fault rather than unavoidable accident lay behind the failure – then the responsibility may have been his rather than Evelyn's. The latter's misfortune, possibly, resulted from his being beguiled by the 'adventure with others', including Kiviet, and the temptation 'to have got a great deal of money' – but then, as Pepys observed, even 'the most ingenious of men may sometimes be mistaken'.

## NOTES AND REFERENCES

1. C.C. Knowles and P.H. Pitt, *The History of Building Regulation in London 1189–1972*, London: The Architectural Press, 1972, p.19.
2. J. Evelyn, *Fumigumium: or the Inconvenience of the Aer, and Smoake of London Dissipated...*, London, 1661, reprinted 1672, reissued Oxford: Ashmolean Museum, 1930, pp.8–9.
3. The post-fire regulations are available in a number of publications, e.g. Knowles and Pitt, 1972, pp.30–35, G. Milne, *The Great Fire of London*, New Barnet and London: Historical Publications, 1986, pp.116–19, and S. Porter, *The Great Fire of London*, Stroud: Sutton, 1996, pp.106–8. The best study of post-Fire rebuilding remains T.F. Reddaway, *The Rebuilding of London after the Great Fire*, reprinted edn, London, Edward Arnold, 1951; but see also T.M.M. Baker, *London: Rebuilding the City after the Great Fire*, Chichester: Phillimore, 2000.
4. J. Evelyn, *Londinum Redivivum*, London, 1666, reissued as *London Revived*, ed. E.S. de Beer, Oxford: Clarendon Press, 1938, pp.53–4. In 1625 it had been stipulated that bricks should be made 'onely between the Feast of the Annunciation of the blessed Virgine Mary [25 March] and the last day of August yerely, and at no other time or season of the yeere': Knowles and Pitt, 1972, p.22.
5. M. Cooper, 'A More Beautiful City': *Robert Hooke and the Rebuilding of London after the Great Fire*, Stroud: Sutton, 2003, p.119.
6. L. Jardine, *The Curious Life of Robert Hooke: the Man Who Measured London*, London: Harper Collins, 2003, p.146; cf. Cooper, 2003, p.134.
7. Reddaway, 1951, p.73.
8. W.G. Bell, *The Great Fire of London in 1666*, 2nd edn, London: John Lane, The Bodley Head, and New York: John Lane Co., 1920, p.279; Reddaway, 1951, pp.127–8; H. Priestley, *London: The Years of Change*, London: Frederick Muller, 1966, pp.193–4; C. Spence, *London in the 1690s: a Social Atlas*, London: Centre for Metropolitan History, Institute of Historical Research, School of Advanced Study, University of London, 2000, pp.44–5. Specialist products for the decorative treatment of façades had to be brought in from elsewhere: the 'best Earth that we have in England for making of Bricks,' wrote Joseph Moxon, 'is in the County of Kent, from whence we have most of the Bricks which are Rubbed and Hewed for the Ornaments of the chief Fronts in the City of London': J. Moxon, *Mechanick Exercises: or the Doctrine of Handy-Works*, London, 1700, pp.2–3. These 'chief Fronts' were in accord with instructions issued on 8 May 1667: the Surveyors were to 'encourage and give directions to all builders for ornament sake, that the ornaments and projections of the front-buildings be of rubbed bricks; and that all the naked parts of the walls may be done of rough bricks neatly wrought, or all rubbed at the discretion of the builder, or that the builders may otherwise enrich their fronts as they please': quoted in Knowles and Pitt, 1972, p.33 (without the capital initials of the original, a slightly damaged copy of which is reproduced opposite p.33).
9. Reddaway, 1951, p.128 with n.2.
10. R. Latham, ed., *The Shorter Pepys*, pbk edn, London: Penguin Books, 1987, p.946.
11. A. Dobson, ed., *The Diary of John Evelyn*, London: Macmillan & Co., 1908, pp.253, 254, 333. I have used this edition, which has modernised spelling and capitalisation, but have also consulted the selections in G. de la Bédoyère, ed., *The Diary of John Evelyn*, Woodbridge: The Boydell Press, 1995, which retains original spelling and includes some slightly variant readings. Sayes Court, which stood near the Royal Naval Dockyard at Deptford, was demolished in 1729: it is remembered in the present names Sayes Court and Sayes Court Street, off Evelyn Street, SE8.

12. Dobson, 1908, p.262.
13. T.P. Smith, 'On "small yellow bricks ... from Holland"', *Construction Hist.*, 17, 2001, pp.31–42.
14. Dobson, 1908, p.16; at this date Evelyn mistakenly supposed that the bricks were 'sun-bak'd': de la Bédoyère, 1995, p.35 (not in Dobson, 1908); see also Evelyn, 1666/1938, p.52: 'their clinkers in Holland does [*sic*] very well [for paving]'. In paving they were normally laid on edge, often in a herringbone pattern. Their other uses are considered in Smith, 2001, p.39.
15. 'Most buildings [on the eve of the Fire], despite some small progress towards brick construction, were high, closely-packed, and timber-framed, a natural prey to fire': J. Schofield, *The Building of London from the Conquest to the Great Fire*, 2nd edn, Stroud: Sutton, 1996, p.170.
16. A. Cox, 'Bricks to Build a Capital', in H. Hobhouse and A. Saunders, eds, *Good and Proper Materials: the Fabric of London since the Great Fire*, London Topographical Soc. Publication 40, 1989, p.4, citing Lambeth Palace Library MS 2723, ff.21v–22. For other advantages of the newer bricks see the testimony of three brickmakers in 1725, cited in L. Clarke, *Building Capitalism: Historical Change and the Labour Process in the Production of the Built Environment*, London and New York: Routledge, 1992, p.95: the bricks, they claimed, were easier to set in the clamp, were lighter in weight, fired more quickly, were less liable to cracking and deforming during firing, and – a subjective judgement – had a better colour. They might have added that they could be stacked upright ('hacked') even for initial drying rather than having to be laid flat and individually, thus saving considerable space at the brickyard; moreover, because of this setting, a greater surface area of each brick was exposed to the air, thus speeding up the drying process. But not everyone shared the enthusiasm. Sir Christopher Wren, for instance, wrote in a letter of 1708: '... the mighty Demand for the hasty Works of thousands of Houses at once, after the Fire of London, and the Frauds of those who built by the great, have so debased the value of Materials, that good Bricks are not to be now had, without greater Prices than formerly.... Brick-makers spoil the Earth in mixing and hasty burning, till the bricks will hardly bear Weight, though the Earth about London, rightly managed, will yield as good Brick as were the Roman Bricks, (which I have often found in the old Ruins of the City) and will endure, in our Air, beyond any Stone our Island affords...': quoted in C. Wren, *Parentalia: or Memoirs of the Family of Wrens ... Chiefly of Sir Christopher Wren*, London, 1750, reissued in facsimile Farnborough: Gregg Press, 1965, pp.319–20. See also D. Yeomans, 'The Quality of London Bricks in the Early Eighteenth Century', *BBS Information*, 42, May 1987, pp.13–15. Cf. M.D. George, *London Life in the Eighteenth Century*, pbk edn, London: Penguin Books, 1992, pp.83–4, 85, 335 n.32, 336 n.34. For the principal brick types in both pre- and post-Fire London see, e.g., T.P. Smith, 'The Building Material', in R. Bluer and T. Brigham with R. Nielsen, *Roman and Later Development East of the Forum and Cornhill*, MoLAS Monograph 30, London: MoLAS, 2006, pp.104–5.
17. Dobson, 1908, p.328; the phrase 'as we use' presumably applies only to 'cover their rows ...' and not to the preceding 'to burn', otherwise Evelyn would be suggesting, implausibly, that straw was used as fuel for brickmaking in seventeenth-century London.
18. R. Neve, *The City and Country Purchaser, and Builder's Dictionary...*, 2nd edn, London, 1726, reissued in facsimile Newton Abbot: David & Charles, 1969, p.44.
19. A. Proctor, K. Sabel, and F.M. Meddens, 'Post-Medieval Brick Clamps at New Cross in London', *Post-Med. Archaeol.*, 34, 2000, pp.187–202.
20. Dobson, 1908, p.262.
21. Pepys refers, in the diary entry quoted above, to Evelyn and 'others': they are not named but presumably included Sir John Kiviet, who, as observed below, seems to have been the prime mover in the project.
22. P.E. Jones, 'Some Bridge House Properties', *JBAA*, 3rd series, 16, 1953, p.63; P.E. Jones, 'Four Fifteenth-Century Plans Relating to Bridge House Property...', *London Topographical Rec.*, 23, 1972, pp. 36–7.
23. A. Quiney, 'Thomas Lucas, Bricklayer, 1662–1736', *Archaeol. J.*, 136, 1979, pp.269–80.
24. L. Stone, 'The Building of Hatfield House', *Archaeol. J.*, 112, 1955, p.107. As late as 1693, however, an agreement made in Worcester still seems uncertain as to whether coal or wood was to be used as fuel for brickmaking: F. Kelsall, 'A Brickmaking Agreement of 1693', *Vernacular Archit.*, 14, 1983, pp.48–9. I am, incidentally, at a loss to understand the thought behind the late Professor John Burnett's curious, and unexplained, assertion that 'the gradual supersession of frame building by load-bearing brickwork was made possible by the use of coal instead of timber [*recte* wood] for the firing of brick': J. Burnett, *A Social History of Housing 1815–1970*, Newton Abbot: David & Charles, 1978, p.27.

## Heritage Open Days, 2006

Heritage Open Days were held nationally on the weekend of 9-10 September 2006 and in London on the weekend of 16-17 September 2006. The annual Churches Cycle Ride Day was held on Saturday 9 September 2006.

These short reports were submitted by members from various of the days/ weekends. The unsigned ones are by the editor of this periodical. The editor has also included notice of an interesting building seen in August 2006. Members are encouraged to send reports from the days/weekends in 2006 and 2007 to the editor for inclusion in a future issue of *BBS Information*.

DHK

### **CAMBRIDGE: ST PAUL'S CHURCH, HILLS ROAD**

This Cambridge church – which I first appreciated more than three decades ago, when, as a post-graduate student, I used to pass it on a regular basis – stands prominently on the corner of Hills Road and St Paul's Road, south-east of the city centre. The earliest portion was designed by Ambrose Poynter (1796–1886) and was built, with a small grant from the Church Building Commission, in 1840–41. To design a church for Cambridge at that time was to enter a lions' den: for in 1839 the Cambridge Camden Society (later the Ecclesiological Society) had been founded with the express purpose of laying down the law on how Anglican churches should be planned – what Richard Morris has aptly called its 'architectural McCarthyism'. In due course, the Society's journal, *The Ecclesiologist*, criticised St Paul's, which possessed, in its primary form, two features anathema to the Society: galleries over the aisles and a shallow chancel. At this early period too, ecclesiologists disapproved of brick for churches – though they were shortly to change their view on that matter.

St Paul's is in a Tudor Perpendicular style using red brick with stone and some brick dressings, and draws its inspiration from the Tudor churches of Essex, as is perhaps most evident in the west tower – actually at the west-south-west since the church is not quite 'correctly' oriented, yet another bone of contention for the ecclesiologists! It is of three stages with diagonal buttresses, which merge into octagonal turrets rising well above the crenellated parapet. The west window, in the bottom stage, is four-centred with three transomed lights, cinquefoiled at their heads; the side walls have small doorways under square labels and small two-light square-headed windows. Each of the north, west, and south faces of the middle stage has a slate clockface within a stone frame, whilst each face of the top stage has a four-centred louvered belfry-opening of three uncusped lights.

The nave arcades are of five bays with octagonal piers and four-centred arches, the mouldings formed in plaster. Externally, only the three westernmost bays of Poynter's aisles remain. Each has a square-headed window of three transomed and uncusped lights. The parapet is crenellated. The west ends of the aisles have four-centred doorways, giving access to small store-rooms, and two-light square-headed windows beneath stepped half-gables. The clerestory is low and has two small square-headed windows of two uncusped lights to each bay – thus ten in all on each side. The parapet is again crenellated.

The walls of these parts of the building are of red bricks laid in Flemish Bond. They measure  $8\frac{3}{4} \times 4\frac{1}{4} \times 2\frac{5}{8}$  inches ( $222 \times 108 \times 67$  mm). There is ample decoration, including crosses, in dark-red/brown bricks.

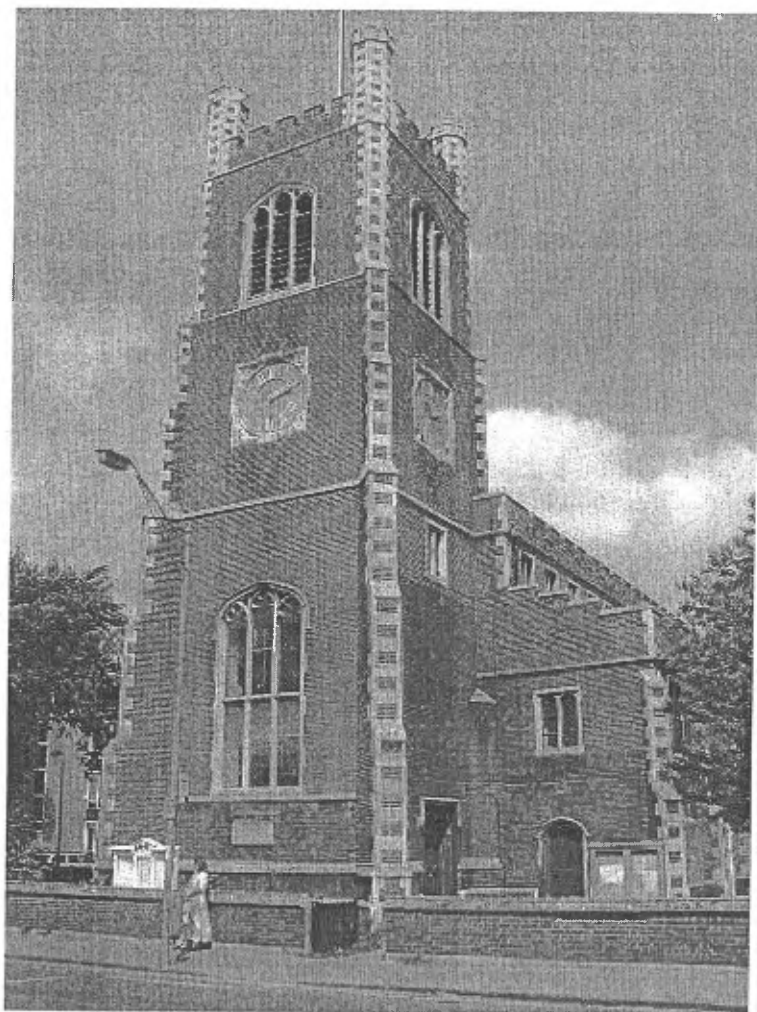


Fig. 1 St Paul's church, Hills Road, Cambridge: the tower, the clerestory and west end of the south aisle.

In 1864 Poynter's shallow chancel was replaced by a longer aisled chancel of two-and-a-half bays with a vestry to the north by H.G. Elborne (an architect about whom little is known). It is in a style basically similar to the earlier work, although all the windows are four-centred except for the slim windows at the east ends of the aisles, which have triangular heads. The east window is the largest, being of five lights with a transom. The tracery of all the windows is of uncusped Tudor Perpendicular type. Beneath the south aisle window in the eastern half-bay is a four-centred stone doorway. The doorway in the eastern half-bay of the north aisle is segmental-pointed and is of Gault bricks, using cant-bricks to form a chamfer with pyramidal stops towards the bottom; it is set within a stone frame. Gault bricks are also used for some of the quoins and for a cross built into the red brickwork above the north aisle doorway. The bricks are laid in Flemish Bond and measure  $8\frac{3}{4} \times 4\frac{1}{4} \times 2\frac{1}{2}$  inches ( $222 \times 108 \times 64$  mm). Curiously, the north wall of the vestry is of large flint rubble above a plinth of Gault bricks laid in English Bond topped by a course of plinth-bricks and with a crenellated parapet of red bricks in Flemish Bond. Is this perhaps the remnant of an earlier building incorporated within the vestry?

In 1893 the aisle galleries were removed and short transepts were added by Temple Moore (1856–1920), once again in a matching style. The windows are square-headed, as in the earliest work. The red bricks, slightly darker than those used earlier, are again in Flemish Bond; they are of the same dimensions as those in Elborne's work. There is no brick patterning.

Such rebuildings and extensions can result in incoherent compositions, especially when the designs are by architects of mediocre ability. (See, e.g., *BBS Information*, 101, July 2006, p.25.) But Poynter and Moore were certainly not *that* – and neither, it seems, was the lesser-known Elborne. The result of all this activity at St Paul's is a well-integrated and pleasing building, with the possible exception of that flint wall to the vestry. (On the south side of the building two additional doorways have been inserted quite recently.) Poynter's work rises far above the level of many Commissioners' churches: but then, the Commission contributed only £300 (a mere 5.2 per cent) of the total cost of £5,766, so that this is not really a *Commissioners' church* at all, except in the technical sense that it was built under their aegis.

The church cannot, of course, compete with the architectural *gems* of Cambridge: it is, nevertheless, worth viewing. It has the advantage, for those arriving by train, that it lies between the station and the city centre. Those physically fit enough should therefore eschew the bus (or a taxi) and *walk* – with a pause to view St Paul's: at the very least, it will be a pleasant *hors d'oeuvre* to the feast that is to follow.

TERENCE PAUL SMITH

### **CHICHESTER, WEST SUSSEX: PALLANT HOUSE AND PALLANT HOUSE GALLERY**

Pallant House is the earliest and one of the grandest of the early-eighteenth-century brick houses in the cathedral city of Chichester. Situated at the north-east corner of the crossroads of the Pallant, in the south-east quadrant of the city, Pallant House was built in 1713 for Henry 'Lisbon' Peckham (1683-1764) at the beginning of his ill-fated marriage to Elizabeth Albery, a widow more than a decade his senior: when he had cleared his father's debts in 1711, he was twenty-seven and she was in her early forties. She, conveniently, had inherited her brother's fortune, part of which was used to build Pallant House. The house was her idea and it cost around £3000: the original estimate was half this sum.

Pallant House is seven bays, with the three central bays pushed forward. The show front faces west. There is a semi-basement, a raised ground floor, a first floor and an attic storey. The house is in Flemish bond with rusticated corners. No architect is known. The character of the house owes much to a local stone mason, Henry Smart, working from "a New Modell [...] Drawne at London". This gave a symmetrical street front. The principal feature is the entry: the doorway approached by eight steps is flanked by stone Corinthian columns with a segmental pediment above. However, this elaborate doorcase rather squashes the windows on either side. The seven windows on the first floor of the street façade and the six on the raised ground floor have flat arches with a central keystone with brick badges.

Inside the house there is a very grand hall across the central third of the house from which rises a fine staircase. On the ground floor there is a single room on the right-hand side and two small rooms, split by a backstairs to the left. On the first floor, five rooms are grouped around the landing.

Both the rear façade and the south wall are visible. The former has a central door to stairs to the garden with a tall, semi-circular-headed window above lighting the stairs and landing. Either side of this are two windows on each of the main floors. The south wall is more interesting: there are what appear to be blocked windows and in one case a blocked fireplace, but these in fact are more likely to be an attempt to provide symmetrical interest to an otherwise blank wall beside the street.

Whilst the principal façade is of high quality bricks of a lightish tone of red, both the south wall and the rear are of darker red bricks and both walls lack any of the ornamentation

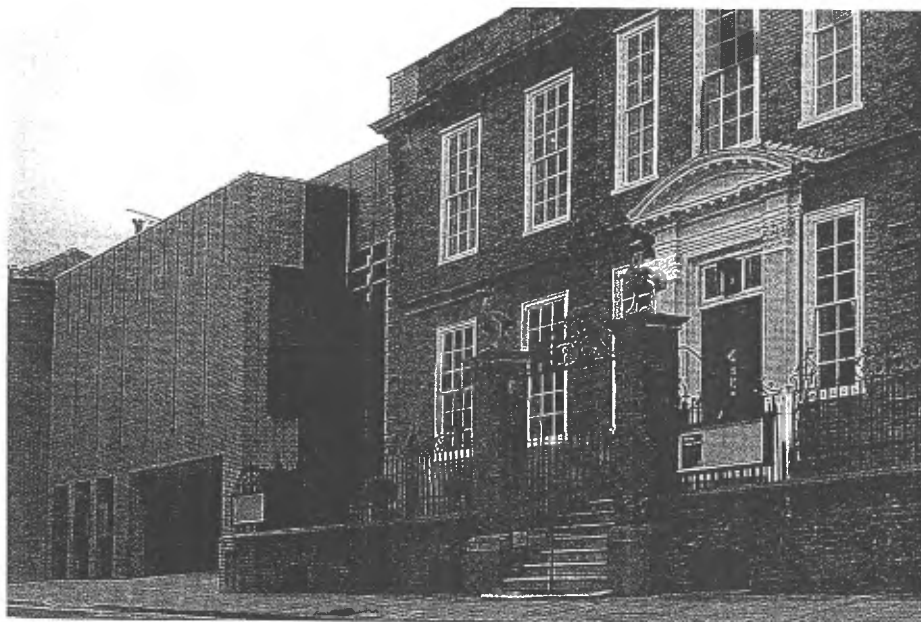


Fig. 2 Pallant House (on the right) and Pallant House Gallery (on the left): street façade.

found on the street frontage.

In the middle decades of the twentieth century, from 1919 to the mid-1970s, Pallant House was used as offices by Chichester Urban District Council. It became an art gallery because one of the conditions expressed by Walter Hussey in giving his collection to the city was that his collection should be displayed in Pallant House.

Walter Hussey (1909-1985) became Dean of Chichester Cathedral in 1955 and held that office until 1977; from 1938 to his appointment at Chichester, Dr Hussey had been Vicar of St Matthew's church, Northampton. Both in Northampton and at Chichester, he was a notable patron of modern religious art: Henry Moore's *Madonna and Child* of 1944 and Graham Sutherland's *Crucifixion* of 1946 at Northampton, and Sutherland, John Piper and Geoffrey Clarke at Chichester. Preliminary work for all of these are in the Pallant House collection. Hussey also commissioned new work from composers: Benjamin Britten and Michael Tippett at Northampton; Britten and *Chichester Psalms* by Leonard Bernstein, among others, at Chichester.

Pallant House gained important additional bequests from 1989 onwards and in the mid-1990s were approached by Professor Sir Colin St John Wilson and his wife, M.J. Long, with a view to receiving the extensive collection of twentieth-century art built up by the architects of the British Library: Sandy Wilson in his youth had entertained ambitions to be a painter.

To house this major gift, an extension to Pallant House would be necessary. An L-shaped building has been constructed on the adjacent site of a former 1930s building and the former garages at the back of the garden of Pallant House. The L-shape permits a courtyard garden to the east of Pallant House, closed by the old wall of the former garden and the new building. Through the European tendering procedure, the firm of Long & Kentish Architects was chosen in 1998 to design the new building, called Pallant House Gallery. Construction took place between January 2003 and January 2006.

Pallant House Gallery has two storeys, with the ground floor at street level and linked by internal stairs and a lift to the levels of Pallant House. The ground floor houses shop, studio, library, restaurant and the usual offices. Exhibition spaces, with fixed walls are on the first floor. These spaces include a blank oriel, with side lights only, one allowing an interesting view of the

rear of Pallant House: the space contain *The Architects* by R.B. Kataj, a painting of Wilson and Long at work, with a small daughter in the half-open doorway at the back of the room. Constructed mainly of white concrete, Pallant House Gallery has a brick façade to North Pallant, immediately north of the existing house, and a brick frontage to East Pallant.

The façade to North Pallant has six deep slits for the first and second floors alternating with seven shorter slits for the uppermost floor, which houses curator's offices. This frontage uses English Bond with neat closers in each header row, a neat touch. The frontage on East Pallant is in stretcher bond with a soldier course signifying the division between the two floors. As with the British Library the bricklaying is superb but perhaps the choice of bond could have been more adventurous, or is it only a "brick buff" who goes and looks at back walls and rear buildings?

## **SOLIHULL, WEST MIDLANDS**

### **THE "BARN À LA PAESTUM", 936 WARWICK ROAD**

The 'Barn à la Paestum' was built in 1796 as the Warwick Road gate lodge to Malvern Hall, Solihull. Sir John Soane was the architect of the lodge, as he had been of alterations to the main house in 1784 for Henry Greswold Lewis. The house was the subject of paintings by John Constable in 1809 (London: Tate Britain) and in 1820 (New Haven: Paul Mellon Centre at Yale University). The house is now a respected girls' school.

The "Barn à la Paestum" uses a soft-textured orange-red brick, insufficiently hard to resist having been cut for graffiti, most of which appear to have been done some time ago. The main building is in Flemish bond; the prominent columns on the road frontage are in stretcher bond. There are vestiges of what appears to have been tuck pointing. No re-pointing seems to have been done for a very long time. The building has a low-pitched slate roof. There are very wide eaves above a triglyph frieze.

In the brief to the architect, the entrance lodge of 1798 had three separate elements: a small dwelling for the lodge keeper or coachman in the western third, an entry serving also as a coach house in the centre, and a grain store in the eastern third. It is the last which gives the building its epithet, "the barn à la Paestum".

The road frontage, on the north side, is of three bays, with the central entry marked by heavy wooden doors. At the ends of the building and separating the bays are pairs of free-standing, unfluted Doric columns, almost Tuscan in their appearance. True Doric columns, as found at the Greek temples at Paestum are fluted. Those on the Solihull building follow the Greek Doric model in having no bases and in narrowing as they rise. At the top of each of the circular columns is a course of dished brick below two courses of larger bricks in stretcher bond. At some point, concrete has been used to provide a very short base for each of the columns, almost certainly as a means of allowing rainwater to drain more easily off them.

The road façade is otherwise plain except that the two bays flanking the entry have a recessed blank opening. No alterations have taken place on the north side of the building, and planning regulations would now forbid this.

Each side of the building has the outer one of an outer pair of columns on the road face, supporting the wide eaves, a short stretch of wall in quarter bond, a pilaster with a plain Doric capital, the large central portion of the wall in quarter bond, another pilaster with a short portion of wall to the corner and a single free-standing column supporting the eaves. On the west side there are no openings; in the east gable wall there is a circular feature, now blocked, which originally permitted air to circulate in the grain store. There is a single-storey extension in dark red brick on the east side.



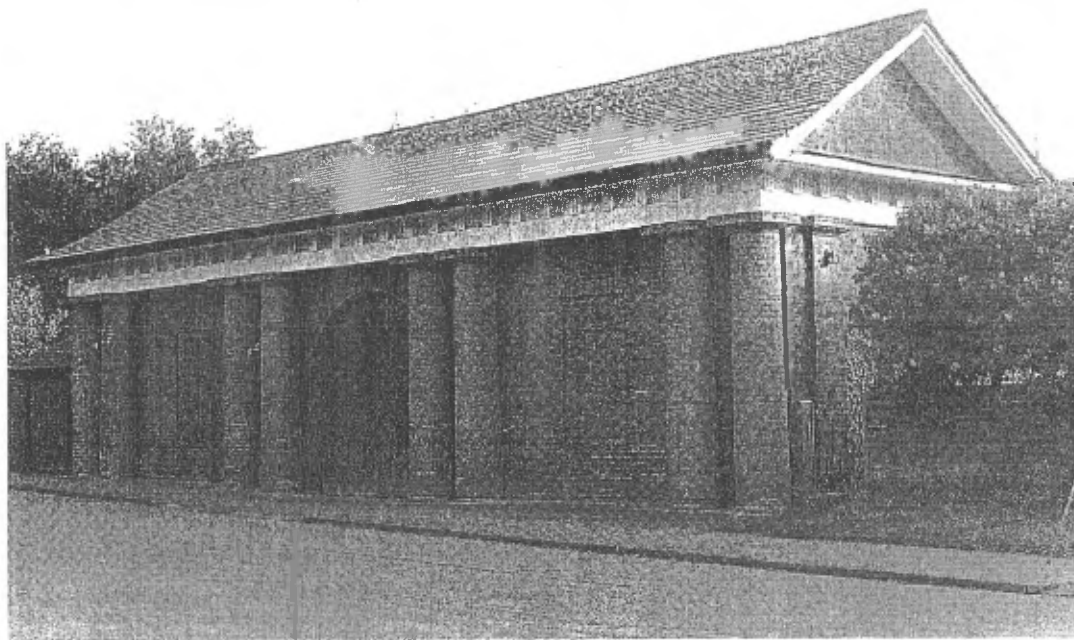


Fig. 3 The "Barn à la Paestum", 936 Warwick Road, Solihull, was built in a soft-surfaced orange-red brick in 1798 to designs by Sir John Soane as the entrance lodge to Malvern Hall. The four pairs of unfluted columns are in stretcher bond; the rest of the building is in Flemish bond.

The "barn à la Paestum" is a private house for which the rear of the building has been altered although some of the original openings for fenestration have been re-used. Immediately beneath the eaves is a series of windows lighting rooms on the upper floor. The centre, originally the inner side of the entry, has been completely glazed. No chimney has been inserted.

## NEW BRICK MAZES IN LUTON

Terence Paul Smith

When Luton's Arndale Shopping Centre was erected in the mid-1970s it left a small open space at the north-west corner of that part of the town known as Park Square. That space has now been used for three brick mazes, officially opened by Luton's Mayor, Councillor Dorothy Hinkley, on Friday 17 December 2004. They are not *built* structures but, like the labyrinths in Chartres and some other medieval cathedrals, flat designs set flush with the pavement.<sup>1</sup> The whole project, created by Luton Borough Council, cost £164,000, using a Big Lottery Fund grant of £100,000, Objective 2 European funding of £54,000, and a donation from Prudential Assurance of £10,000.

The three mazes are set in a pavement of face-bedded red bricks surrounded by a sinuous decorative border of a zig-zag design using brown and pale yellow bricks and also incorporating, at intervals, raised structures which serve as shallow steps or as seats. Laid more or less at random within the pavement are individual pale yellow bricks. A few of these have impressed in them, and coloured black, the *bee volant* (flying bee) which forms the central charge of Luton's shield of arms, granted in 1876; one has a more humorous depiction of a flying bee.

Others of them have impressed, and also black, sans serif letters recording various significant events in the town's history.<sup>2</sup> The three mazes - based on drawings submitted by children from five local primary schools - are formed in blue, pale yellow, and red bricks, cut to shape as necessary, and reflect various aspects of the town. There is a circular honeycomb design, evoking that bee again, a circular football design (fig. 1), celebrating Luton Town Football Club and recalling the fact that the team reached (though lost!) the Cup Final in 1959, and an aircraft

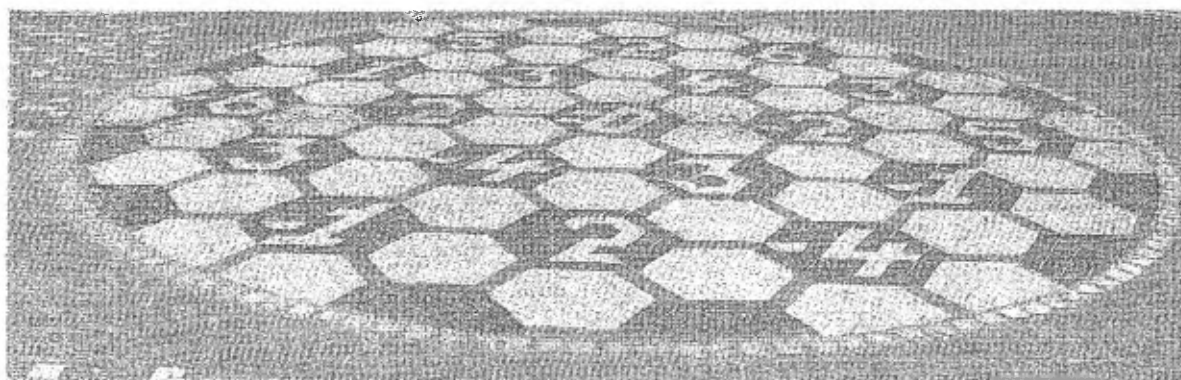


Fig. 1 The football maze, with its positive and negative numerals.  
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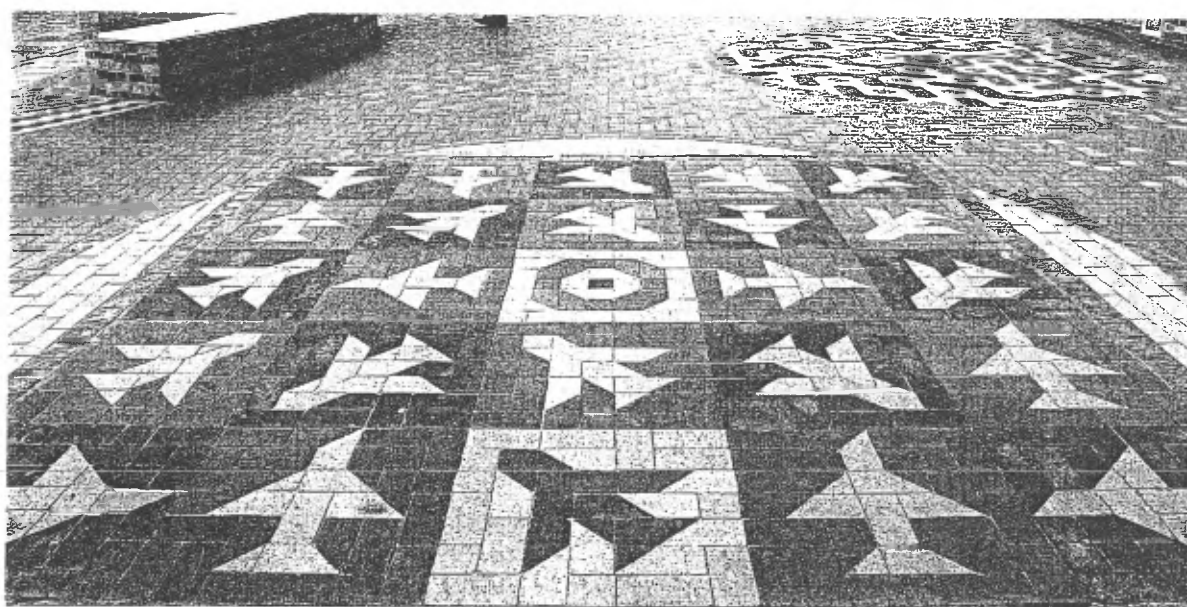


Fig. 2 The aeroplane maze, with the honeycomb maze at top right.  
© Bedfordshire Newspapers Ltd.

design (fig. 2), comprising a superimposed square and circle with aeroplane motifs, referring to Luton International Airport - a mixed blessing, as some of us see it. A plaque set in the pavement in front of each maze explains how it is to be used. The honeycomb maze has an appropriately honey-coloured path, perhaps also suggesting the Yellow Brick Road: this must be followed, tortuously, to reach the centre. In the aircraft maze the aeroplane shapes may be followed for any

distance in the direction in which they point, starting from the red plane (bottom middle in fig. 2) in an attempt to reach the target in the centre. The football maze is a little more cerebral: each ball within the design bears a positive or negative number formed of cut bricks: as each ball is reached its number must be added (e.g.  $2 + -4 = -2$ ,  $-2 + 3 = +1$ , etc.), and to reach the centre ( $=0$ ) it is necessary to arrive at a result of zero.

Mayor Dorothy Hinkley, as reported in the local press, commented that the project 'represents Luton as a forward-thinking, industry-friendly town creating work and employment in an environment where the community can come together, have fun and enjoy themselves'. That may not be everyone's vision of Luton, and one has to admit that the fine words about 'community' are undermined by the fact that only five of the town's forty or so primary schools submitted designs - although I have suggested elsewhere that the town has, at least, more to offer the brick enthusiast than at first might be supposed.<sup>3</sup> The brick mazes now provide a further attraction. Such features are one aspect of what has been called *brick and the world of play*.<sup>4</sup> Reference was made on that occasion to the three brick mazes at Cliff School, Wakefield, Yorks., and their creator, Adrian Fisher, has himself written enthusiastically about such designs.<sup>5</sup> According to one local newspaper, although the Luton mazes were not the built structures that some people were expecting, they nevertheless 'appeared to get a general thumbs up from passers by'. Some, however, expressed fears that the area 'will now become just another hang-out for drinkers' or for skateboarding youngsters.<sup>6</sup> One hopes not, for the project deserves a better fate.<sup>7</sup>

#### NOTES AND REFERENCES

1. A. Fisher, *Mazes and Labyrinths*, Princes Risborough: Shire Publications, 2004, pp.28-29.

2. Or sometimes, perhaps, interesting but not so very significant, like the visit of the Beatles to the Odeon (misspelled 'Odean') cinema in 1963. It is a pity that on one brick the Neolithic enclosure at Waulud's Bank, Leagrave, is misdated to 200 BC; somewhere around 3000 BC is a more likely date.

3. T.P. Smith, 'The 1930s in One Town: Brickwork in Luton', *BBS Information*, **81**, October 2000, 3-19.

4. T.P. Smith, 'Brick and the World of Play', *Brick Bulletin*, Spring 1995, 6-7.

5. A. Fisher, 'Amazing Paving', *Brick Bulletin*, Summer 1996, 6-7. Mr Fisher has been responsible for many recent mazes, not all in brick: Fisher, 2004, pp.45-46. On Saturday 13 April 2002, members of the British Brick Society were able to see his Tudor Rose maze at Kentwell Hall, Long Melford, Suffolk.

6. *The Luton & Dunstable Herald & Post*, 23 December 2004, 6-7.

7. I am grateful to Bedfordshire Newspapers Ltd, in particular to Stephen R. Clark, Managing Director, and John Francis, Group Editor, for the courtesy with which they treated my request to reuse their one published illustration and for in fact supplying, free of charge, three photographs, two of which are reproduced here: the originals are in colour.

## HAMPSHIRE BRICK: Nineteenth Century and Modern

Andrew Napier and Wendy Pagdin,

### INTRODUCTION

The short contributions about brickworks and brick structures in Hampshire here included were submitted by two BBS members. In November 2006, Brian Pegden sent a set of miscellaneous cuttings about brickworks in Hampshire and elsewhere. At various times, Kathleen Clarke has sent the editor items about the Hockley Viaduct. The editor is most grateful to both members for submitting these.

The various items, both newspaper cuttings and short magazine articles, have been adapted by the editor for use in *British Brick Society Information* as a short record of both brickworks and brick structures in the county.

It is to be hoped that future issues of *BBS Information* can contain a miscellany relating either to another county or as happened in *BBS Information*, **102**, September 2006, to a particular time-frame.

DHK

### HOCKLEY VIADUCT, NEAR WINCHESTER, HAMPSHIRE

The brick-faced Hockley Viaduct will be familiar to many who travel along the M3 motorway just to the south of Winchester. The viaduct can be seen on the north-west side between the two portions of junction 11 on the M3 motorway.

The longest railway viaduct in Hampshire. Hockley Viaduct crosses the river Itchen on a now abandoned line between Eastleigh and New Arlesford, part of a relief line constructed to take the boat trains from London Waterloo to Southampton Docks. The viaduct is 309 yards (278 metres) in length, has 33 arches and is 35 feet (10.68 metres) high.

Built in 1891, Hockley Viaduct was an early example of a concrete structure faced with brick and at the time of building would have been a formidable piece of engineering in what was still a comparatively new material for major engineering structures in the late nineteenth century. Poured concrete was, of course, used by the Romans.

Due to its lack of use by a railway line, the track bed and the brickwork have both become overgrown with vegetation. This has led to deterioration in the state of the structure and could lead to long-term damage making restoration both more difficult and more costly.

Four attempts to have the viaduct protected by statutory listing have been unsuccessful. Earlier attempts were in 1984, 1990, and 1997. More recently, in November 2006, the Under Secretary of State at the Department of Culture, Media and Sport, David Lammy, wrote

While this viaduct clearly possesses strong local interest, it does not possess sufficient historic or architectural interest on a national scale to merit listing.

At least one suggestion has been made that the viaduct should be blown up but this proposal failed because the viaduct spans the River Itchen Site of Special Scientific Interest. In the immediate aftermath of the rejection of listing in 2006, one suggestion for re-use has been that

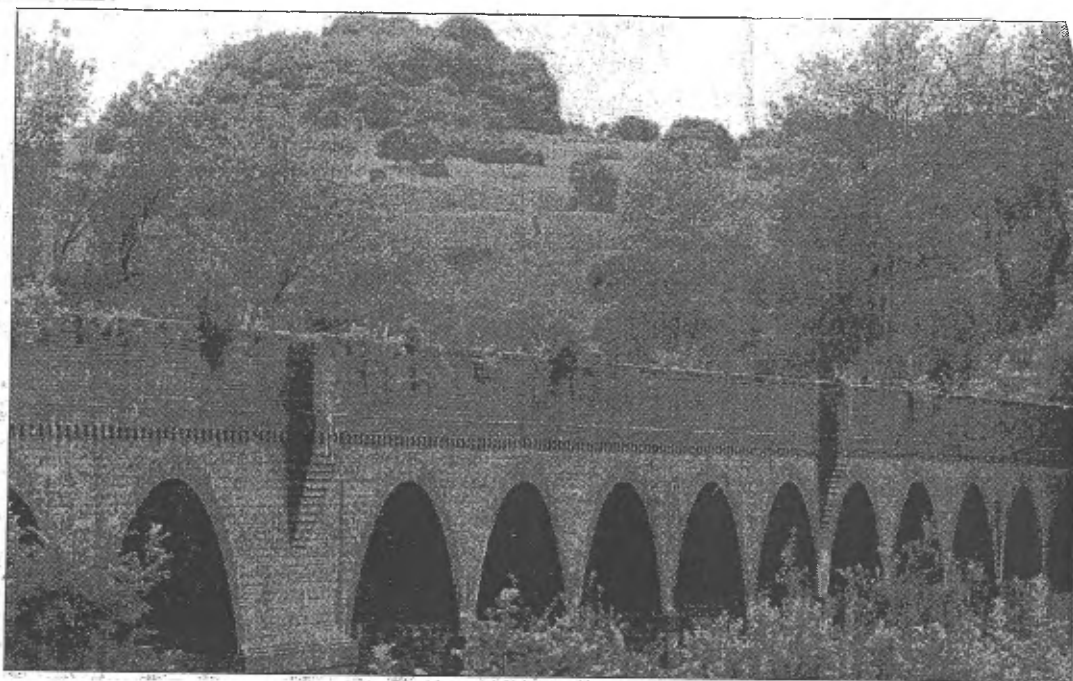


Fig. 1 The Hockley Viaduct which used to carry the relief line from London to Southampton. The brickwork faces an early concrete structure.

the viaduct should become part of a cycle route from a proposed park-and-ride, giving walkers and cyclists a dedicated route from the car park into Winchester.

ADAPTED from press cutting *Daily Echo* 6 November 2006 by ANDREW NAPIER. Courtesy of KATHLEEN CLARKE

## RAMSDELL BRICKWORKS, HAMPSHIRE, 1868-1979

The brickworks at Ramsdell were first registered by a Mr Follett in 1868. They were set up to manufacture hand-made bricks, tiles and land drains. The works stood on the only piece of land in Ramsdell not owned by the Manydown Estate.

The clay seam began where School House, Ramsdell, now stands and the earliest bricks were burnt in claps until two Scotch kilns were installed. The clay was dug by hand and put through a pug mill which was initially horse-driven. Later a steam engine was brought in which had a driver and a fireman and this was used to drive the pug mill and to transport bricks around the yard. From 1900 to 1934, the owner was a Mr Hales, who installed a sixteen-chamber Hoffman continuous process kiln. This had a high tower which was a familiar local landmark for many years.

In the early 1930s, a 450 foot bore hole was dug and a pump installed with a water tower. This water supplied the brickworks, the foreman's house, a local bungalow, and 'The Wilderness', the house where Mr Hales himself lived.

In 1934, the brickworks was purchased by the Allied Brick & Tile Company which installed a 2-foot-gauge railway which ran a three-quarter cubic yard skip hauled by a winch. Later a single cylinder Blackstone diesel engine was acquired and this was then used for transporting the clay. However, the clay was still dug by hand and continued to be until 1961 when a mechanical crane was introduced.

During both world wars, the brickworks was taken over by the government for storing

munitions. After the Second World War, it was reopened in 1946 and prisoners-of-war from the camp at Winchfield were transported over to work as labourers. Bricks were made for six months of the year continuously and allowed to air dry in large sheds. The following six months were spent in firing all the bricks that had been made. In this way the workers were employed at all stages of the manufacturing process. Most of the houses in the local area were built using Ramsdell bricks up until the 1970s. The bricks range in colour from red to a light yellow-orange or purple depending on where they had been positioned in the kiln.

In 1964, the Allied Brick Company sold the works to Mr H.N. Edwards and it then became the Ramsdell Brickworks. A major development happened in 1972 when the two down draught kilns were converted from coal to being oil-fired.

Coal was initially brought from Wales by train. It took 20 tons of coal for one kiln which held 42,500 bricks. The brickworks could produce between half a million and one million ton of bricks per year. The average house required about ten thousand bricks and a bungalow about six thousand.

After the brickworks was closed in 1979, the site was redeveloped for small businesses. The main extraction site for the clay was land filled and forested. It is opposite to Monk Sherbourne Road in Tadley, Hampshire.

WENDY PAGDIN from *A Moment in Time*

## BRICK IN PRINT

Between June and November 2006, 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. Nicholas Cooper, 'Chilham Castle, Kent Part I', *Country Life*, 6 July 2006, pages 104-109  
Jeremy Musson, 'Chilham Castle, Kent Part II', *Country Life*, 13 July 2006, pages 76-81.

Nicholas Cooper describes the building and historical development of this important brick house built in 1616 to a polygonal plan, an open hexagon with the open side to the south, which also commands the best view. Built for Sir Dudley Digges, who was Master of the Rolls, there is an earlier example of an hexagonal plan at the Villa Farnese at Caprarola, Italy, designed by Vignola in 1560 but any links may be tenuous.

Nicholas Cooper's article includes good photographs of the north front (p. 106), the house from the south (p.107) and the house from the east (p. 92, the contents page). The first and the third, particularly, demonstrate how the wings spread out from the battlemented and turreted public façade. The house with the north front aligned to the village square and parish church beyond retains its historic form but the interiors have been remodelled, most recently between 2002 and 2004 for the new owners, Stuart and Tessa Wheeler. These recent renovations are the subject of Jeremy Musson's article.

- 2.. John Maddison, 'Hengrave Hall, Suffolk',

*Country Life*, 25 May 2006, pages 98-102.

At 51 hearths, Hengrave Hall was Suffolk's largest house in the Hearth Tax. Built by the London merchant, Sir Thomas Kytson between 1525 and 1540, the builder hoped to establish a dynasty in the county but in the seventeenth century, the house passed to the Gage family: Sir Edward Gage paid the tax in 1674. Kytson began in white brick with the sumptuous south front but good building stone became freely available following the closure of Bromehill Abbey in 1536 and the abbeys at Ixworth and Thetford in the next year. Hence the inner courtyard is faced in Northamptonshire limestone. The change is illustrated by the colour photographs by Martyn Goddard: the chimneys, however, are in red brick.

Kytson had court connections and these influences on the building including the people concerned are documented. However, the original brickwork to the south front was the work of a local man John Eastawe with whom a contract of 1525 specified that Eastawe "must make a house at Hengrave of all manner of mason's work bricklaying and all things concerning masonry ... according to the frame the said John has seen at Comby" but John Eastawe was not to be responsible for the bay window of the hall with its internal fan vault or the sophisticated gatehouse with its central oriel.

3. Jeremy Musson and Mary Miers, 'Advice from the Wreck Savers',

*Country Life*, 23 November 2006, pages 68-73 and cover photograph.

Brief accounts of three restoration projects on three brick houses undertaken by private owners. Richard Blunt has restored Clifton Campville Hall in Staffordshire; Charles and Romilly Saumarez Smith revived 133-135 Mile End Road in East London, which had been in non-domestic use for almost two centuries; and Richard and Janine Johnson bought Somersham Park, Hunts., on Christmas Eve, 2002, when it was a complete wreck (see cover photograph).

Clifton Campville Hall is the servants' wing of a house designed by Francis Smith of Warwick in 1705 using a warm red brick. This wing and another, but not the central block, were all that was built from the original design for Sir Charles Pye (died 1721). Somersham Park is a century later, built in 1802 of London stock bricks.

4. Jeremy Musson, 'Magical Wendy Houses',

*Country Life*, 19 October 2006, pages 84-89 and cover photograph.

There is a child in all adults. Parham Park, Sussex, and The Sanctuary in Devon each have a purpose-built Wendy house. The latter imitates the house on a child's sampler of 1708 and is built in carefully laid red brick in Flemish bond. In Wales, a rendered coal shed and a brick air-raid shelter have been converted into a Wendy house and a pirate's lair respectively for the children of Perigrine and Caroline Armstrong-Jones.

5. Lyle Perrins, 'Hertfordshire Brickworks: a Gazetteer',

*Hertfordshire Archaeology and History*, 14, 2004-05, pp. 187-206.

With this contribution BBS member Lyle Perrins adds to the increasing number of county or regional gazetteers of brickworks. It begins with a short history of brickmaking in Hertfordshire and an account of traditional manufacturing methods, which includes a considered at the specialist interlocking bricks patented by Caleb Hitch of Ware in 1828. Overall, this is an accurate account of brickmaking, although one may note that the wheels for grinding material for terracotta manufacture at Broxbourne (p. 1900, fig. 4) are *not* 'Pug wheels' – for the apparatus



illustrated is quite different from a *pugmill*.

The bulk of the contribution comprises the gazetteer, which draws on mostly published historical evidence for the earlier period – the late thirteenth century to c.1830 – and on tithe maps and awards, directories, Ordnance Survey maps, place names, and fieldwork for the later period. Entries are arranged by town or civil parish, with grid references usefully provided where they are ascertainable, although the organisation is, perhaps, a little less clear than in some other published gazetteers.

A single endnote refers to Alan Cox's pioneering gazetteer of Bedfordshire brickworks (1979). References to the specifically Hertfordshire literature might have been helpful: Richard Storey's work on Hitch's Patent bricks, for example, or Tony Crosby and others' study of the Jeeves dynasty of brickmakers at Hitchin, Nina Freebody's brief consideration of Stevenage brickyards, Chris Reynolds' work (largely published on the internet) on St Albans brickmakers, or Peter Ward's notes (also on the internet) on brickmaking at Hemel Hempstead. Perhaps, even, reference might have been made to the evocative fictional description of a nineteenth-century brickyard in *Bleak House*, since Dickens locates this near St Albans. The absence of references particularly affects the introductory discussion, for there are fascinating details here which one might wish to follow up but, frustratingly, cannot.

For all that, Lyle Perrins' work is a valuable contribution to the local history of brickmaking within a county where the industry was of some importance though of a small localised nature. Hertfordshire never developed brickworks on the scale of that at, say, Crayford in Kent or at the Fletton works near Peterborough and those in Bedfordshire.

TERENCE PAUL SMITH

6. Leo Schmidt, 'Holkham Hall, Norfolk',  
*Country Life*, 6 April 2006, pages 106-111

This is primarily an article about the restoration carried out by Edward, the seventh Earl of Leicester at his ancestral seat, Holkham Hall, built by Coke of Norfolk, the celebrated agricultural pioneer, between 1734 and 1765. By using the inventory of 1776, this brought much of the interior back to its original appearance, particularly in replacing the plate glass sash windows with sash windows with smaller panes and in hanging paintings in the rooms for which they were originally intended.

The article has useful notes about the documentation of the architectural development of the house and highlights the roles in the 1720s of both Colen Campbell as architect and Matthew Brettingham as clerk of works, rather than the initial historical interpretation which credited all of the work to the Earl of Burlington and William Kent, although both of these contributed at different times. Thomas Coke outlived them all and was throughout the driving force in building the house.

## BRITISH BRICK SOCIETY MEETINGS IN 2007

The only *firm* date is Saturday 16 June 2007, the Annual General Meeting

Saturday 16 June 2007  
*Annual General Meeting*  
Sudbury, Derbyshire

*Morning:* Annual General Meeting in Sudbury Parish Hall  
*Afternoon:* Visit to Sudbury Hall, a late-seventeenth-century brick house built in a Jacobean style, built for a young squire George Vernon. This is a National Trust property (charge for those who are not NT members).

Planned meetings include:

A Saturday in late September or early October 2007  
*Autumn Meeting*  
The Forest of Dean  
The society is hoping to arrange a visit to either Coleford Brick or Broadmoor Brick.

A Saturday in late October or early November  
*London Autumn Meeting*  
London between Piccadilly and Pall Mall

Full details in the May 2007 mailing.

*The British Brick Society is always looking for new ideas for future meetings.  
Suggestions of brickworks are particularly 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 address.

