ISSN 0960-7870

BRITISH BRICK SOCIETY

INFORMATION152

FEBRUARY 2023

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* *The annual subscription to the British Brick Society is £20-00 per annum. There are now no concessionary subscriptions.*

Telephone numbers and e-mail addresses of members would be helpful for contact purposes, but these will **not** *be included in the Membership List.*

British Brick Society web site:

http://britishbricksoc.co.uk

Contents

Cover Illustration:

Brick-fronted houses on South Street, Bridport, Dorset where a mixture of brick and stone frontages to dwellings with long gardens behind where rope and twine manufacture happened.

Editorial:
British Brick Society Matters

Members of the British Brick Society will find enclosed with this mailing a revised version of the society's Constitution. As the society approaches its half century, it seems only right to update the Constitution of the British Brick Society to take account of the revised list of officers, and their duties; the customary date of the Annual General Meeting in the twenty-first century.

Please read the enclosed document, in conjunction with your copy of the 1974 Constitution. All comments on the revisions should be sent to:

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preferably by email, *Chapman481@btinternet.com* to arrive on or before Thursday 4 May 2023.

This issue of *British Brick Society Information* contains another of the unpublished papers of the late Terence Paul Smith: 'Pumpkin Pie: The Old Brick Church, Newport, Isle of Wight County, Virginia, USA'. Inclusion in an issue of *British Brick Society Information* with articles having some focus on Dorset seems to be especially appropriate as unlike New England when 'vexed and troubled Englishmen' left these shores by reason of freedom of religious worship, it was the Church of England and the *Book of Common Prayer* which motivated the expression of religious fervour or its more restrained cousin, acceptance of the social hierarchy as right and proper, in Virginia. Virginia, also, recruited the men and women of Dorset as indentured servants, white persons who served for seven years, to pay off the costs of their transportation — the word is used in its English and not American sense; the latter being a synonym for 'transport' whereas in England, the word means the possibly forcible and/or involuntary removal from the country of one's birth.

To preserve Terence Smith's work as it was written by him, some material to which he does not seem to have had access has been incorporated in the endnotes of the article but otherwise, the paper is as Terence wrote it.

Looking at St Luke's church, Isle of Wight County, and its contemporaries of the late seventeenth and eighteenth centuries and the differences between their towers recalling the individuality of the towers of the medieval churches of the north Norfolk coast, it struck this writer that the brick-built towers of the Tidewater churches, which are many fewer than the surviving churches, might also have acted as navigation aids. This is even more apparent when looking at the location of the churches in relation to the significant headlands and the bends in the rivers flowing into Chesapeake Bay on reasonably large-scale maps. It is hoped to include an article on this aspect of these buildings in a future issue of *British Brick Society Information,* possibly in one devoted to 'Brick and its Uses in Churches'.

The account of Dorset brick and other building materials in the county which follows this 'Editorial' has been written from an outsider's perspective. The multi-layered geology of Dorset recalls the south-west to north-east strata of his home county of Bedfordshire where chalk is succeeded by gault clay and itself is overlain by greensand, before giving way to Oxford clays with its self-combusting brick clay bearing resources giving rise to the Fletton industry, named after the major site in north Huntingdonshire. Alluvial mud in the valley of the River Great Ouse was not much exploited in Bedfordshire, except as infill in the timber-framed houses of the central parts of the county, but in this timber-framed landscape the use of Oolites from the fringes of the Northamptonshire ironstone belt and other, usually white, limestones were much exploited for churches and other more elite buildings.

As far as the writer can recall, he last spent any time in the county in late April 1966, as a final year undergraduate at Prifysgol Cymru, Coleg Caerdydd, (now Prifysgol Caerdydd or Cardiff University) on an archaeological field trip prior to the final term and final examinations. More recently, but at least fifteen years ago, he has stood on the top of the brick-built, octagonal tower built on the Stourhead estate at the point where the boundaries Wiltshire, Somerset, and Dorset meet.

However, there has been a long-standing interest in Dorset and its houses. Over thirty-five years ago, as he returned to academic work after a four year break due to family commitments, the writer conceived the idea of writing a study of the gentry and their houses in seventeenth-century England with Bedfordshire, Dorset, and Suffolk as three sample counties to investigate more fully: in the early 1980s they were three of only eight counties where an edition of the Hearth Tax levied between 1662 and 1685 had been published for the majority of a county, if not all of it; the other five were Norfolk, Oxfordshire, Shropshire, Staffordshire, and Surrey, and even here there were problems: the 1664 Norfolk Hearth Tax lacked the original documents for about a third of the county, notably in several of the eastern hundreds, including East Flegg Hundred with Caister Castle; the Staffordshire Hearth Tax had been published in multiple parts; and the edition of the Surrey Hearth Tax was an index to the county's 1664 Hearth Tax not an edition of the tax itself.

Hearth Taxes for individual counties are more fully available in 2023with the inception of the Hearth Tax project sponsored by the University of Roehampton. The writer maintains a listing, available to any member of sends him an email at *davidkennett510@gmail.com* requesting a copy. One can then be emailed to the member.

Looking at the Contents page of this issue of *British Brick Society Information,* one is struck by just how many of the 48 pages have been contributed by a single person. And whilst that person has a substantial backlog of nearly-completed and half-completed articles, the list of which occupies four pages, he is now in the penultimate year of his eighth decade. It would be beneficial to the society's journal's health for a wider group of contributors to *British Brick Society Information* to become established in the course of the issues to be produced in the next two or three years.

Members would have an ideal opportunity to contribute as there is ample space in *British Brick Society Information,* **153,** June 2023, for which the submission date has been put back to Wednesday 12 April 2023, but this is the latest possible date to allow distribution in advance of or at the Annual General Meeting in Bridport on Saturday 17 June 2023. Earlier submission would be appreciated.

DAVID H. KENNETT
Editor, *British Brick Society Information*
29 December 2022

Honorary Secretary needed for British Brick Society

Owing to severe ill health, the current Honorary Secretary, Michael Oliver, feels that he must step away from the post of Honorary Secretary of the British Brick Society with immediate effect. Mick has been the society's Honorary Secretary for more than a decade. Offers to take on the post are invited. Please contact:

Michael Chapman, Chairman, British Brick Society,
8 Pinfold Close, Woodborough, Nottingham NG14 6DP
or by email at *Chapman481@btinternet.com*

The duties are to act as secretary to the British Brick Society and its Executive Committee, including making the arrangements for the Annual General Meeting, which is held in a different venue each year, alternately in a northern or a southern venue, decided by a vote of the members.

Brick in Dorset: An Overview

David H. Kennett

Brick came comparatively late to Dorset: apart from a few buildings of the 1530s, brick was not used to any great extent until relatively late in the sixteenth century and, more importantly, from the first quarter of the seventeenth century onwards. Contrasting the use of brick and tile with timber-framing, 'never a favourite building material' and now 'decidedly rare, the late Alec Clifton-Taylor summarised brick and tile manufacture as:

> carried on increasingly from the C17, and there are even modest examples of brickwork from the time of Henry VIII. The first large houses do not, however, go back earlier than the reign of James I: the core of Bloxworth House dates from 1608 and Anderson Manor from 1622. But Dorset is not lacking in good brick clays, notably the Oxford Clay and Kimmeridge Clay formations and the rather narrow band of Paleogene clays which overlie the Chalk in the SE, describing an arc from the Hampshire boundary near Cranborne to Wimborne Minster and Broadmayne near Dorchester, thence back eastwards to Studland. Most of Dorset's brick architecture is in towns, the stimulus for which was sometimes provided by bad fires, as at Dorchester in 1613, 1725, and 1775, at Gillingham in 1694, and at Blandford Forum in 1731. Excellent Georgian brick buildings can be enjoyed at Poole (despite improper demolitions), Wareham, Weymouth, Bridport, Dorchester, and above all at Blandford, where the fine brickwork is of several colours. Broadmayne was known for its speckled bricks, owing to the presence in the clay of small nodules of manganese oxide, which only become evident after firing. Tiles were chiefly made in SE Dorset, where was also the principal demand. The works at Chickerell (Kellaways and Oxford Clay formations) supplied Weymouth. These are no longer in operation; most of the local brick and tile works, unhappily all over England, have had no alternative but to close.
>
> (A. Clifton-Taylor, in 'Building Materials' reprinted, updated, in M. Hill, *The Buildings of England: Dorset,* New Haven and London: Yale University Press, 2018, pages 9-10.)

The Chickerell works were operating in 1972, when the first edition of *The Buildings of England: Dorset* was published; here in the preceding decade, two brickworks were still in operation.

The Kellaways and Oxford Clays occupy three distinct areas of Dorset (fig.1). There is a triangular-shaped area north and west of Weymouth, interspersed with exposed Oolite formations. The clays for the bricks at Dorchester were also of these formations. North-east of Bridport is a narrow band of the clays running east-west for about 8 miles. However, the largest expanse of exposed clay is in the north of the county.

The northernmost railway station in Dorset is at Gillingham, a town which, as noted above, had a serious fire in 1694. Early buildings were of rubble, with brick only coming to the fore in the early eighteenth century. Active in the late nineteenth century, the brickworks at Gillingham produced a salmon-pink-coloured brick, which Michael Hill describes as 'less-than-attractive' but that may be a matter of taste: the local Baptist chapel of 1892-93 (T. Hudson, a local man) is built of this brick. The brickworks is one of several industries which followed within a decade of the opening of the Salisbury & Yeovil Railway in 1859.

In east Dorset, brick appears in the sixteenth century at Abbey House, Witchampton, but this is a rare application of the material. In this part of the county, large secular buildings in the seventeenth century have brick frontages but not the material is not used for churches until well into the nineteenth century. The refacing in brick of Horton church in 1740 was a one off application; the structure of the church remained stone. Around Shaftsbury and Wimborne Minster, brick was sufficiently cheap and readily available to begin to be used for the walls of cottages by the end of the eighteenth century.

In west Dorset, the principal building materials were all stone: Ham stone from over the Somerset border; Portland stone, beloved of Sir Christopher Wren; and Colne Marshall and Todtree stone of Coraline rock. Brick hardly appears before the late seventeenth century and is sparingly used until the middle of the eighteenth.

Having said that, there is evidence of no fewer than six brickyards in Bridport and Allington plus another in Botherhampton and the surviving Suffolk kiln at Powerstock Common. This was built in 1858 for the Bridport Railway, a branch line from Maiden Newton on the line from Bath to Weymouth via Dorchester. It was erected

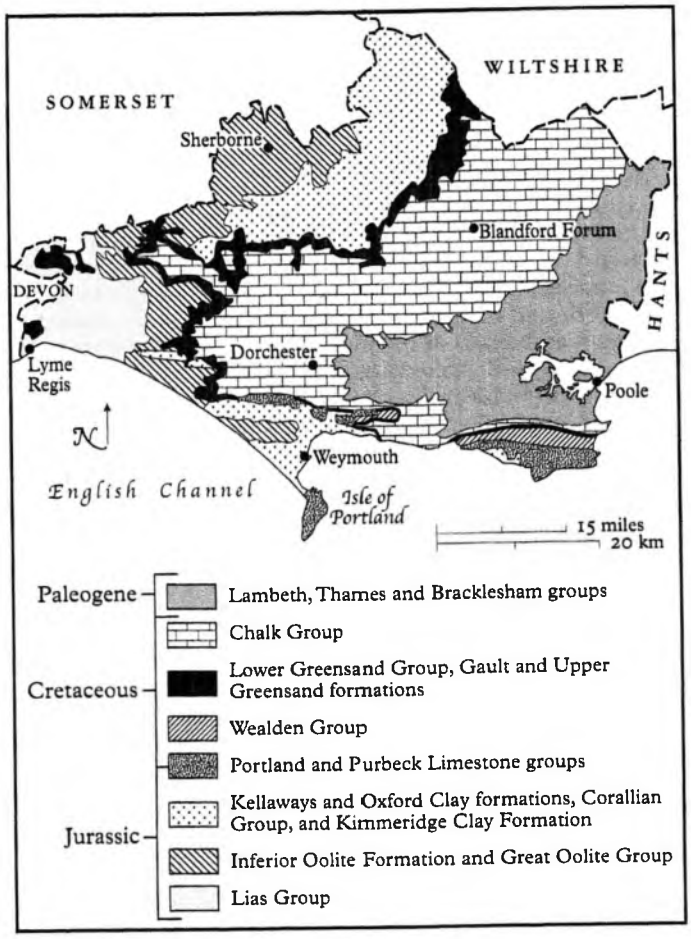

Fig.1 Simplified geological map of Dorset: note locations of the Kellaways and Oxford Clays of the Jurassic period and the clays of the Palaeogene.

to use a suitable clay to provide revetments to stop landslides at Wytherstone Common. This kiln was operative for about ten years and also provided yellow bricks for Bridport. Equally short-lived were kilns in South Street, Bridport, in use between 1834 and 1843, and at Wanderwell, beyond the southern end of South Street which functioned full time in the early 1840s and then intermittently until 1889.

Beyond the West Bridge is Allington, a suburb where, at different periods, there were three separate brickmaking enterprises. The earliest was at North Allington begun in 1797 and worked until 1812 when another brickworks was started in West Allington by Richard Warr who had been at North Allington. The latter was in operation until Warr's death in 1829. The North Allington brickyard is not recorded as operational until 1845 but thereafter under various ownerships, some combining brickmaking with farming or building work, seems to have been in operation until the Second World War. The West Allington brickworks is recorded between 1839 and the 1880s, again under various ownerships. The third brickworks in Allington was at Hibernia Place and seems to have been in production between 1835 and 1871.

A couple of miles east of Bridport is Botherhamton where there is a band of Oxford Clay. The Bridport Terra Cotta, Brick, Tile, Pipe, and Pottery Works was established here in 1888 with clay digging and the first bricks were produced in the following year. There was a fourteen-chamber Hoffmann kiln at the brickworks, which produced 25,000 bricks a week, with an annual production of 750,000 bricks between May and mid-November. The brickworks closed in 1852 as the quality of the clay had begun to deteriorate.

The most intensive area for brickmaking in the county was south-east Dorset, with towns such as Dorchester, Poole, Wareham, and Weymouth, all of which have fine brick buildings.

The last major house to be built with stone external walls in Dorchester, the county town, was Colliton House *circa* 1700. Thereafter houses were erected with load-bearing brick walls as were the successive buildings for the county gaol. In Poole, despite demolitions, most of the extant eighteenth-century buildings, including the Custom House, had brick walls. A feature of the brickwork of Poole is the use of Header Bond, often with vitrified bricks as patterns in the red brick. The same is also found in Dorchester and Wareham.

Wareham was rebuilt in brick after the 1762 fire, using bricks made from the Oxford clay beds at Radipole and Radwell. South of Wareham, the raw material for the bricks in Swanage was Wealden clay found between Goldington and Ulwell. These clays were exploited well into the twentieth century. Weymouth, as noted, was supplied with brick from works at Chickerell but also from the six brickworks in Broadmayne, as around Bridport, not all were working in the same nineteenth-century decades.

Other brickworks in south-east Dorset were on the Weld estate at Lulworth, at Moreton for the estate surrounding Moreton House, a brick house of sixteenth-century origins. North-west of Poole Harbour, the Bagshot beds were exploited as brick clay at Studland and Upton.

Seventy houses with eleven or more hearths are listed in the published 1662 Hearth Tax for Dorset; of these, the building materials for 33 are known. Only nine houses there listed which are still standing were built of brick. In order of construction, they are: Abbey House, Witchampton of *circa* 1530 (15 hearths); Sir John Strangeways' house at Waterson, where the earliest us of brick is dated 1586 but there were also additions in the early seventeenth century and again in 1641 (15 hearths); the sixteenth-century Middlemarsh at Minterne Magna (16 hearths); Islington House, which is late sixteenth century in date (13 hearths); Bloxworth House whose earliest parts were constructed in 1608 (14 hearths); Anderson Manor of 1622 at Winterborne Anderson (17 hearths); the house in Blandford Forum occupied by William Thomas Esq (12 hearths but with six burnt down) of *circa* 1630; also of around 1630 is Woodlands Manor Farm (12 hearths); and finally, the only 'great house' in the group: Lord Ashley's St Giles House at Wimborne St Giles, begun in 1651 (38 hearths).

Apart from St Giles House, these are relatively modest houses, the property of squires and country gentlemen, not magnates. Despite his barony and later an earldom, the first ennobled Lord Ashley was a country squire who had accumulated an estate than a landed magnate. By 1662, the Ashleys had been in Wimborne St Giles for ten or more generations.

Whilst the statistics for the local stone as opposed to brick for walling in houses built before 1662 show an advantage of almost four-to-one in favour of stone, very much the reverse is true regarding the nine known replacement buildings, where brick outnumbers stone by two-to-one. Nine replacement houses are known; six have brick walls, some with stone quoins. In order of construction, rebuilt in the eighteenth century were: Deans Court, Wimborne Minster, in 1725; Critchel House, More Critchel, rebuilt after the early-seventeenth-century house burnt down in 1742; and Cranford Manor in Cranford Magna where the older house was demolished in 1765.

Earlier than these is the new brick-built house at Chettle, built *circa* 1715 for George Chafin to a design by a young Thomas Archer (*c.*1688-1743); the house in 1662 had only 10 hearths and its building materials have not been recorded. Chettle House will be one of the houses featured in a prospective article on the use of brick in late-seventeenth- and eighteenth-century houses in Dorset which is in preparation for a future issue of *British Brick Society Information.*

Three houses were totally reconstructed at the end of the nineteenth century: Bryanston House, rebuilt in 1889-94 after a previous rebuilding in 1778; Clyffe House, Tincelton, rebuilt in 1892-94; and Motcombe House, also rebuilt in 1892-94, following an earlier rebuilding of *circa* 1800.

Given that a future issue of this journal will have a long article on the uses of brick in country houses in Dorset between *circa* 1660 and *circa* 1770, the rest of this Editorial will concentrate on brick in towns, including public buildings and churches.

About churches, little need be said. Dorset has ample building stone: Purbeck 'marble', actually an easily carved and polished black limestone, and Portland stone stand out. However, one can point local resources: Oolitic limestone at Sherborne and stone from quarries at Marnhull used at Sturminster Newton. There are deposits of Blue Lias, another limestone which can be polished, around Lyme Regis and, more importantly, just over the county boundary at Ham Hill in Somerset: it was much used in medieval Dorset. Greensand was exploited at Shaftsbury, Blandford Forum, and Charlton Marshall. From the surviving outbuildings at Eastbury, it is clear that John Vanburgh regarded it highly: but his suburban house at Greenwich, Vanburgh Castle, is brick.

Medieval church builders had great choice and mostly chose to use whatever was locally available. For churches, their preferences were continued by the Victorians. Late in the queen's reign, Edward Schroder Prior (1852-1932) was commissioned to construct a new church at Botherhampton, not far from Bridport. Holy Trinity is a remarkable building with transverse arches in the nave supporting the concrete roof, designed to resist wind pressure. Prior did build one Dorset church in brick: St Osmund, Bournemouth Road, Parkstone, Poole, of 1913-16, where he took over a project begun by G.A.B. Livesay in 1904. But here the bricks were supplied not from a brickworks but by Poole Pottery, which as its name suggests was concerned with ceramics.

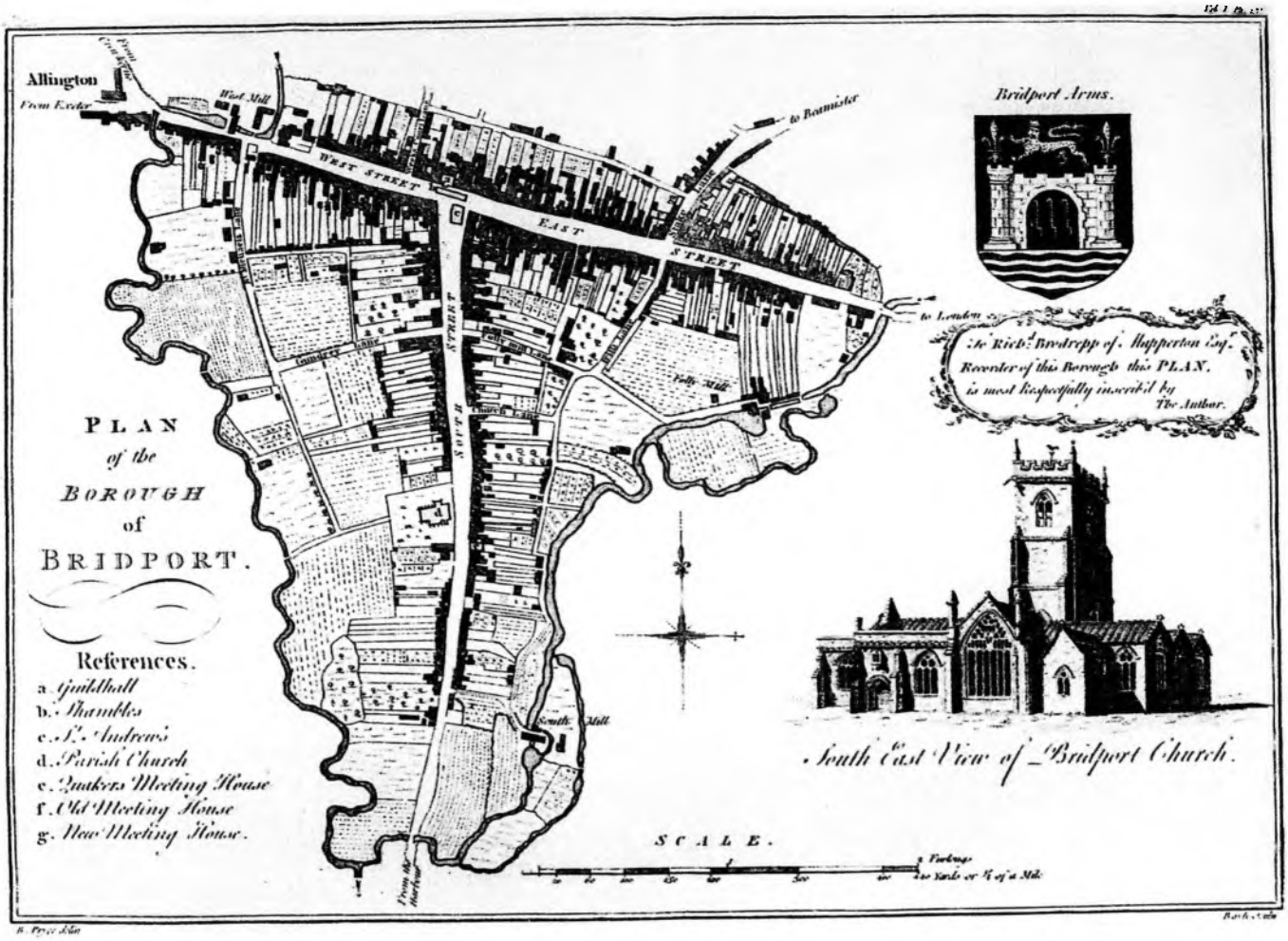

Fig.2 Plan of central Bridport in 1774, from John Hutchins, *The History and Antiquities of the County of Dorset,* Note the long gardens behind the houses on South Street and the south side of both East Street and West Street. They reflect medieval burgess plots. Note, also, the areas given over to market gardening in the areas beside the River Brit, to the east, and the stream to the west.

Poole Pottery, incidentally also made the blue pantiles on the butterfly house at Yaffle Hill, Broadstone, another Poole suburb (1930: Edward Maufe).

In the long eighteenth century (*c.*1660 to *c.*1840), nine of Dorset's towns had at least one fire: in addition to those mentioned earlier, fires occurred at Sturminster Newton in 1729, at Cerne Abbas in 1740, at Wareham in 1762, at Beaminster in 1684 and 1781 following an earlier fire in 1644, at Bere Regis in 1788, and at Lyme Regis in 1844. Not all towns suffering a fire were rebuilt in brick and others combined new brick buildings with those of stone. The quality of the rebuilt work was variable: in both Blandford Forum and Wareham, it was particularly high. In the former, the walling is mixed; in the latter brick predominates in the rebuilt part of the town. Brickwork on late-eighteenth-century buildings in Wareham varies from white with red brick dressings to red with white brick dressings.

In Beaminster, north of Bridport, most of the frontages are stone, often in good-quality ashlar, but Barton End on Fleet Street has a five-bay brick front to an older, seventeenth-century stone property.

Other towns, including Bridport, seem to have been spared a fire but nevertheless were rebuilt as urban prosperity rose. The long gardens in Bridport (fig.2), particularly on South Street and East Street, bespoke the rope and twine-making industries of the pre-Victorian and Victorian years. Much of the work in these industries was done by outworkers who could afford well-built properties, faced either in stone or in red brick (fig.3).

What is noteworthy about Bridport and other Dorset towns is both the quantity and the quality of brick-built public buildings. In addition to the Town Hall (1785-86: William Tyler of London), Bridport has three other public buildings of brick: the workhouse of 1836-37 (H.J. Whiting), the Foresters' Hall of 1875-76 by an unrecorded architect, and the Community Hospital of 1996 (Kendall Kingscott Architects). Both William Tyler and the architects of the Foresters' Hall chose red brick whilst the late-twentieth-century firm opted for yellow brick with concrete tiles.

Dorchester, the county town, has a wider range of public buildings erected with load-bearing brick walls. The older Shire Hall (1796-97: Thomas Hardwick), like its contemporaries in Chester, Stafford, and York, is of Portland Stone as befits the assize courts of an English county, but the administrative centre, County Hall (1938-39, 1950-55: H.E. Matthews) was constructed with external walls of brown bricks to a steel-framed building. Benjamin Ferrey (1810-1880) could build in either stone or brick. In Dorchester, the former County Hospital, Princess Street, of 1839-41 was built of Portland stone, copying the Elizabethan mansion, Loseley Park, Surrey, but his Town Hall, High West Street, of less than a decade later, erected across the summers of 1847 and 1848, uses buff Broadmayne brick. The workhouse (1836: George Wilkinson), as one would expect, was built of brick but with stone bands. The modern West Dorset General Hospital (1983-87: Percy Thomas Partnership with Barry Payne) is brown brick with red brick accents.

Prisons in Dorchester have had a complex history. Unusually, after the Assize of Clarendon of 1166, no county gaol was put up; the sheriff and therefore the gaol were shared with Somerset, with a joint jail at Ilchester, although from at least the seventeenth century, and possibly the sixteenth or earlier, Dorset had its own assizes, witness the notorious collection of hangings issued by Judge Jefferys after the Duke of Monmouth's rising in 1685. The county prison was then at the east end of High East Street and the condemned were led along Gallows Hill to the place of execution on the top of the Roman wall at the south-east corner of the town. In 1784-85, William Tyler (*d.*1801), the architect of Bridport Town Hall, designed a new county gaol on the existing gaol site but this prison lasted rather less than a decade. The gallows is prominently marked on the town plan of Dorchester accompanying the county map in John Speed, *Theatrum Imperii Magna Britanniæ*; the plan was drawn in 1610. The map in the third edition (1867) of John Hutchins, *History of Dorset*, indicates where Gallows Hill crossed the south-east corner of the town walks, which how the line of the east, south, and west walls was preserved but by then the gallows had been moved to inside the county gaol. The north and north-east boundaries of the Roman and the medieval town were the River Frome but there were walls between the town and the river.

Tyler's prison was superseded in the 1790s by a new county gaol, built in the bailey of the castle, a structure which by then was an enclosed space with a mound in the north-west corner: in modern terms, a brownfield site. The new prison was designed by William Blackburn (1750-1790), a prolific designer of jails; it opened in 1792. Surviving from this prison in 2017 was the external wall of red brick with the gatehouse in Portland stone. Within Blackburn's outer walls a new prison was erected in 1879-80 with buildings of 'hot red brick' suggesting a striking colour, although former inmates have attested on You Tube and other internet sources to its humane attitudes. The first prison of the post-1877 Prison Commissioners was also the last to be built to a radial plan, as had been the case with most prisons built between 1826 and 1877, and was also the general plan of workhouses for the poor.

Roughly contemporary with the last of the county gaols in Dorchester is the town's barracks (1876-77: Major R.E Seddon RE), now with the Dorchester Military Museum in the gatehouse. The gatehouse was rock-faced but the outer walls and the buildings within are in red brick.

Both Dorchester and Bridport had substantial breweries. In the former, George Crickmay (1830-1907) designed the offices of the Eldridge Pope brewery in 1880 using a series of bands, of varying height, of both red brick and cream brick. Major buildings were existing in 1880, such as the maltings of 1879, or contemporary, like the brewhouse, all of which were designed by Crickmay. He also designed a bonded warehouse and a bottling store for the brewery at about the same time. The maltings and the brewhouse had burnt down in about 1920 and were rebuilt to a design by Crickmay & Son in 1922 but in keeping with the existing structures.

Palmers Brewery in Bridport began trading in 1794. Its original buildings are an L-shaped structure of this date on Skilling Hill Road, extended in 1841 at the west end. Increased motive power was provided in 1879 by a single undershot wheel in a stream off the River Brit; locally made, the engineers for the waterwheel were the Thomas Helyear's foundry on West Street. There are two thatched beer stores, one of 1796 and the other of 1833. A maltings of 1857 was modified in 1884 by H. Stopes. Another beer store, now used as a mineral water plant was built in red brick in 1865. A brick-built office was constructed in 1890. More recently, in 1985, David

Fig.3 South Street, Bridport, has a mixture of red brick and stone frontages.

Oliver designed a wine store whose principal feature is the multiple gables. The Old Brewery in Bridport, to use its alternative name, has clearly been a thriving business for over two centuries.

Bridport had two flax mills, both outside the main buildings of the town. Priory Mills of 1838 was three storeys and built of stone, but the surviving warehouses associated with North Mills, which both milled flax and produced nets, are brick-built structures erected at in the middle decades of the nineteenth century. The surviving complex at North Mills includes a large early-nineteenth-century rope walk building.

Three individual houses may command our final attention in this brief survey of brick in Dorset. Dorset was part of Wessex, the Anglo-Saxon kingdom that came to dominate southern and later midland England before claiming suzerainity over the whole of the country. Historically, Wessex is England south of the River Thames and the Bristol Avon, east of the River Tamar, and west of the boundary between Hampshire and both Sussex and Surrey, Sussex being an independent Anglo-Saxon kingdom and Surrey the southern part of Middlesex, another independent kingdom in seventh-century England.

In his novels, Thomas Hardy extended Wessex to include Berkshire, until 1847 part of the Diocese of Salisbury to which Dorset belonged in the Middle Ages and has again since 1836, and, more controversially, Cornwall, west of the River Tamar, where the native speech is Brythonic not Germanic in origin.

Fig.4 Max Gate, the house the novelist and poet Thomas Hardy designed for himself in 1883, extending it in 1892-95. Hardy's brother Henry ran a prosperous local building firm and was responsible for the construction of both phases of the house.

There are two architectural symbols of Wessex: the prehistoric Stonehenge and Max Gate, the house which the novelist and poet, Thomas Hardy (1840-1928) which he built for himself in 1883-85 and then extended in 1895-96, with both phases in red brick. The firm run by his brother, Henry, were the building contractors for both phases and Thomas also designed a house for Henry. Between 1856 and 1862, Hardy had trained as an architect with John Hicks (*d.*1869) of Dorchester and, after a sojourn in London, returned to Dorset to work for George Crickmay of Weymouth in the late 1860s and early 1870s. In 1853, Thomas Hardy had been awarded the Essay Prize of the Institute of British Architects for his work 'On Polychrome Brickwork', but the medal was withheld for reasons unknown and the manuscript has not survived. Whilst Hardy was still an assistant architect with Crickmay. his first two novels — *Desperate Remedies* and *Under the Greenwood Tree* — were published in 1871 and 1872 respectively; the latter establishing the author's reputation.

The second house is Belmont in Lyme Regis, a five-bay, two-storeyed house built in about 1770 and now covered with brown stucco. What distinguishes this house is the elaborate artificial stone around the windows and the doorcases. In 1784, Mrs Eleanor Coade (1733-1821) of London was given the house by her uncle. She proceeded to embellish the house with a decorative artificial stone of her own invention, Coade stone.

The third house is Downe Hall built within a small park on the northern outskirts of Bridport in 1789 for William Downe, a London merchant, in Portland stone. The house was remodelled at the back in 1893 by E.S. Prior for A.W. H. Dammers, who was a kinsman of his wife. His alterations and extensions were in brick.

BRICK AND BRICK BUILDINGS IN DORSET: A SELECT INTRODUCTORY BIBLIOGRAPHY

Books

Bettey, 1987
J.H. Bettey, *Church and Parish: An Introduction for Local Historians,* London: B.T. Batsford, 1987. Many Dorset references.

Hill, 2013
M. Hill, *West Dorset Country House,* Reading: Spire Books, 2013.

Hill, 2014
M. Hill, *East Dorset Country Houses,* Reading Spire Books, 2014.

Hill, 2018
M. Hill, N. Pevsner, and J. Newman, *The Buildings of England: Dorset,* New Haven and London: Yale University Press, 2018.

Hutchins, 1774 and 1861-64
J. Hutchins, *History and Antiquities of the County of Dorset,* 1st edn, 1774
J. Hutchins, *History and Antiquities of the County of Dorset,* 3rd edn, in 4 volumes 1861-64.
The later edition is the more comprehensive.

Oswald, 1933 and 1959
A. Oswald, *Country Houses of Dorset,* 1st edn, 1935
A. Oswald, *Country Houses of Dorset,* rev. edn, 1959

RCHME
Royal Commission on Historical Monuments, England
All volumes issued by the RCHME are available online, free of charge. The five volumes in eight parts covering Dorset were consulted in Oxford Central Library rather than online.

RCHME, *Dorset*
RCHME, *An Inventory of the Historical Monuments of Dorset,* London: HMSO, 5 volumes in 8 parts, 1952-1975.

Taylor, 1970
C.C. Taylor, *Dorset,* London: Hodder and Stoughton, 1970, reprinted 1975.

VCH Dorset **2** and **3**
W. Page, ed., *Victoria County History: Dorset,* volume **2,** London: Constable, 1908, for 'Religious Houses';
R.B. Pugh, ed., *Victoria County History, Dorset,* volume **3,** London: Institute of Historical Research, 1968, for Domesday Book, Dorset Geld Rolls, and Dorset fiefs in the Exon Domesday.
Topographical volumes have yet to appear.

Whitaker, 2021
J. Whitaker, *Raised from the Ruins: Monastic Houses after the Dissolution,* London: Unicorn Press, 2021.

Williams, 2006
M. Williams, *Bridport and West Bay: The Buildings of the Flax and Hemp Industries,* Swindon: English Heritage, 2006.

Pamphlets

Sims and Sims, 1998
R. Sims with M. Sims, *Brickmaking in Bridport,* Bridport: Bridport Museum Service, 1998.

When did Red become Blue? Colour Change in the Brick of Railway Structures

David H. Kennett

INTRODUCTION

Throughout the nineteenth century, railway companies were major customers of brickworks, both their own and outside concerns. But in the course of the nineteenth century, the colour of the product favoured for the external face of major engineering structures such as viaducts and retaining walls changed from red to blue. This essay will look at *some* of the evidence for an answer to the question posed in its title, 'When did Red become Blue? Colour Change in the Brick of Railway Structures'; however, it does not seek to give a definitive answer.

Rather, the present paper is intended as an opening contribution to a potential debate intended to clarify what may well be a pattern that varies regionally. Members of the British Brick Society whose expertise is in areas with which the present writer is less familiar may well be able to suggest different time scales to those put forward here.

The problem may be simply stated. There are well-known early railway viaducts, with which most persons interested in bricks or railways or both, will have some acquaintance: Balcombe, Sussex (1838-41), Stockport, Cheshire (initially completed 1842), and Digswell, Herts., (1850), also known as the Welwyn Viaduct, being obvious examples. These are all red brick, with white brick used also on the Balcombe viaduct. Other red brick viaducts are the less well-known examples in East Anglia: the Yare viaduct, south of Norwich (1850), and the Chapel Viaduct over the meadows and the River Stour, Suffolk (1850).

In contrast, viaducts erected during the last decade of the nineteenth century are built of blue brick. The former Great Central Railway from Sheffield and Nottingham south through Loughborough, Leicester, and Rugby to London Marylebone was built between 1897 and 1900. Much of the line was either in deep cuttings, as at Helmdon, Northants., or on viaducts of blue brindle brick as can be seen east of Loughborough and in places crossing Rugby. Such viaducts were once prominent in Nottingham, itself. The viaducts on this line known to the author are exclusively of blue brick. The same is true of the external face of the viaducts of the line built by the Great Western Railway from London to Birmingham via High Wycombe, Bicester, and Banbury, using a new, shorter route from London Paddington to Aynho, Northants., joining the existing line from Oxford to Birmingham through Banbury, Leamington Spa, Warwick, and Solihull to a new station at Birmingham Moor Street and a rebuilt one Birmingham Snow Hill, the latter constructed on a series of viaducts externally faced in blue brindle bricks. Between the two is a tunnel, above part of which the Great Western Railway built the Great Western Arcade.

The bridges on the older parts of the line are in red brick; those on the newer route are of blue brick. The contrast is dramatically apparent just south of Tylesley Station in Birmingham: looking south, to the left is the old route from Oxford to Birmingham where the overbridge is red brick whilst that on the left, on the 1886 line to Stratford-upon-Avon, and originally beyond to Cheltenham, Gloucester, and Cardiff is of blue brick.

In investigating the colour change, it perhaps best to begin with one city and then to branch out to a wider geographical canvas. That city is, of course, Manchester, and its neighbour, Salford (fig.1).

MANCHESTER AND SALFORD

Manchester is where it all began. Three of the six technological revolutions which for better or worse and certainly richer materially and economically not poorer that have convulsed the western world since 1759 began in Manchester: water transport with the Bridgewater Canal in 1759 and the industrial use of water power soon afterwards; in land transport, the application of steam power began with the Liverpool and Manchester

Fig.1 Manchester and Salford: railway viaducts and stations in 1855. Town plan from *Index Gazetteer of the World ... Illustrated with Town Plans of the Principal Towns in Great Britain, America etc. Drawn and Engraved from the Most Recent Government Surveys and Other Authentic Documents,* London: John Tallis, *circa* 1855. The railway lines are demarcated as a black line.

Railway in 1830; and from the Enigma Machine, in 1948 Alan Turing developed the world's first micro-electronic processor in the buildings of Manchester University. Even with steel and electricity in the latter decades of the nineteenth century and mass production in the first decade of the twentieth, the city was not far behind the American progenitors. Henry Ford opened his first plant in Europe in 1911 on Trafford Park, on the south side of the Manchester Ship Canal, opened by Queen Victoria on 1 May 1894. Car production in Manchester began only three years after mass production of the Model T began at Highland Park, north-west of Detroit. Production of cars remained at Trafford Park for twenty years, only shifting to the new factories at Dagenham, Essex, in 1931 because of government inducements to move south. Equally, we may note that the intellectual firepower of Manchester's various universities and the industrial firms which have been spun off by their researchers are a major driving forces behind both the biotechnology revolution and the development of artificial intelligence.

To return to railways and steam power, that remarkable painting by John Raphael Isaac (1809-1870) 'Salford and Manchester, 1859' [Salford: City Art Gallery] shows the central business district of Manchester already circumscribed by a ring of railway viaducts, each of which is shown with a train using it. At this date there is no ship canal but there was the Bridgewater Canal giving access from the duke's coal mines at Worsley to the city centre. Like the Manchester, Bolton, and Bury Canal, it is shown fully operational, carrying freight.

Amongst the city's railway viaducts, the earliest is the series of viaducts leading into the Liverpool Road station, which remarkably survives as the eastern terminus of the world's first steam passenger railway line. At the terminus station, passengers boarded on the south side beside which were the office buildings of the railway company and its station looking remarkably like high-quality, late Georgian houses in red brick. On this side the wooden platform survives together with the red brick steps leading up to it. At first, passengers from Liverpool alighted at a platform on the north side outside the station. The platform of 1831 has been displaced by later works, although these, too, are in red brick. The approach viaduct was thickened by further

lines as after 1844, this station served as a goods station for over one hundred years. It is now incorporated within the Manchester Museum of Science and Technology.

West of Manchester is the Sankey Viaduct built between 1825 and 1830 to carry the Liverpool and Manchester Railway across Chat Moss, an extremely boggy area of marshland. As with the viaducts in Manchester, it was built of red brick, although later accretions when the line was doubled to four tracks were done in blue brick.

After the approach to the station on Liverpool Road, the next viaduct to be built in Manchester is that of 1832 for the Manchester, Bolton, and Bury Railway which initially ran from Salford Station, the company's first Manchester terminus, to cross the Manchester, Bolton, and Bury Canal near Oldfield Road, Salford, and then followed a line adjacent to the canal north-westwards for several miles. The initial viaduct was built in red brick, but it is not now easily seen. Portions of the original can be made out on the east side (the Manchester side) in the vicinity of Princes' Bridge, a road bridge of 1898 crossing the River Irwell and linking Salford with Manchester. On the north-west side, facing Salford, the line was doubled in capacity more than once later in the nineteenth century, with a blue brick retaining wall beside East Ordsall Lane, Salford, now the most prominent feature. The Manchester, Bolton, and Bury Railway was absorbed by the Lancashire and Yorkshire Railway (LYR) which was proudly and fiercely independent of the Liverpool and Manchester Railway's ultimate successor, the London and North Western Railway (LNWR).

On the north-east side of Manchester, the Leeds and Manchester Railway initially ran into a station on Oldham Road, Manchester. From 1844 these passenger trains ran into the new station at Manchester Victoria. From 1844, Manchester Victoria was also the terminus for passenger trains from Liverpool although after 1884 these ran into the new Manchester Exchange station: Salford artist, L.S. Lowry (1887-1976), submitted a painting of the latter as his Diploma work on becoming a Royal Academician. In April 1962. Through trains from Liverpool to Leeds via Manchester were soon in operation on the viaducts south-west and north-east of Manchester Victoria station.

The first railway line in Manchester faced west. The economic rationale of the Liverpool and Manchester Railway was to cut the cost of transporting raw cotton from the commercially-significant out-port of Liverpool to the centre of Manchester. Initially, passengers were of secondary consideration. But directors of the line and the successor companies soon realised that money could just as easily be made from transporting people as well as goods. In the late 1830s, trains of the Grand Junction Railway ran from Birmingham into the station at Liverpool Road, Manchester, via a junction at Newton-le-Willows, Lancs. However, a more direct route was inaugurated in 1842 via Stockport and Wilmslow to Crewe and a new station approached on multiple, low viaducts built at Manchester London Road, now Manchester Piccadilly. The first approach viaducts to the new station date to 1842 but most are later as it became the principal station for south- and east-bound trains. Where the tracks divide at Ardwick, the viaduct, twelve tracks wide, is almost completely of red brick. These can be seen from the west side from Ardwick Green, not far south of Manchester Piccadilly station.

The various railway amalgamations of the late 1830s saw the Liverpool and Manchester Railway absorbed into the London and North Western Railway. In 1844, the LNWR built a line from the Liverpool and Manchester's line at the northern end of Ordsall Lane, Salford, to adjoin the viaduct of the Manchester, Bolton, and Bury Railway near Salford Station and thence into Manchester Victoria. This was originally four tracks, but became six and sometimes eight, all of which were carried on a discontinuous viaduct on the east side of the existing lines of the Manchester, Bolton, and Bury Railway. The solid wall of eight or even ten railway tracks effectively cut Salford off from Manchester. It was three and half miles long and was originally of red brick. There were various spaces for trestle bridges, mostly now replaced, to provide access to the streets around the New Bailey Prison which used to stand on land between the railway and the River Irwell.

Rebuilding in places, particularly for the new bridge supports over Chapel Street, Salford, and in connection with work in the early 1880s for the LNWR's Manchester Exchange Station, opened in 1884, were in blue brick. There is a particularly impressive inclined approach to the station from the Salford side where the exterior and the slope at completely lined in blue brindle brick.

The two elevated tracks of the Manchester, South Junction and Altringham Railway of 1850 define the southern limits of the central business district of Manchester. In less than a mile it supports three stations:

Piccadilly South, Oxford Road, and Deansgate (originally Knott's Mill). This viaduct has been renewed several times and beyond Deansgate station is of blue brindle bricks as is much of the inner-city portion, which in places is difficult to examine.

Before 1859, a twin-track line partly carried on viaducts of red brick was built to connect the line from Manchester Victoria to Stalybridge and Huddersfield with that from Manchester Piccadilly to the same Pennine towns. Running along the eastern side of Ancoats from Miles Platting in the north, through the suburb of Bradford, west of Ardwick, south of the original Manchester township. Originally built of red brick, parts were rebuilt in blue brick.

The original approach viaducts to Manchester Central Station — the slightly smaller version of the great train shed at London St Pancras at the other end of the Midland Railway's line — were built between 1875 and 1879 and are in red brick. Initially, there were four tracks on two double-track viaducts whose southern arches now carry the tracks for the Metrolink trams. Later the approach to the station was widened on the north-west side to carry further railway lines into the station and to the nearby (but now demolished) Cheshire Lines Committee warehouse of 1901. At its widest, the new work was six tracks on three double-track viaducts, each faced in blue brindle bricks. Because the multiple viaducts form a long tunnel covering the western third of Great Bridgewater Street, the undersides of the arches are in glazed white brick, making it on the early mornings a somewhat dismal place. Connected with the widening of the approaches to Manchester Central Station is the Cheshire Lines Committee viaduct of 1889 over Dawson Street, Manchester, also in blue brindle bricks.

Between 1894 and 1898, the Great Northern Railway built its famous Goods Warehouse north of the Cheshire Lines Committee warehouse. It was approached by a spur, three-quarters of mile long, carried on a quadruple-track viaduct after the bridge crossing Deansgate. The access viaduct is faced in blue brindle bricks as are the piers to the now demolished bridge over Deansgate.

Manchester has an extensive series of early railway viaducts. Those dating to 1825 to 1830 and the 1840s through to at least 1870 are in red brick. Late additions to the railway network of England's second city beginning in the late 1870s had viaducts faced in blue brindle bricks.

RED BRICK

The Stockport Viaduct of 1842 has already been mentioned. When proposals were made concerning the doubling of the tracks from two to four, the suggestion was made by the directors of the London and North Western Railway that the same solution as had been made when crossing the Mersey on the way to Liverpool be adopted here. The high-level bridge between Runcorn and Widnes which takes the line over a much wider river is a metal structure raised a mixture of brick and stone supports. The Stockport viaduct was and is regarded with pride by the town and the new county borough council was having nothing to do with this cheaper, and in their eyes somewhat nasty, solution. With the backing of the town's population, the aldermen and councillors of Stockport wanted the viaduct doubled as a proper viaduct and built with good quality red brick, and they got their way. The east side, facing the town of Stockport, echoes the older west side.

The Stockport viaduct is one of several well-known, early railway structures high in the air which carry far more traffic today than their builders could have imagined. And trains are both longer and far heavier than their nineteenth-century counterparts. Trains are also more frequent.

Far to the south, the thirty-seven arches of the Ouse Valley Viaduct at Balcombe, Sussex, were built by the London, Brighton and South Coast Railway, being completed in 1842. It was constructed of red brick with white brick dressings. To reduce the weight pressing on the marshy ground, the piers of the Balcombe Viaduct are split in two with a void between them. The piers are joined at the base by a reverse arch and at the top by an arch. Equally spectacular is the Digswell Viaduct in Hertfordshire, also known as the Welwyn Viaduct, built for the Great Northern Railway to gain access to its London terminus at King's Cross. Both terminus and viaduct were completed in 1850 but whilst the station frontage is of yellow London stocks, the viaduct was built in red brick.

There are several viaducts in East Anglia. It is a popular misconception, encouraged by Noel Coward's silly aphorism "very flat, Norfolk", that there are neither hills nor valleys in Norfolk and Suffolk. Whereas

there are ten level crossings between Thorpe St Andrew and Worstead, there is none in the more undulating country north of Worstead on the line from Norwich to Cromer. The Midland & Great Northern Joint Railway across the county from the River Nene at Long Sutton to Great Yarmouth, with branches to Sheringham and Cromer, now a steam heritage line between Sheringham and Holt, and to Norwich has many cuttings, if not any viaducts. And in Suffolk, anyone visiting Boxford or Kersey, neither of which was reached by a railway branch line, would soon be dispelled of that erroneous notion, especially if they had walked there: public buses, even in the late 1970s and early 1980s, were somewhat thin to non-existent.

The first railway in Suffolk ran from Bury St Edmunds to Ipswich: it opened in 1840. In Bury St Edmunds, the line was built on a raised platform of stock brick, hidden under an embankment, both at the Northgate Station and for the first mile going south-east. Where visible, as at the underbridge east of the station, the brickwork is in red brick. Like the stations at both Stowmarket and Needham Market, Northgate Station in Bury St Edmunds was built of red brick.

From Stowmarket a line was built in 1848 north to Norwich, much of it on raised embankments, especially around Diss and near Caistor St Edmund: from the embankment near the latter, a good view of the defences of the Roman town can be seen to the east. South of Norwich, this line crossed the River Yare and the alternative route from Norwich to London via Thetford, Ely and Cambridge, by means of the Victoria Viaduct, also known as the Yare Viaduct. The viaduct once gave access to a now demolished station, Norwich Victoria, west of the city walls. Despite closure of this station, the Victoria Viaduct is much used, carrying the express trains to and from Norwich Thorpe to London Liverpool Street.

On the border between Suffolk and Essex, seven million bricks were used in building the long, low Chappel Viaduct over the River Stour on the line between Marks Tey and Sudbury: this line originally went north via Long Melford and Lavenham to Bury St Edmunds. Only one of the arches of the Chappel Viaduct actually crosses the river, the others were built to allow the meadows to continue to flood.

On the Great Western Railway (GWR), Isambard Kingdom Brunel's bridge at Maidenhead over the River Thames was built in 1838 of red bricks. This may not be immediately visible in J.M.W. Turner's celebrated painting *Rain, Steam and Speed* [London: National Gallery], which shows a train going to Bristol from London. Brunel also used red brick for the overbridges on southern pair of tracks between Reading and Didcot. When the line was quadrupled, the later pair of lines, those to the north, were traversed by overbridges in blue brindle bricks, very often with a straight joint between the work of the late 1830s and that of *circa* 1900. Again using red bricks, the Wharncliffe Viaduct over the River Brent is the first raised section of the line west of London.

A line taken over by the Great Western Railway was the Oxford and Birmingham Railway on a route via Banbury, Leamington Spa, Warwick, and Solihull. Red brick was used for underbridges at Warwick Station and where the line crosses the Fosse Way (the B4451) about 2 miles west of Harbury, Warks. As noted in the Introduction, an original redbrick overbridge survives in south Birmingham, just south of Tyesley Station.

However, as will be noted below, because of the sheer scale of nineteenth-century rebuilding, the predominant colour for railway brick structures in Birmingham is blue. However, part of the original Midland Railway line from the old Curzon Street Station to Gloucester, following a route east of Pershore Road, has not been reconstructed using blue brindle bricks. It is now a freight by-pass route from south-west of Birmingham to north-east of the conurbation. One of several red brick underbridges takes the line over the northern end of Stratford Road in Sparkbrook.

One group of red brick viaducts in England south of the GWR main line to Bristol deserves a brief mention, those on the line from Eastleigh to Fareham and Gosport of 1842.

RED BRICK: A POTENTIAL PRECURSOR

Railways superseded canals. Perhaps to a modern visitor slightly incongruous, one transport node of the first quarter of the nineteenth century was Stratford-upon-Avon. At the edge of the navigable part of the River Avon a large double basin was built as the terminus for a canal linking the insignificant south Warwickshire market town with the expanding industrial centre of Birmingham, some thirty miles to the north. Between the two

town, the Stratford Canal was built in the nineteenth century's second decade. Red brick was used for many of the more spectacular structures taking the water of the canal over a road or marshy ground. A low overbridge at the canal entrance from the river basin, now somewhat invisible under road 'improvements' of the late twentieth century, is red brick although this is difficult to see and unnoticed by many who use the duckboards on one side. At Bearley, 5 miles north of Stratford, where marshy ground has to be crossed, the Edstone Aqueduct was built in 1813. There are thirteen large, brick piers carrying the canal in a trough half a mile long. The red brick piers are solid brick, some seven bricks thick, and taper from base to top; the paucity of modern repairs testifies to their functionality and endurance. What few repairs there are include modern patching or rebuilt corners in blue brick. A mile or so north of the aqueduct, the canal crosses the road from Birmingham to Stratford (the modern A3400) just east of Wootton Wawen: the road has been lowered to accommodate modern road vehicles. Another canal trough is visible, supported by red brick piers and red brick retaining walls. On the south side of the trough is a plaque recording the construction of the canal here in 1816.

In contrast to the aqueducts, the locks of the Stratford Canal are lined with blue bricks and the same colour of brick is found in the sides of the canal where brick has been used. The Oxford Canal at Banbury also uses blue brindle bricks in the locks and in the vicinity of the town centre, the sides of the canal are lined in blue brindle bricks.

Alongside the south-east side of the Stratford canal basin is the terminus of the former horse tramway from Stratford-upon-Avon to Moreton-in-Marsh, following the road from Stratford to Oxford for six miles to Newbold-on-Stour, although it crossed the road more than once. At its northern end, the tramway had to cross the River Avon; the red brick Tramway Bridge has nine arches of good quality red bricks made at the former brickworks of the Alscot Estate, just beyond the southern boundary of Alscot Park and adjacent to the route of the tramway. The same brick is used for an underbridge at the Tramway Inn, Shipston Road, Stratford-upon-Avon, and an overbridge at Smallbridge Farm, 2 miles south of the town.

Whilst this very selective evidence is derived from one undertaking, the use of red brick for bridges when blue brick was readily available may be significant in the context of its not much later use by railway builders.

Another 'borrowing' from eighteenth-century construction was the use of timber as the basis for roads crossing boggy ground. The 'Acle New Road' of 1830 links the Acle with Great Yarmouth; it crosses the Yare marshes as does the original railway line between Norwich and Great Yarmouth via Berney Arms of 1844. This, too, is constructed above a timber platform. By the 1980s, the railway provided a smoother ride than did the road, the latter being continuously weakened by the succession of large, articulated lorries often with a trailer heading for the container terminal on Fisherman's Wharf, Great Yarmouth.

BLUE BRICK

The use of blue brindle bricks can be an early feature of the railway age. There are early stations built of blue bricks, particularly the principal stations on the Oxford, Worcester, and Wolverhampton Railway of 1845. Worcester Shrub Hill, rebuilt using blue bricks in 1863-64 probably to a design by the Great Western Railway's chief engineer, Edward Wilson, is still in use. However, Wolverhampton Low Level Station was abandoned for over forty years after 1970. In 2017 it was incorporated in a new hotel.

In attempting to discover when blue brick became the more usual choice for railway engineers building viaducts, these notes will advance from the most recent to the earliest ones known to the writer.

The Great Central Railway has already been mentioned. Although closed in 1957, many of the viaducts remain: for many years they were considered just too big to demolish. Thus in central Nottingham, there was a great viaduct whose plan was Y-shaped; the northern stem of the 'Y' led originally into Nottingham Victoria Station, a building demolished for a shopping mall in the 1970s. Crossing Nottingham Midland Station this viaduct was partly intact as late as 1999 but by 2009 the last vestiges had been swept away only to be reinstated as the viaduct carrying the tracks of the Nottingham light rail system. However, north-east of Loughborough, Leics., there are extensive viaducts remaining which carry the steam trains of the successor Great Central Railway. A further series of viaducts could be seen east of Rugby Midland Station in the late 1990s but some

of these have been demolished in the twenty-first century. All of these viaducts are of blue brindle brick and were erected between 1897 and 1902.

In 1894, the Great Western Railway built a line from London Paddington to Aynho, Northants., to join its existing line from Oxford to Banbury, Warwick, Leamington Spa, and Birmingham. Both viaducts at Aynho Junction are of blue brindle brick as are those elsewhere on this line. The retaining walls at stations such as those at Great Missenden and High Wycombe, both Buckinghamshire, are also of blue brindle bricks in English Bond. The company's two stations in Birmingham were remodelled in the course of this development. Both Moor Street and Snow Hill were rebuilt on huge viaducts of blue brindle bricks laid in English Bond in the 1890s. These can be easily seen on the west side south of Moor Street Station but its most recent refurbishment, bringing terminal platforms back into use, has resulted in new boundary walls on the east side in blue bricks laid in Stretcher Bond. Very tall, original GWR viaducts in red brick, laid in English Bond, can be seen from Stratford Road about half a mile south of Moor Street Station.

During the 1880s, Birmingham's New Street Station was enlarged and rebuilt for the London and North Western Railway and also used by trains of the Midland Railway: those of the Great Western Railway had their own Birmingham stations, as noted in the preceding paragraph. New Street Station is in a deep cutting held back by retaining walls constructed of blue brindle bricks.

Another cut-off line built in 1881 by the Great Western Railway connected Birmingham with Cheltenham and Gloucester via Stratford-upon-Avon, Broadway, and Winchcombe. The overbridges at stations on this line in Birmingham's southern suburbs, such as Spring Road, Hall Green, and Yardley Wood, and those further south as at Stratford-upon-Avon itself, are in blue brindle bricks. The same is true of the few underbridges as with the one north of the station at Henley-in-Arden, Warwks. Now an abandoned line, and with the arch of the bridge removed, the abutments of the bridge crossing the Stratford to Birmingham road (the A3400) on the short spur from Henley-in-Arden to Solihull are also in blue brindle bricks laid in English Bond. One of the major undertakings on the line from Birmingham to Cheltenham was the Toddington Viaduct, which from the outside is of blue brindle bricks. The late Martin Hammond once told me that the undersides of the arches are, at least partly, in red brick and that much red brick was used in the core of each pier.

In contrast, the stations on the line from Birmingham to Stratford-upon-Avon — in full use at Tyesley, Spring Road, Hall Green, Shirley, and Stratford-upon-Avon, with the buildings closed up at Henley-in-Arden, and given over to domestic use at Wilmcote — are built of red brick and very often a bright red brick. The station at Stratford-upon-Avon is embellished with white brick dressings to its round-headed windows and doorways.

Earlier than these is the London extension of the Midland Railway, built in the mid-1860s from Bedford to the company's new London terminus at St Pancras, a line passing through Luton and St Albans. In Luton, the underbridges over Old Bedford Road and Hitchin Road, respectively north and south of Luton Midland Road Station, are in blue brindle brick. The bridges over the same roads and those over New Bedford Road and Dunstable Road on the largely single-track branch line between Hatfield on the Great Northern Railway and Leighton Buzzard on the London and North Western Railway also employ blue brindle brick. East of the Midland Railway's station, rebuilt in the 1930s, the company cut back the hillside and built a retaining wall in English Bond using blue brindle bricks.

RAILWAY STATIONS IN WHITE BRICK

Some early stations were built in white brick. One of the earliest is the original terminal station in Wolverhampton, whose main building of *circa* 1840 is now used as part of the city's bus station. Other white brick railway stations include that at Boston in Lincolnshire, as well as the well-known one at Cambridge. The latter follows local tradition: on the way to Newmarket is the Suffolk village of Kennett where the principal non-domestic building apart from the church is a great barn constructed in the nineteenth century of white brick.

On the former Oxford, Worcester, and Wolverhampton line, the booking office of the station at Moreton-in-Marsh is built in yellow brick with bands of single rows of red brick as accents in the structure. But the next surviving station to the north, at Evesham, is in red brick on both platforms.

CONCLUSION: WHEN DID RED BECOME BLUE?

Change may be gradual and, as noted in the Introduction to this paper, there are probably regional variations. At least in the southern part of the English Midlands and for lines directed at moving people and goods from central England as well as elsewhere in England, particularly ports, the evidence seems to point to sometime around 1880. Certainly, the cut-off lines, as they were known, built by the Great Western Railway in the 1880s and 1890s have major structures in blue brindle bricks.

But does this happen elsewhere? The evidence from Luton suggests a possible earlier date for a major company seeking to access London and to have its own terminus. The Midland Railway may have made the switch from red to blue in the 1860s. Yet the brick base below the train shed at London St Pancras and the internal pillars holding up the platforms and the track bed is red brick.

It would be useful to compare the evidence presented here from early lines around Manchester and in East Anglia with other areas for the use of red brick for early railway structures. Similarly, it may be asked whether the evidence from the Great Western Railway and the rebuilding of Birmingham New Street Station represent a universal date when red was replaced by blue.

BIBLIOGRAPHICAL NOTE

This contribution has been written from personal observation over several decades. It wishes to stimulate debate on 'when did red become blue?', therefore it has not been burdened with end notes. The piece was written over a number of years following examination of the artefacts over an even longer period of time: the writer left Luton in 1980, East Anglia in 1993, and Salford in 1997. It reflects fieldwork done in these areas up to the dates when he ceased to live there. Since 1997, he has lived in a town in south Warwickshire which is 10 miles from a north-bound railway connection and 14 or 9 miles away from two different south-bound ones; Shipston-on-Stour lost its railway passenger services in 1929 and has been without even a freight service since 1964. Despite being a long-term traveller on trains, the author's book collection is extremely limited on railway history. With reference major libraries inaccessible in 2020 and 2021, due to the Covid-19 pandemic, access to the relevant literature was thus limited. This was exacerbated by an accident in October 2021 followed by a series of back problems.

BRICK IN THE NEWS:
REPAIR OF HORSPATH RAILWAY BRIDGE USING THE ORIGINAL BRICKS

The long-disused, single-track railway line from Princes Risborough to Oxford via Thame and skirting Oxford to the south-east at Cowley had, as part of its infrastructure a brick bridge over Cuddesdon Road, Horspath: Horspath is small village east of Oxford. The bridge was fragmenting and fracturing and leaning dangerously over the road. Despite having not been used for trains for over fifty years, the decision to repair the bridge rather than demolish it was taken in October 2021, with the work expected to be completed by Friday 17 December 2021.

As part of the campaign to save the bridge and possibly eventually see the re-opening of the railway line, local residents collected and cleaned 3,000 bricks which had fallen from the bridge.

The work on the bridge was reported on BBC Teletext on under Oxfordshire on 26-29 October 2021.

Pumpkin Pie: The Old Brick Church, Newport, Isle of Wight County, Virginia, USA

Terence Paul Smith

INTRODUCTON

Some years ago, Trevor Cooper drew attention to, and illustrated, the Old Brick Church, (St Luke's), Isle of Wight County, Virginia, USA.[1] Although unable to answer the specific question of who was the designer(s) of the building, it is possible to offer some pertinent observations on the church: its style, its brickwork, and its date.[2] It is important, not for any architectural distinction but because it is a rare survival of a church from the seventeenth-century English South — now Virginia and the Carolinas (Georgia was added only in 1732; Carolina was split into North and South in 1712). The area was settled by the London Company and was staunchly Anglican (Episcopalian in American terms). Virginia, in particular, had strong links with south-west England, not least Dorset.[3] But in contrast, New England — from Connecticut northwards to Maine — which was settled by the Plymouth Company, was resolutely nonconformist and congregational and thus had meeting houses rather than churches.[4]

DESCRIPTION

The body of the church, which is 'correctly' orientated to the east, is a single rectangular space of four bays with no structural division between nave and chancel, the latter marked only by a (reconstructed) wooden screen (fig.1). There are crow-stepped gables, the western of them interrupted by a square, unbuttressed tower, narrower than the nave (figs.1 and 2). The two lower stages, which have chamfered rusticated quoins, are separated by a moulded string course, the second and third by a plain platband. It has a low, pyramidal roof.

The church is entered through a round-headed arch beneath a rudimentary triangular pediment in the west wall of the tower. There is a square-headed doorway in the south wall of the chancel with a round head and hoodmould.[5] Mr Cooper wondered whether the tower is a later addition. But this is almost certainly *not* the case: the similarity of the second stage windows to those of the nave and chancel is particularly telling in this regard.[6] It is, however, possible that the top stage is a later, but not *much* later, addition (or reconstruction): note the absence of rusticated quoins and of the Y-tracery.

The church is entirely of red bricks (8⅞ x 3¾ x 2⅜ inches; 200 x 95 x 60 mm) without stone dressings.[7] Simple shaped bricks are used for jambs, arches, the western pediment, the string-course and quoins of the tower, and the plinth offsets. Slightly more complex are the mouldings of the mullions and tracery, which have twinned ovoles with axial fillets (fig.3c); the sills have related mouldings.

The roof (reconstructed after a collapse) is of collared and braced rafters with the tie-beams at bay intervals; it is braced internally. The walls are plastered and whitewashed. The floor is large square tiles. There was a wooden gallery (now replaced) at the west end of the nave.

Stylistically, the building is an irresolute hybrid.[8] The Y-tracery of the side windows and of those in the second stage of the tower is of thirteenth-century type, but under round not pointed, arches, making them *quasi*-Gothic rather than Gothic proper. The louvred openings in the tower are round-headed and without tracery: the bottom stage has circular windows. The crow-stepped gables are a late medieval and Tudor feature. But the west doorway attempts a Classical style with its round head and rudimentary triangular pediment perched awkwardly above it. The rusticated quoins on the lower two stage of the tower are a Classical device, as are the mullion and tracery mouldings. And then there is that 'somewhat ungainly ... east window' (fig.4) to which Mr Cooper refers set beneath a small circular window in the gable, it is not, strictly, a window at all, but rather two rows each of found small round-headed windows topped by a slightly pointed arrangement of

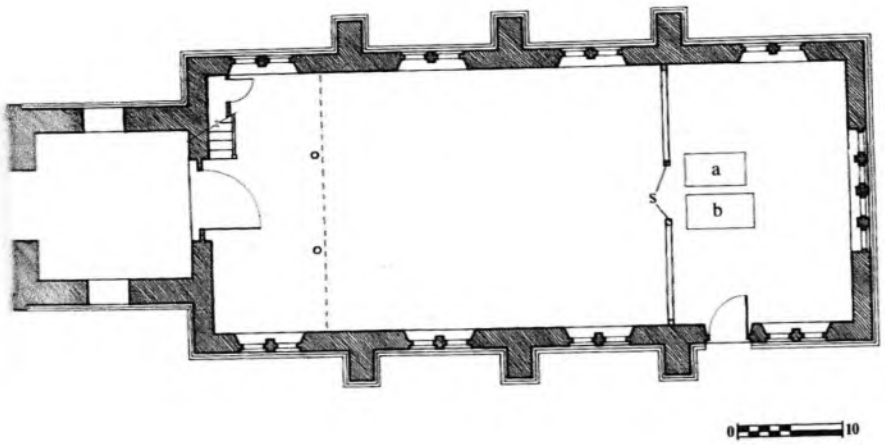

Fig.1 Plan of St Luke's church, Newport, Isle of Wight County, Virginia, USA
After Dell Upton, *Holy Things and Profane*, New Haven and London: Yale University Press, 1987, fig.44.)

somewhat heavy-handed intersecting tracery. Of course, the whole concoction evokes, and was clearly intended to evoke, a single Gothic window but without actually being such. Mr Cooper notes that 'the only precedent [he has] seen suggested is at Sandon, Essex'. But there is really no likeness: Sandon's west window has real mullions and the tracery is of Perpendicular form; the mouldings too are different.[9] Indeed, there is nothing in England remotely similar to the St Luke's east 'window'.[10] But in Virginia, the large east window of St Peter's parish church, New Kent County, of 1701-03, is round-headed and divided by three mullions and two transoms but with neither the round-headed arches to the two lowest rows of glazing nor the elaborate mock-tracery to the upper portion found on the St Luke's window.[11]

THE DATE OF THE OLD BRICK CHURCH

With regard to the date, Mr Cooper observes that the church was 'probably built between the 1660 and the 1690s, though some have claimed a date of 1632'. The earlier date is that preferred by those with personal ties to the church and has also found its way into a number of general works.[12] The style of the building offers little help in dating, but the brickwork provides a valuable clue. The walls, though not all the buttresses, are in a consistent Flemish Bond. This would be unexpected in a colonial building of the 1630s. There are earlier adumbrations of Flemish Bond in England, but its first *consistent* use is generally taken to be at Kew Palace, London, of 1631.[13] This, though not originally a palace, was a high-status, fashion-setting building, far superior to colonial buildings like St Luke's. In England, Flemish Bond gradually (though never completely) displaced the earlier English Bond in the seventeenth century's second half: all the post-Fire brick churches in the City of London, for example, are in Flemish Bond. It took time to move down the social scale, and in farmhouses in Midland England, for instance, was used only from 1700.[14]

A date significantly later than that of Kew is virtually certain for a building in Virginia, where Flemish Bond is not to be expected before the later decades of the century. Bacon's Castle, Surrey County VA (as late as 1664-65),[15] for example, is still in English Bond despite being a higher-status building than St Luke's. The small Merchant's Hope church, Prince George County, would be one of the earliest uses for Flemish Bond in Virginia if the date of 1657 could be accepted; but it is almost certainly half a century or so later[16] — its windows are similar to those of the (grander) third parish church at Bruton parish, Williamsburg, built of brick, 1711-15.[17] The suggested date of the 1660s or later for St Luke's church is thus virtually certain. This is confirmed by the similarity of plan, especially in the use of buttresses, at both the second Bruton parish church of 1681-83 and the body of the James city church which has been dated to *circa* 1680 with the west tower added *circa* 1699.[18]

Fig.2 St Luke's church from the north-west: a photograph from before the nineteenth-century restoration. (After *American Architect and Building News*, **44**, no.414, 10 April 1884.)

This date is also supported by the rusticated brick quoins, which would be most unexpected in an English colonial and essentially vernacular building of 1632.[19]

Some of the buttresses are in English Bond. This is slightly perplexing, although buildings mixing both bonds are certainly known from seventeenth-century England.[20] More significantly, perhaps, the Adam Thoroughgood House, Princess Anne County, VA, (probably of the 1680s) has its principal face in Flemish Bond but its other faces in English Bond.[21] English Bond has been regarded as stronger than Flemish: could be therefore, at St Luke's, the builder deliberately changed to it for (some) of the 'engineering' features? But then, why did he not do so consistently? It remains a perplexity.

THE DESIGNER OF THE CHURCH

Mr Cooper observes that the tower (and therefore the whole church if, as is most likely, it is of one build) was almost certainly by Charles and Thomas Driver. The Driver family, he continues, 'were probably brought over to Virginia in the mid-seventeenth century by their patron, Joseph Bridger, who was from a prominent Gloucestershire family'. Bridger was born in 1628 and can scarcely, therefore, have been responsible for a church of 1632! He died in 1686 and is buried within St Luke's church in one of two tombs, directly in front of the altar, between the (reconstructed) screen and the communion rail, a place of high honour.

The Drivers were, in fact, associated with the church in the 1680s.[22]

Fig.3 St Luke's church from the south west, *circa* 1865, showing repairs around the windows and the prominent buttresses.
(Photograph after Dell Upton, *Holy Things and Profane,* New Haven and London: Yale University Press.)

Whether or not the designer of St Luke's was one (or both) of the Drivers, of one thing we may be certain: he was not a professional (or even a gifted amateur) architect. He is most likely to have been an artisan builder, perhaps a bricklayer[23] — and one, moreover, who was experienced in domestic rather than ecclesiastical building.

It is worth remarking that in England — as in northern Europe more generally — crow-stepped gables were as much a secular as an ecclesiastical feature, as were rusticated quoins; and the mullion/tracery mouldings are more a domestic than an ecclesiastical type. Commissioned to build a church, he did his best to introduce 'ecclesiastical' features but without any real understanding. Perhaps he was vaguely recalling what he had seen back in England, or perhaps he was working from sketches provided by a patron whose memory was no less hazy. This, of course, is conjectural; but it does account for the naivety and indeterminacy of the design, in contrast with the bricklaying, which is entirely competent.

SOME FINAL THOUGHTS

One needs, therefore, to treat with caution the statement that St Luke's 'could easily be a parish church in an English county where brick was used for want of a suitable local stone'.[24] This is at best only superficially true. St Luke's is a poor show when viewed against the early Tudor brick church of Essex and elsewhere in eastern England which are sometimes cited as parallels.

Its simple plan form, with no structurally separate chancel, is rare amongst those churches, although there are one or two cases, for example, Smallhythe, Kent (1516-17) and, almost certainly, Goltho, Lincs. (probably of the 1530s).[25] The former even has east and west crow-stepped gables, as at St Luke's. But at both churches the window forms are different, Smallhythe having tracery of a distinctly Netherlands character; and neither church has a tower. The mouldings, too, are completely different. Later, 'the omission of anything emphatic in the way of a chancel' as at Groombridge, Kent (1623) and Morden, now in south London (1636), was the main characteristic of early-seventeenth-century churches.[26]

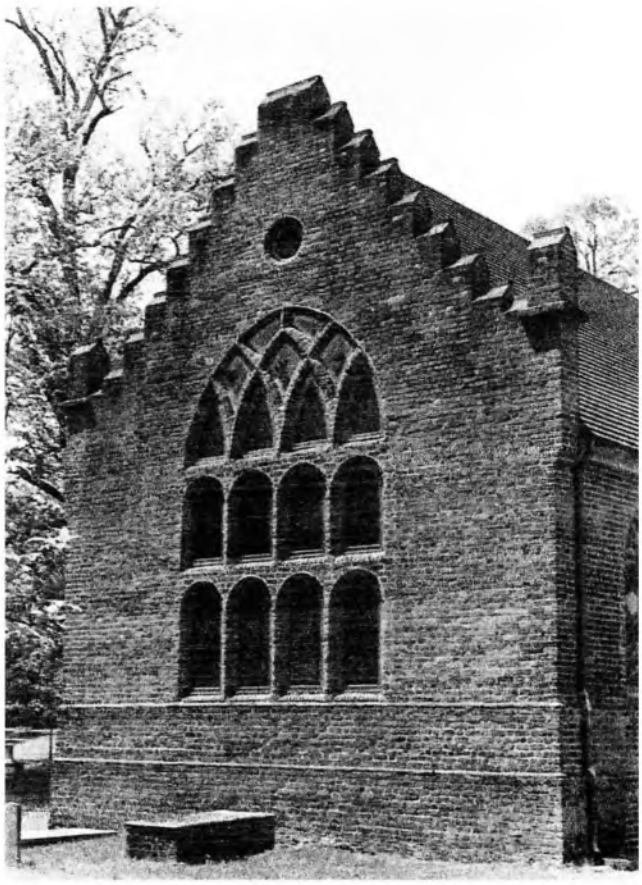

Fig.4 St Luke's church, the east wall with the large mock-Gothic window.
(After Dell Upton, *Holy Things and Profane,* New Haven and London: Yale University Press, 1987.)

Dell Upton gives plans of both Langley chapel, Shropshire, of 1601, and Foremark church, Derbyshire, of 1662, as examples without the structural division of nave and chancel,[27] something which is found in several of the Virginia churches he discusses.

Much more important, one would look in vain for parallels to some of the details — Y-tracery under round arches, for example, or, in the early Tudor churches, filleted ovolo mouldings rather than plain or hollow chamfers to the mullions and tracery. In particular, as already noted, there is nothing in England to match that anomalous east 'window'. Of the tower, it has been claimed that it 'repeats *almost exactly* a brick-built tower of the time of Archbishop Laud'.[28] In fact, brick church towers of the early seventeenth century are few and far between. Where they do exist, they tend to retain Perpendicular details, as at Morden (1636), with a castellated parapet, and Old Malden (perhaps a decade earlier), with a plain parapet, both in south London, though at Stanmore west London (1632, now ruinous) there are twin round-headed belfry openings; again, there is a castellated parapet. In most towers, the dressings are of stone, not brick. Thus, St Luke's bears little resemblance to, let alone repeating 'almost exactly' the few church towers of the time in England.

Harold Kalman perceptively sums up the situation at St Luke's: 'the inspiration from the Old World is realized more through suggestion than direct imitation .... The precise ... details differ greatly from any specific European prototype ... [and] remind a person of a Gothic building without actually looking like one'.[29] The church is firmly in the vernacular tradition, exhibiting an 'all-pervading naivety [which] softens the contrast' of its quasi-Gothic and Classical styles'.[30] As such it is an example of architectural 'malediction' which Thomas Jefferson (1743-1826, third President of the USA and himself a proficient amateur architect) perceived in colonial building, but which we can now appreciate in its own terms.[31] The ardently Francophile Jefferson wanted European *cordon bleu*; a century earlier, St Luke's and its like offered pumpkin pie. It is, of course, possible to enjoy both.

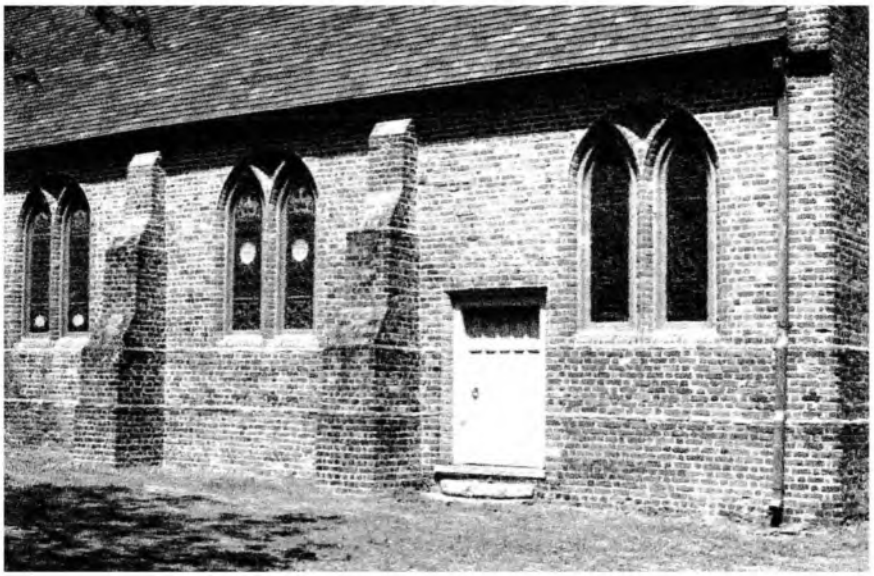

Fig.5 The buttresses of the south wall of St Luke's church.
(Photograph after Dell Upton, *Holy Things and Profane,* New Haven and London: Yale University Press.)

EDITORIAL NOTE

This paper was found in July 2022 in the papers of the late Terence Paul Smith, partly written out neatly and partly in a neat draft. It is suspected that Terence had abandoned the paper having been told that items longer than 1,000 words needed to be submitted at least in typescript and preferably electronically: in at least the final decade and a half of his life, Terence neither owned a typewriter nor had access to a computer. He did tell me that he had abandoned at least one potential project.

The paper is as Terence wrote the text. But additional references to buildings other than the Old Brick Church, especially from both Dell Upton, *Holy Things and Profane,* and Richard Guy Wilson and contributors, *Buildings of Virginia: Tidewater and Piedmont,* have been added by the editor. Insertions of additional information in the endnotes by the editor have been shown in square brackets.

NOTES AND REFERENCES

1. T. Cooper, 'St Luke's ("The Old Brick Church"), Newport, Isle of Wight County, Virginia', *Ecclesiology Today,* **41,** December 2008, pp.83-86; quotations and citations from this short contribution have not been referenced. The church has been known as St Luke's only since 1828: Historic St Luke's Restoration Inc., website *http://www.historicstlukes.org/history.html* [accessed May 2009]. Down to 1837 the county was known by the Native American name Warrasquoyacke (various spellings).
2. There have been various repairs, reconstructions, and alterations; for the most important of them noted below: J.G. van Derpool, 'The Restoration of St Luke's [Newport, near] Smithfield, Virginia', *J. Soc. Architect. Historians,* **17:1,** March 1958, pp.12-18.
3. [For an examination of the links between mid- to late-seventeenth-century Anglicanism, south-west England, and the settlement of Virginia, see the extended essay ''The South of England to Virginia: Distressed Cavaliers and Indentured Servants', in D. Hackett Fischer, *Albion's Seed: Four British Folkways in America,* New York and Oxford: Oxford University Press, 1990, pbk edn, 1991, pp.207-418. Hackett Fischer spent his childhood in the Chesapeake Bay area of Virginia. (DHK)]
4. The English South was claimed by the Church of England as part of the Diocese of London and in the colonial period never had bishops of its own. For a judicious account of religious observance in the two non-contiguous regions see D. MacCulloch, *A History of Christianity: The First Three Thousand Years,* London: Allen Lane, 2009, pp.717-731; also L. Heren, *The Story of America,* London: Times Books, 1976, pp.11-18, which notes (p.11) that the 'British crown [originally and absurdly] claimed *all* of North America, which was first called Virginia' (my italics).

5. The earlier doorway is shown in photographs in the US National Register of Historic Places, eg NRHP66000838; also, though at a very small scale, in D. Cruickshank, ed., *Sir Banister Fletcher's A History of Architecture,* 20th edn, Oxford: Architectural Press, 1996, p.1205A. But this doorway may not have been a primary feature.

6. One of the most knowledgeable considerations of St Luke's does not even discuss the matter, but boldly states that the 'tower is the only one known to have been built *as an original feature* of a [colonial] Virginia church': D. Upton, *Holy Things and Profane: Parish Churches in Colonial Virginia,* Cambridge MA: MIT Press, 1986, reprinted New Haven and London: Yale University Press, 1997, p.61 (my italics).

7. The brick size is given in J.W.P. Campbell and W. Pryce, *Brick: A World History,* London: Thames and Hudson, 2003, p.184, which has excellent colour photographs of the church.

8. Marcus Whiffin notes the miscenegetic character, but over-emphasises the Gothic aspect by erroneously referring to the 'pointed arches' and ignoring the non-Gothic mouldings: M. Whiffin and F. Koeper, *American Architecture, 1607-1976,* Cambridge MA: The MIT Press, and London: Routledge and Kegan Paul, 1981, p.18 (my italics).

9. There are photographs of Sandon church in N. Lloyd, *A History of English Brickwork ...,* London: H. Greville Montgomery, 1925, reissued Woodbridge: The Antique Collectors' Club, 1983, p.129; and in J.A. Wight, *Brick Building in Britain from the Middle Ages to 1550,* London: John Baker, 1972, pl.46.

10. There is a striking Virginian parallel in the Memorial Chapel at Jamestown. But this dates only from 1907; the church itself is a copy of the nave/chancel of St Luke's, though with the bricks laid in English not Flemish Bond — the influence, presumably, of the Gothic Revival. All that remains above ground of the seventeenth-century church is the ruined tower, although footings have been excavated; see websites: *http://historicjamestowne.org/jamestown_church.php,* and *http://www.preservingvirginia.org/tour.hmtl?process=0* [both accessed May 2009] [The Memorial chapel at Jamestown was erected as part of the Tercentennial celebrations of 1907 (DHK).]

11. Upton, 1986/1997, fig.56.

12. Eg J. de Visser and H. Kalman, *Pioneer Churches,* Toronto: McClelland and Stewart, 1976, p.9; Whiffin and Koeper, 1981, p.18 (but see n.19 *infra* for a change of mind); D.P. Handlin, *American Architecture,* London and New York: Thames and Hudson, 1985, p.18; Campbell and Pryce, 2003, p.184. The use of brick does not in itself preclude the earlier date, since brick manufacture was introduced to Virginia as early as 1611, just four years after the foundation of the colony: Handlin, 1985, p.17; Campbell and Pryce, 2003, p.182. On the other hand, the bricks were probably only used for chimneys in timber houses rather than for complete buildings. In colonial days, timber was actually preferred to brick (or stone) in the English South, and even more so in New England, although the picture is now skewered by the greater survival potential of the latter; Whiffin and Koeper, 1981, pp.4, 7; see also R.W. Brunskill, *Illustrated Handbook of Vernacular Architecture,* 3rd edn, London and Boston: Faber and Faber, 1987, pp.200-205.

13. R.W. Brunskill, *Brick Building in Britain,* revised edn, London: Victor Gollancz in association with Peter Crawley, 1997, p.52; A. Clifton Taylor, *The Pattern of English Building,* 4th edn, ed., J. Simmons, London and Boston: Faber and Faber, 1987, p.249. *Cf.* A. Bryan, 'The Distribution of Brick Bonds in England up to 1800', *Vernacular Archit.,* **11,** 1980, pp.5-7. There was formerly an example of 1634-37 at St Catherine's College, Cambridge: RCHM (England), *An Inventory of ... the City of Cambridge,* Part I, London: HMSO, 1959, p.c (i.e. Roman 100).

14. M.W. Barley, *The English Farmhouse and Cottage,* London: Routledge and Kegan Paul, 1961, p.189.

15. R.G. Wilson *et al., Buildings of Virginia: Tidewater and Piedmont,* New York and Oxford: Oxford University Press, 2002, pp.474-475 with photograph. The building was added to in *circa* 1740 and restored *circa* 1896 and in 1995.

16. '1657' is carved into a rafter at Merchant's Hope: de Visser and Kalman, 1976, p.61, with good colour photograph of the church at p.66; but the rafter may well be reused from an earlier (timber?) church or from another (secular) building; or the carved date may be a forgery; Upton, 1986/1997, caption to fig.64, dates Merchant's Hope church to '1725'; Wilson *et al.,* 2002, concurs: see also Upton 1986/1997, p.71 and Wilson *et al.,* 2002, p.478.

17. de Visser and Kalman, 1976, p.70 has a good photograph of the third Bruton church, for which see Whiffin and Koeper, 1981, p.60. Upton, 1986/1997, pp.81-82, with figs.81 (photograph from north-west) and 82 (plan); and Wilson et al., 2002, p.369 with photograph from the south-west.

18. Upton, 1986/1997, fig.49 (Bruton), and fig,50 (James City).

19. Whiffin appears to acknowledge this, in Whiffin and Koeper, 1981, p.18, by suggesting that they are an addition (of 1657) to the original tower, which he (then) dated to 1632; see also Campbell and Pryce, 2003, p.184. But if, as Whiffin supposes, they were added when the topmost stage of the tower was itself added, it is puzzling that they were not continued in the latter and they may be primary. Whiffin later dated the whole church to *c.*1660: see n.17 *supra.* (But as noted above, it is possible that the top stage is a *slightly* later addition or reconstruction.)

20. Clifton-Taylor, 1987, p.250.

21. Campbell and Pryce, 2003, p.185, with photographs at p.182. Whiffin in Whiffin and Koeper, 1981, p.7, figure caption, less plausibly dates the house to 1636. See also Wilson *et al.,* 2002, pp.454-455 with photograph.

22. J.S. Rawlings and V. Perdue-Davis, *Virginia's Colonial Churches: an Architectural Guide,* Richmond VA: Garrett and Massie, 1963, p.8; Upton, 1997, p.60, which pertinently observes that the economic conditions in Virginia were hardly propitious for the construction of brick buildings in 1632. For an account of the early troubles in Virginia, see B. Bryson, *Made in America,* London: Black Swan, 1998, pp.38-40. Perplexingly, although Harold Kalman accepts the early date for St Luke's, he also states that it was only by 'mid-century' that 'brick began to be preferred [over timber] for more important structures [such as churches]': de Visser and Kalman, 1970, p.61. Whiffin came to accept a date in the 1660s for St Luke's in 'United States of America II. Architecture 1, The Colonial Period before 1776', in J. Turner, ed., *The Dictionary of Art,* New York: Grove's Dictionaries, and London: Macmillan, 1996, vol. **31,** *Tinoco to Verna,* p.589; the same date is applied in T.P. Smith, 'Brick, II, History and Uses, 3. Post-Classical Western World, (ii) 1600 and After' in the same work, vol.**4,** *Biardeau to Briggemann,* p.786. L.N. Meades, 'The Americas', in Cruickshank, 1996, p.1202, apparently hedges her bets by dating the church to '1632-*c.*1660' — or is she thinking of an early church to which the tower was added later? Writing a decade after the initial publication of Upton, 1986/1997, M.J. Chiat also equivocates, writing 'The only Anglican church building dating to this period is St Luke's Episcopal church, also known as Benns Chapel, in Isle of Wight County, built between 1632 and 1682' and 'its construction date of 1632, however, is not accepted by all authorities': M.J. Chiat, *America's Religious Architecture: Sacred Places for Every Community,* New York, Chichester: John Wiley and Son, 1997, pp.231, 233.

23. But not necessarily: at the brick-built St Peter's, New Kent County VA (1701-03), the 'Draft' (= plan) was prepared by a *carpenter,* William Hughes: de Visser and Kalman, 1976, p.61; but it was built by a bricklayer, Cornelius Hall: Upton, 1997, p.63, caption to fig.51.

24. Whiffin and Koeper, 1981, p.17. The best of the early Tudor brick churches are in Essex, where they typically include brick tracery: see P. Ryan, *Brick in Essex from the Roman Conquest to the Reformation,* Chelmsford: privately published, 1996, pp.62-64, 71-73, with pls.16b-20c. Elsewhere, brick-built churches often have stone windows and other dressings, as at Shelton (in progress *c.*1487). In these churches, incidentally, brick was probably adopted for reasons of fashion no less than because of the death of building stones.

25. Wight, 1972, p.203 and pls.42, 43 (Smallhythe); T.P. Smith, 'The Brickwork of Goltho Chapel, Lincolnshire', *BBS Information,* **71,** June 1997, pp.7-11. The seventeenth-century chancel at Goltho is almost certainly an addition, not a replacement of an earlier chancel: note the aumbry and piscina at the eastern end of what is now the nave.

26. J. Summerson, *Architecture in Britain 1530-1830,* 8th edn, London: The Penguin Group, 1991, p.158. But the absence of a structurally distinct chancel had long been familiar in the college chapels of Oxford and Cambridge (of which King's Cambridge, is the most familiar example), and in chapels in schools. Its appearance in seventeenth-century parish churches is therefore less innovatory — certainly less radical — than has sometimes been supposed.

27. Upton, 1986/1997, figs.40 (Langley) and 39 (Foremark).

28. A.E. Richardson and H.O. Corfiato, *The Art of Architecture,* London: The English Universities Press, 1938, p.160 (my italics).

29. de Visser and Kalman, 1976, p.12 (italics in the original).

30. Whiffin and Koeper, 1981, p.18.

31. *Cf.* Handlin, 1985, p.37; and see the whole of his discussion at pp.36-38.

32. Jefferson 'loved France and all things French' — not just architecture: Reynolds, 2009, p.95. In fact, his own house, Monticello II (1796-2009) owed more to its 'humbler [Virginian] neighbours' than he liked to think. D. Upton, *Architecture in the United States,* Oxford and New York: Oxford University Press, 1998, p.23. So did his attitudes: the free-thinking advocate of human rights 'owned 100 black slaves'.

BRICK IN THE NEWS:
THE SOUTH BLOCKHOUSE, KINGSTON-UPON-HULL

The BBC2 programme 'Digging for Britain' on Sunday 5 February 2023 featured the excavations at the south blockhouse of the eastern defences of Kingston upon Hull. Here stonework, specifically a newel post from a spiral staircase, was being reused in the 1540s from one of the three religious establishments in the city, from none of which are there surviving remains. The question can be asked whether bricks from any of the three — the Augustinian Friary, which is the nearest, the Carmelite Friary near the Beverley Gate, or the extra mural Carthusian Monastery — were also recycled into the defences on the eastern side of the River Hull. The Dissolution of the Monasteries occurred between 1536 and 1540; The eastern defences were built in the early 1540s.

Brick for a Day:
Banbury, 25 September 2021

It may seem strange for the British Brick Society to visit to Banbury, a town on the edge of the Oxfordshire Cotswolds and close to the Jurassic ridge which typifies adjacent Northamptonshire. But the town has a proud history of brickmaking in the nineteenth and early twentieth centuries. Brickyards start up and when the clay source is fully exploited are then closed down. The two main areas of brickmaking activity were Grimsbury, east of Banbury Bridge, and beyond the Great Western Railway's line from London and Oxford to Birmingham, and to the west and north-west of the town. In chronological order, evidence is available for a number of enterprises active between 1832 and 1914 (see below).

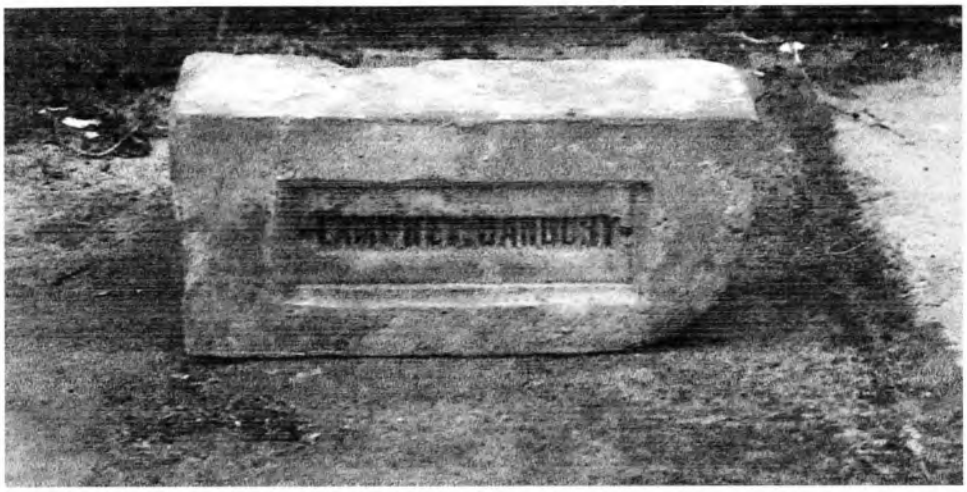

Fig.1 Brick made by Lampreys at their works at Grimsbury, east of Banbury Bridge and the Great Western Railway line.

1832 There were claypits on Broughton Road, Drayton Road, and Middleton Road; all on the west side of the town. At this point the cost of walling materials, whether stone or brick, were approximately equal. Houses on Constitution Row had brick fronts but rear walls of stone.

1840 On the west side of the town, Joseph Garratt, the builder of houses on Constitution Row, had a brickyard that probably was operating when he was building the houses on the north-west side of town.

1848 A temporary brickyard at Frankland's Kiln was opened for buildings and other structures the London & North Western Railway's line from Buckingham to Banbury. This line closed after the Second World War and the station at Merton Street was demolished. Traces of the single-track line can be seen on the east side of the Great Western Railway's line south of Banbury Station. This shows up as a continuous but not very straight raised bank across and fields and alongside field edges on the left-hand side of the main line when going south.

Mid-C19 A claypit in Grimsbury between Causeway and Middleton Road was opened by William Wilkins, a builder and brickmaker. Wilkins was the builder of houses on the north side of Causeway, Duke Street, Castle Street (19 houses), Marlborough Road, Gattrick Road, and Dashwood Road. Many of these houses were small and condemned by the medical profession. These houses were replaced at the end of the nineteenth century.

Mid-C19 William Aris, a builder and brickmaker, had a brickyard in the Bath Road area. He built houses on Bath Road, Windsor Street. Broad Street, and Grove Road.

Mid-C19 There was a brickyard on Bath Road for the Gillett family estate. Houses on Park Road, Queen Street, and Bath Road were built using bricks from this works.

1882 Liassic clay on Grove Road was exploited at two brickyards on Broughton Road, one now called 'The Old Quarry'.

1899 Kimberley's brickworks was on the south side of Broughton Road.

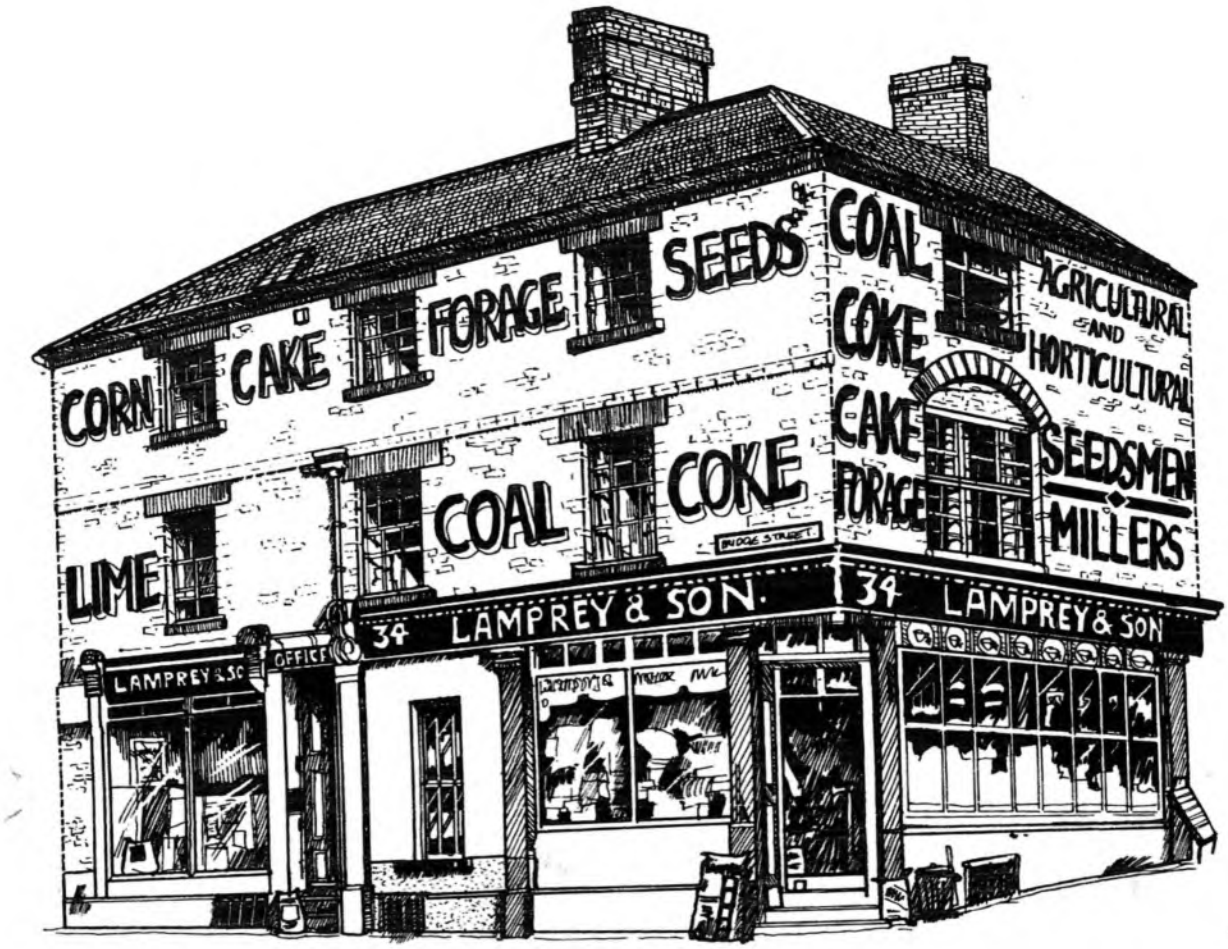

Fig.2 The shop and house of the Lamprey family in central Banbury, still with the trades of the family firm written on the painted brick.

In the late nineteenth century, John Lamprey and his son William Linnell Lamprey, diversified from their agricultural seeds and coal and coke business on the edge of Market Place (fig.2) into operating a brickworks in Duke Street, Grimsbury, east of Banbury Bridge and the Great Western Railway's line. They were exploiting a seam of Oxford Blue Clay, from which Fletton bricks were made, Their works produced 12,000 bricks a day and in 1905, the year's production topped one million bricks. The works closed in the early twentieth century. Later the open clay pit, which was not waterlogged, became an unofficial children's adventure playground.

The building once occupied by Lamprey's seed merchants is in whitewashed brick in Flemish Bond: the lettering on it proclaims what the firm traded in: 'corn, cake, forage, seeds, lime, coal, and coke'. The firm also proclaimed itself as 'Agricultural and Horticultural Seedsmen and Millers'.

Lamprey's building is at the eastern edge of the Market Place. At the western edge, Market Place gives way to a short road north, Cornhill. The morning walk began with the two most outrageous brick buildings in Banbury, nos. 24 and 23 Cornhill (fig.3). They were built in 1866 as a double eyecatcher for the adjacent Castle House, no.25 Cornhill. W.J. Douglas, its mid-nineteenth-century owner, wanted them 'to present an ornamental appearance when viewed from his grounds'. They certainly do that! Both are in banded polychrome *brickwork, mainly yellowish white but including much red and much blue/black.* No.24 is a house, and no.23 a shop for a spirit merchant, a Mr Coleman, for whom living quarters were provided above the shop. Of two storeys and attics under pavilion roofs, originally with wrought-iron finials, they are quirky. No.24 even has a corner turret on a fat, stone column. There is a lot of stone, now painted white, in the decorative leaves over windows and doors: the shop front exemplifies this.

Fig.3 Nos. 24 and 25 Cornhill, in polychrome brickwork: no. 24 was a shop, but no.25 was a private house. Both were erected as eyecatchers for the owner of the nearby Castle House, W.J. Douglas.

Their designer was William Wilkinson (1819-1901) of Oxford who was usually quite sober but as the houses he designed on the St John's College estates in North Oxford show could exhibit wilder tendencies but in Oxford nothing quite like this! The majority of the brickwork in these two buildings is in Flemish Bond but there are places where Header Bond is used. Alan Brooks, following Jennifer Sherwood, calls these buildings 'a parody of Butterfield's Keble College', [Oxford], (1868-82: William Butterfield), despite the fact that not a brick had then been laid at the Oxford College in 1866 when they were erected.

Castle House, once a public house but now unoccupied, is ironstone ashlar and was probably built in the middle of the eighteenth century. It is a double-pile house of seven bays and two storeys. Stucco was applied in the nineteenth century to the rear wing. The shaped gable above the bow window may indicate the incorporation of part of an earlier house.

Castle House and the two houses were within the curtilage of Banbury Castle, built for Bishop Alexander of Lincoln (in office 1123-1148) who gave the black Tournai limestone font to Lincoln Cathedral. The Market Place north side follows the outside of the outer ditch. The castle was destroyed in 1648 following the English Civil War. Later the Oxford Canal was cut through the castle's baileys.

No.22 Cornhill is a late-eighteenth-century brick house of three storeys and five bays. The façade is a replacement in red brick laid in Stretcher Bond. Just before Cornhill becomes Market Place, no.26 Cornhill was built as Gilletts Bank in 1847. Stone-built, it has a rusticated ground floor with three windows above, the central one of which has a pediment.

The west side of Market Place contains buildings both distinctive and distinguished. A distinctive brick one was built in 1905 for Joseph Bush & Sons. There is a big, elaborate but original shop front on the

ground floor tiled in green. There are two cartouches of brick with lettering: one says 'J B and S' and the other 'AD 1905'. Above these are two plain cartouches. The three-storeyed building is red brick laid in Flemish Bond. The two upper floors have much stone in the window surrounds. The building's corners are chamfered, so that the two upper floors of the street frontage reads: chamfered bay with single window, main front is single window, double window, single window, and then another chamfered bay; the windows in the two chamfered bays are narrower than those on the main front. The shop fronts on the ground floor look contemporary with the building's construction.

The timber-framed building covered with roughcast with the semi-circular bows on the first floor was built in the seventeenth century: it was the Unicorn Hotel, nos.17-20 Market Place. It has three large bow windows on the first floor beneath gabled dormers. The carriage entrance, to the north, has gates with a lion and a unicorn, the supporters of the English royal arms. They have a date of 1648, which probably indicates the date of the building, or re-building following the fire of that year.

Near the south end of the west side of Market Place is the former Central Corn Exchange (1857: James Murray) but the façade is not original. It was rebuilt in brick in 1880 in a French Renaissance style. Dominating the centre and above the entrance is a relief of the sun in splendour and sheaves of corn, testifying to its earlier incarnation. The 1880 frontage is in red brick. The hipped roofs are punctuated by undulating dormers with gable fronts. This is a building which has undergone several transformations. It was the Palace Theatre for many years before becoming Blinkthorn's Cinema. For a while it was the Palace Arcade; it became the local branch of the Midland Bank (now, of course, the multi-national HSBC). The irony of the banking name change is that in the 1920s the Midland Bank was the largest banking corporation in the world; Hongkong and Shanghai Banking Corporation was then a part-owned subsidiary.

Just north of Lamprey's building is the now closed branch of Marks & Spencers; it closed in December 2020. The rest of the store went back into the shopping centre. The frontage is in dark brown brick laid in Stretcher Bond. Adjacent is the former 'Wild Lime' public house in a yellowish-white brick laid in Flemish Bond for the front wall. The windows and doors are encased in thick uprights and lintels of stone. The side wall has been rebuilt in red brick.

Next to former 'Wild Lime' public house is one of the entrances to the shopping centre (1999-2000: Lyons Sleeman Hoare); externally, this is in red brick in Stretcher Bond but inside a straw-coloured brick is used, again in Stretcher Bond. Adjacent to the shopping centre is the Bus Station, with its south side a mixture of old and new: the old replaces the back of the Temperance Hall and the new is the back of Banbury Health Centre. It is in mixture of yellow brick panels and a main structure of red brick, all in Stretcher Bond, but there is a ground-floor corner in Header Bond. The Temperance Hall was completed in 1876 to a design by Samuel Ingall of Birmingham. It is of red brick laid in Flemish Bond with Bath stone dressings and has three storeys divided into six bays on the south side. At one point, it functioned as a Temperance Hotel, hence the advertisement for 'Baths Hot & Cold' on its west side. Continuing the hospitality theme, the ground floor is now partly given over to a restaurant.

Banbury Health Centre was built in 2009, in red brick in Stretcher Bond, and of three storeys. It echoes the style of is western neighbour.

On the south side of Bridge Street is a charity shop. Steel-framed of three storeys with large plate-glass windows on all floors and both the north and west sides, it was built in the second half of the 1920s as speculative venture for Messrs Humphries. Later it became the local Electricity Board's showrooms.

In the centre of the west side of Broad Street is the former Grand Theatre, which was always a cinema, although it could and did stage variety shows in the pre-Great War era and the 1920s. It was the first cinema in Oxfordshire to acquire the sound equipment to show the 'talkies', in this case *Showboat* on 21 October 1929. It continued as a cinema, from 1943 as part of the ABC chain, until 1968 when bingo took over under a variety of owners and managements. Later it became the Chicago Hard Rock Café. It is currently unoccupied.

The theatre opened in 1910 with 500 seats and closed on 13 June 1935 'for reconstruction and enlargement as a modern super cinema'. The reconstructed cinema reopened on 12 December. During the reconstruction the present façade was built and a new auditorium constructed which had 'nearly 1,000 seats'. The four-storey façade is now cemented and painted in an off-white colour with black accents. One change is that the fourth-floor balcony (for the projectionist to slip out for a cigarette or just get some air) has been glazed in at some point in the last five years.

The 1935 reconstruction was designed by Joseph G. Gomersall of the Manchester firm of Drury & Gomersall, who specialised in cinema design and layout, particularly for the Essoldo chain, of which this

cinema was once part. Much of the interior of his auditorium survives. The exterior, whose upper part is visible from George Street, is in red brick.

Two buildings of different periods were erected for Co-operative Societies. On the east side of Broad Street is the former Co-op Arcade (1933-34: W. Guest Hubbard of Luton). It is vaguely classical in detail and uses artificial stone from the frontage to Broad Street. However, the rear elevation, visible from a town centre carpark is in a reddish-brown brick in English Bond. The building on the north-east corner of Broad Street with George Street was built as a Co-op food store, as the moulded terracotta proclaims. The terracotta also covers the corner tower which has a copper dome. Built in 1908, the architect was A.E. Allen of Bedford. He could have been invited to design the building on the strength of his work at the Particular Baptist Chapel round the corner. The Co-op building is three storeys and has three bays to both the south and west fronts. The west front is much wider than the south, but the brick lettering, 'Cooperative Society', between the first and second floors on each frontage has been adjusted to take account of this.

Fig.4 Like many local banks, Cobb's Bank became part of the much larger Lloyds' Bank in the nineteenth century, but the 1780s premises remain largely intact.

Two buildings were examined on the narrow George Street whose pavement is equally narrow. On the south side is the Salvation Army Temple, of 1889-90 by J. Williams Dunford. There is a very wide front in dull red brick red brick with a the straight-sided gable having a shaped gable at the top of the frontage. The ground floor even has battlements, suggesting a fortress!

Opposite, on the north side is the twenty-first century extension to Lloyds Bank, built in a light red brick laid in Flemish Bond, seemingly without windows but with interesting dentil courses where the floors change. It was constructed in the late twentieth century. Lloyds Bank, High Street, was built as Cobb's Bank in about 1783. It is one of the earliest buildings in Banbury to be built mainly in brick. It is five bays and three storeys of brick with much stone in around the fenestration. The ground floor is stone. What appears to be the manager's house, of three bays and three storeys, is to the right. Both buildings are red brick in Flemish Bond.

The banker, Timothy Rhodes Cobb, was Mr Banbury during his lifetime. His grandson's Girth Factory of 1837-38, which made corsets was beside the Oxford Canal, was demolished in 1972. Combining banking with another trade, often brewing, was not uncommon in the eighteenth and nineteenth centuries. One thinks of the Lacons in Great Yarmouth and the Tawneys in Oxford. Like Mr Cobb, the Tawneys also had interests in canals.

The afternoon visit began with Marlborough Road, a street laid out in 1863. The street has exciting brickwork in one building and two others of interest, together with a significant stone building. The road runs north-west to south-east; for convenience the north-east side is termed the north side and the south-west side the south side. (Alan Brooks in *Buildings of England: Oxfordshire: North and West* uses the alternatives of west and east, respectively.)

On the north side begins with the former Oddfellows Hall, now used as the Masonic Hall, designed by local architect W.E. Mills and built in 1882-83 using a seventeenth-century style in orange-red brick laid in Flemish Bond with stone dressings to the quasi-Venetian window lighting the main hall. The brick is pitted suggesting a certain softness to the fabric. This part has a shaped gable.

The ground floor has an extension on the front, in red brick laid in Stretcher Bond, matching the two-storeyed building next door. This extension is extremely recent; it was added just prior to the Covid-19 pandemic of 2020 and 2021.

Almost next door is the present Public Library. The library was built as the Mechanics Institute in 1884, the two eastern parts, each of three bays, to which was added a further three bays in 1893 for the Municipal Technical School. W.E. Mills was the architect responsible for both parts. The outer bays are three storeys and contain separate entrances but the centre, which is pushed slightly forward, has only two floors. The building is of red brick laid in (*bond*) with ironstone dressings and the windows are a glorious mixture of mullions and transoms and oriels. Each group of three bays has its own gable. The staircases are original in cast iron.

Beyond the Public Library are brick-built terraces, each different in their decorative brickwork. The third one is a brick-built terrace of six houses (nos.18-23) of three storeys and a basement. Erected in about 1881, they may be by W.E. Mills. The chief interest is in the foliated brickwork used to great effect. A similar terrace can be found at nos.24-36 Albert Street and identical foliated brickwork adorns a double-fronted detached house on Oxford Road.

South Bar Street led to one of the four turnpike bars at the entrances to Banbury, hence the names North Bar Street, South Bar Street, and West Bar Street. Within the four bars, no turnpike fees were levied. South Bar was at the junction of South Bar Street with Bloxham Road and Oxford Road. The street has three non-Anglican churches, only one of which is in use as a place of worship. All three are on the east side of the broad, tree-lined thoroughfare.

The active one is St John's church for the Roman Catholic Church, the most southerly of the three. It was designed in 1835 by Hickman & Derrick of Oxford, meaning John MacDuff Derrick (*c.*1806-1861) who at the time when it was being built designed Holy Trinity church, London Road, Chipping Norton, for the same denomination, in a completely different style. This is an attractive Classical box in ashlar. St John's was constructed of Heyford Park freestone in a style reminiscent of the third quarter of the fourteenth century when the last manifestations of the earlier Decorated style were giving way in builders' concepts of the appropriate form of windows to the Perpendicular. The nave windows have Y-tracery; there are no aisles. Within six years, A.W.N. Pugin (1812-1852) had added the three-sided, apsidal chancel. The three-stage west tower has battlements and (renewed) pinnacles. Pugin also contributed the design of the ancillary buildings flanking the east end of the church, a school to the north and the presbytery to the south. The latter of 1839 has a stone façade in a Tudor style; the former was completed in 1846 to a L-shaped plan; additions were made in 1883 by W.E. Mills and in red brick between 1898 and 1900. The last is visible from Dashwood Road.

On the other side of Dashwood Road is Austin House, 24 South Bar Street, of three bays with the central one protruding. The orange red brick is laid in Flemish Bond. There are neat closers in the brickwork of the central bay. The porch is probably later. Between 1834 and before 1853, this two-storeyed brick house, the home of the brewer George Austin was also the local Baptist Chapel. Later the house became the offices of the solicitors Messrs Stockton, Sons & Fortescue whose nameplate survives within the entrance lobby.

On Dashwood Road is the former Ebenezer Chapel of 1877, successor to the Particular Baptist Chapel which was held in George Austin's house. The chapel has a white brick front in English Bond; the side walls are in red brick, also in English Bond. Paired lancet windows in brick to the side walls, more elaborate fenestration in stone on the street frontage. The building is now in industrial use.

At the northern end of the east side of South Bar Street, opposite Banbury Cross, is the former Congregational church (1856-57: W.M. Eyles of London) with a façade of Bath stone in a Greek Revival style with Doric columns. But the body of the church is of red brick but not visible from the street. It is now a pre-school establishment.

Fig.5 George Austin's house on South Bar Street also functioned as a Baptist chapel between 1834 and before 1853, prior to the building of the Particular Baptist chapel on land behind the house in 1877.

The west side of South Bar is predominantly or ironstone. While the buildings are mostly in commercial use, they were originally houses for the affluent. Many have seventeenth- or eighteenth-century origins even if re-fronted or re-fenestrated in the nineteenth century. Nos.43 and 44, an unequal pair of houses of 1890 have side walls in red brick. But no.45 is much older, probably dating from the late eighteenth century. At the south end of the west side of South Bar Street is a group of brick buildings. On the corner of Bloxham Road is a building of three storeys in buff brick in Stretcher Bond: two bays, set back face Bloxham Road, three bays form an angled corner, and four bays face South Bar Street. Adjacent to this is Bower & Bailey, a building in two parts: three wide bays to the south and five narrower bays to the north. Again, this is buff brick in Stretcher Bond. The south part may have been built at the same time as the previous building.

Savills, the estate agents, and one does mean 'estate agents', occupy no.38 South Bar Street, a red brick building of two storeys with the brick laid in Flemish Bond. There is a classical frieze below the eaves. The building is in two parts, owing to the fall in the ground. The upper part has a large half-hexagonal by in stone. No.37 South Bar Street is the premises of a chiropractor. It is in red brick in Flemish Bond. The wide half-hexagonal bay is of stone. No.36 South Bar Street is five bays wide of white brick in English Bond. Above the fanlight above the central entrance is a double half-circle of recessed brick. There are wide bay windows in brick to both the first and second floors.

Where the four bars meet is Banbury Cross and the sculpture echoing the verse, 'Ride a cock horse to Banbury Cross':

> Ride a cock horse to Banbury Cross
> To see a fine lady upon a white horse
> With rings on her fingers and bells on her toes,
> Sher shall have music wherever she goes.

Banbury Cross was erected in 1858-59 to commemorate the marriage of Princess Victoria, eldest child of Queen Victoria and Prince Albert, to Frederick, Crown Prince of Prussia. Designed by John Gibbs of Oxford, it follows the model of the surviving Eleanor Crosses and the Martyrs' Memorial in Oxford (1841-43: G.G. Scott). In two stages with a short spire, the figures of Queen Victoria, Edward VII, and George V were added in 1914, carved by Boulton & Sons, directed by Oxford architect T.G. Jackson. Alan Brooks calls them 'pompous'. In 2005, the statue of a 'Fine Lady on a White Horse' by Denise Dutton was placed on its Hornton stone plinth.

The meeting ended at two buildings south of the town centre: Banbury School and the Horton General Hospital. In the midst of a municipal housing estate of the 1920s is the former co-educational, selective Banbury Grammar School, now the 2,000-pupil Banbury School, a state comprehensive. Banbury Grammar School (1929-30: W.A. Daft) on Ruskin Road has a long façade: two storeys and twenty-one bays in all of

brick in English Bond with much stone trim especially in the window surrounds. The bricklaying in Flemish Bond is particularly fine. The three-bay centre is completely faced in stone. With a generous site, it was expanded in 1967 to form Banbury School for which many additions were built.

Horton General Hospital, the Horton as it is known locally, has been threatened with closure and down-grading in the past three years; now rebuilding to much greater capacity has been suggested. If there is one building reminder of Banburyshire, the area of north Oxfordshire, south-west Northamptonshire, and south Warwickshire which sold its produce on Banbury market and in the two corn exchanges, and had other dependencies on the largest town for 15 miles, it is the Horton. In contrast to the origins of many hospitals as the local workhouse, the Horton was always a hospital; it was given to the town by a Miss Horton, hence the name, for the benefit of all its inhabitants.

The original brick buildings of the Horton were by Charles H. Driver of London and were built between 1869 and 1872. The red brick with blue bands accompanied by stone dressings. These face Oxford Road behind a screen of mature trees. The battlemented tower and gable mark the asymmetrical centre of an otherwise symmetrical building; each side has a two-storeyed block with a hipped roof with a corridor to a single-storeyed wing reaching back, one for men, the other for women.

Twentieth-century additions include the former Nurses Home of 1937, designed by Cecil Burns of Tunbridge Wells, replacing a smaller home of 1897. Queen Victoria, when asked what she would like for a Diamond Jubilee gift in 1897, requested Nurses' Homes: surviving buildings are often in new uses: that in Salford, Lancashire (now the Working Class Library). George V had the same thought when he was asked when approaching his Silver Jubilee in 1935. Another example of this period faces Alexandra Gardens, Great Yarmouth, just below the site of the former town centre General Hospital: from what I heard from a former resident, the regime in the mid-1960s was not greatly different to a university hall of residence in the period.

DAVID H. KENNETT

Brick Query

The article by Peter Hounsell, 'Up the Cut to Paddington', *British Brick Society Information,* **89,** February 2004, contains references to Cowley Stock Bricks. I would be interested to know if there are any well-known buildings using these and if there are any buildings erected using these which are in the London Borough of Hillingdon.

Also was there any variation between these and the products of the Uxbridge/Hayes brickfields.

Replies to

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with carbon copy to David Kennett.

Fambrini and Daniels: Manufacturers of Imperishable Concrete Stone, Excelsior Stone Works, Monks Road, Lincoln: A Correction

Arthur Ward

INTRODUCTION

A mistake appears on pages 32 and 33 in the article, 'Fambrini and Daniels: Manufacturers of Imperishable Concrete Stone, Excelsior Stone Works, Monks Road, Lincoln', *British Brick Society Information,* **150,** June 2022, pages 23-36. The content of three paragraphs has become muddled and therefore difficult to follow and understand. The correct layout of these three paragraphs is as below.

The Editor of *British Brick Society Information* apologises for the error.

CORRECTED CONTENT

One early commission in Lincoln was for the supply of concrete and artificial stone for the steps of the Montague Street Bridge, erected in 1878 over the river Witham at the end of Montague Street and designed by the City Surveyor, Mr Henderson. The contract was for £369 10s. Messrs Porter and Co. of Lincoln were the Contractors; Mr Fullalove executed the masonry work. There are ten steps at each end of the bridge, half being Yorkstone, the remainder artificial stone as supplied by Fambrini and Daniels. At the time it stated that, 'the merits of the latter will be fairly tested.' Two other local commissions were for the Odd Fellows' Hall building on the north side of Unity Square designed by William Mortimer where Fambrini and Daniels supplied the stonework for the ornamentation on the elevations as well as for specific architectural elements. At Bracebridge Hall, for Francis Clarke (1842-1888) of the world famous 'Clark's Blood Mixture' — an alexia that brought him fortune and sold world-wide — designed by Albert Vicars, Architect (151 Strand, London) with construction on site overseen by superintendent local architect William Mortimer, where the use of Fambrini and Daniels artificial stone elements embellish its façade. Both buildings are still viewable today, the latter listed grade II.[1]

Looking at the Architects — Watkins; Mortimer and Drury — as used by Fambrini and Daniels in respect of submitting applications to The City of Lincoln Council for their business, and the timespan, one can assimilate detailing used in other buildings they designed to compare detailing and possible used of Fambrini and Daniels products. We know that William Watkins favoured terracotta for detailing on his building facades and that on Mortimer designed buildings architectural detailing used 'artificial stone': their house – 95 Monks Road (1876); workshops at 85 Canwick Road (1899); Odd Fellows' Hall on Unity Square (1878) and Bracebridge Hall (1883). The latter two displaying a 'cornucopia' of the many architectural details the company made.

William Mortimer's practice ledgers exist. Looking through these you can identify several properties: The Liberal Club on St. Swithin's Square and Baptist Church, Mint Lane, which could be assessed for architectural detailing supplied by Fambrini and Daniels, along with a vast amount of application for terraced housing in the city passed through their practice. Unfortunately, many of Mortimers' buildings have been demolished or lost through fire damage: The Temperance Hall, St. Swithin's Square; Stands at the Racecourse and other Masonic Rooms; memories consigned to photographs or archived drawings. A challenge for another research project to address how extensive the use of 'artificial stone' has been used?

NOTES AND REFERENCES

1. Reference number: 1388710; listed, 2 August 1989 as Grosvenor Hall Private Nursing Home.

Brick for a Day:
Ibstock Brick's Lodge Lane Factory, Cannock, West Midlands, on 9 November 2022

Michael Chapman

INTRODUCTION

Members of the British Brick Society visited the Lodge Lane Factory, Cannock, West Midlands, of Ibstock Brick on 9 November 2022. This was the second post-pandemic visit of the society to a brickworks. Twelve members and guests attended.

This area of Staffordshire has a long history of brick and tile manufacture with the principal raw materials of coal and clay being readily available. The clay type is Etruria Marl, a unique material whose chemical properties produce, when fired, not only a fine red colour, but most importantly enabling the manufacture of a traditional of clay building products known as 'Staffordshire Blue' The firing process required to develop the 'blue' colour also produced a hard and durable brick which became the material of choice used in the railway construction boom of the nineteenth century.

As demand for this type of brick grew, the works already established benefitted from the canal and later railway network which provided the vital transport links to all parts of the country. Whilst both the original brick and tile works and the collieries have long ceased production, there are still extensive reserves of Etruria Marl which now support several brick and tile factories producing very high quality red and blue facing bricks and roof tiles.

The Lodge Lane factory was opened in 1991 by Tarmac Brick Ltd, and specifically built to produce Staffordshire Blue facing and engineering bricks using modern tunnel kiln technology, within a factory environment, to successfully achieve what had hitherto been only possible using traditional downdraught kilns. At the time Tarmac also operated the nearby Hawkins' Roof Tile factory, making the available knowledge and experience an important factor in deciding to open a new brick plant. The Tarmac brick business was bought out by Ibstock in 1995, with the Hawkins business and range of clay tiles produced by Marley Roof Tiles, but with production based at Keele, North Staffordshire.

Fig 1 Sculptured Commemorative Plaque

HISTORY OF BRICKMAKING IN THE CANNOCK AREA

As a very brief history of brick and tile making in the area, the maps below give a snapshot of the considerable industrial effort and associated transport links developed in a relatively small geographical area.

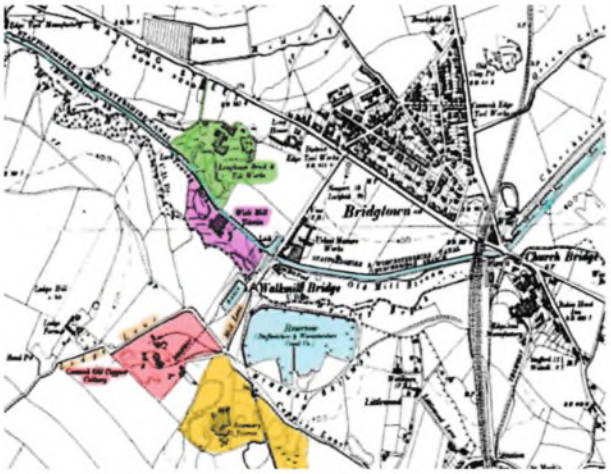
The left-hand Ordnance Survey map of 1900 shows the significant brick and tile industry that existed in the area between the Watling Street and Cheslyn Hay and on the right a modern aerial shot showing Lodge Lane factory, highlighted yellow and the adjacent M6 Toll route. The colours on the 1900 map show both brick and tile works and colliery.

- Green Longhouse Brick and Tile Works, owned by the Hawkins family.
- Mauve Walkmill Tileries, owned by GW Lewis.

- Ochre Cannock Old Coppice Colliery, known locally as Hawkins Colliery as owned by the Hawkins family.
- Blue Line of the Staffordshire and Worcestershire canal, with associated basins and reservoir.
- Yellow Rosemary Tile Works owned by G.W. Lewis. This business was eventually bought by Redland PLC.in 1984. The site supplies clay to a modern clay roof tile factory.

The principal railway route is shown on the right-hand side of the 1900 Ordnance Survey map being a section of line operated by the London and North Western Railway, all connected by a network of sidings to the colliery and works.

The factory itself (yellow highlight) is built on part of the old Hawkins' Colliery site, with the, now capped, main shaft being in the stockyard adjacent to the M6 motorway. The red arrow is the present clay quarry for Rosemary Tiles.



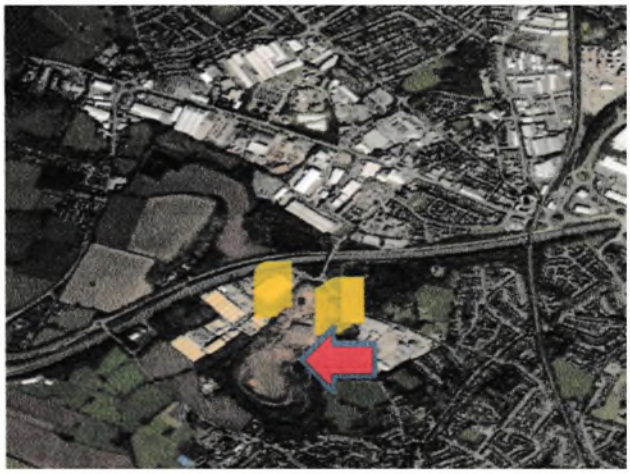


Fig.2 Left The 1900 Ordnance Survey map of the area around Lodge Lane, Cannock, West Midlands.
Fig.3 Right A modern aerial photograph of the same area.

THE BRITISH BRICK SOCIETY'S VISIT

The modern Ibstock site is home to both the production facility and a sales office providing sales and customer service for the range of bricks and special shapes manufactured on the site.

Having had a welcome cup of coffee and introduced ourselves, we were taken on a factory tour to see the overall production process. The factory was built without an adjacent clay source as Tarmac already owned a quarry at Redhurst, which is adjacent to the Cannock Service area on the M6 and about 3 miles away.

At the quarry clay is won during the summer months, and built up into layers, of clay incorporating sand to reduce the clay density. Each stockpile contains 44,000 tonnes of material. Several stockpiles are built so that they can be left for some nine months to sour the clay prior to use.

All the clay is delivered to the plant by road vehicle (fig.4) and is tipped into a covered storage area (fig.5). The storage area consists of several bays which are used for both the incoming material and for the prepared clay prior to delivery to the making plant.

All the standard product range is made by the extrusion process, with the standard brick having a characteristic triple-hole perforation.

Control of moisture content is a critical part of the process, so several bays of the storage area are used to allow the clay to become homogenised an achieve a consistent moisture content. The material is then delivered by box feeders and conveyors to the preparation plant. Prior to extrusion an organic clay conditioner is added along with manganese dioxide. The former reduces the amount of water added to the extrusion phase, the latter to assist with the blue colour of the fired product.

Fig.4 Clay from Redhurst Quarry about to be tipped.

Fig.5 Left Clay storage bunkers.
Fig.6 Right CCTV camera screen monitoring the clay preparation process, with the centre piece being the wet pan where all the hard work of crushing and grinding is done.

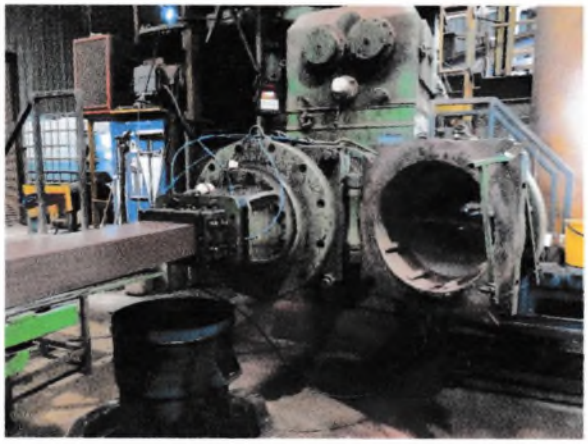


Fig.7 View of the extruder pressure head and die forming the column, with a second pressure head being prepared for a changeover. The second head shows the bridge bar dissecting the oval section. It is this bar the supports the triple-perforation set which the clay flows through to create the perforations contained within the clay column. The internal bars at the front of the rings act as a brake on the rotational movement of the clay within the extruder barrel and assist with clay compaction prior to exit from the extruder mouth. This whole arrangement must be precisely set up to minimise the risk of lamination within the finished brick.

The standard brick is extruded into a continuous column, then automatically cut into the standard brick size prior to the individual bricks being palletised and sent to one of a bank of chamber dryers. The drying cycle is 48 hours with the principal heat source be from recycled hot air from the tunnel kiln.

Whilst standard brick production is happening, a small identical line is used to manufacture the variety of special shapes that are an important part of the factory's range (fig.8). Special shapes are either extruded as the final shape or cut into larger blocks (fig.9) which are then expertly hand cut and fettled. The special shapes go into a much slower drying sequence, with the larger blocks taking several weeks to dry. The shapes are then loaded on to kiln cars to be fired in one of two intermittent 'crocodile' kilns.

Fig.8 Left General view of the specials' extruder, with the operators changing a die from the selection of shapes on the table.

Fig.9 Right Oversize blocks of extruded clay with the die box used to hand cut to actual size.

Fig.10 Left A general view of an unloaded kiln car,showing the unusual pedestal refractory deck design,which ensures that the development of the blue colour is even.In the background aone of the intermittent kilns has its hood raised from a hinge arrangement at the rear and giving it the appeaance of the jaws of a crocodile.

Fig.11 Right A kiln car being unloaded,sorted into best and scrap, with the bricks being packed.

This whole process is labour intensive with very exact standards of quality being achieved. Returning to the main prodcution line and with the bricks being dry, they are then processed through an automated setting machine for placement onto the the tunnel kiln cars.

The original tunnel kiln was replaced in 2017 at a cost of some £8 million and was necessary as the kiln atmosphere in continuous blue brick production can be very aggressive in breaking down the refractory lining of the walls and roof of the structure. The company decided to completely replace and incorparate newer design technology that would improve quality and reduce running costs.

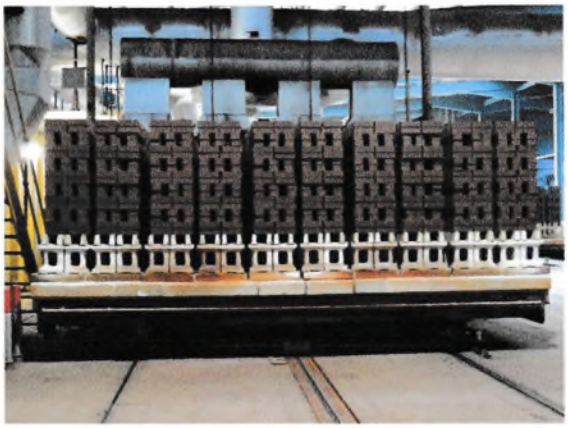


Fig.12 Left An empty kiln car being processed through the setting machine.
Fig.13 Right A full car set with dry green bricks en route to the tunnel kiln. Note that the bricks are set flat to ensure the full faces achieve the correct blue colour. The flat set bricks have a thin layer of sand between them so as to minimise the bricks sticking together.

The kiln contains 27 cars with the firing cycle is acheived over three days producing nine cars of fired product per day. The kiln also incorporates a pre-heater containing three cars to ensure that as each car enters the kiln proper, it is at 160 degrees C.

Firing blue bricks in a natural gas fired tunnel kiln requires an exact control of moisture content of the green brick entering the kiln which must be less that 1% so as to avoid cracking or worse shattering in the kiln.

Etruria Marl clay is rich in iron oxide which in an oxygen rich kiln atmosphre fires red.To produce a blue colour the amount of oxygen must be restricted or 'reduced' by introducing carbon monoxide, CO, at the latter kiln zone which is at the maximum temperature of 1098 degrees C. The reducing kiln atmosphere changes the iron oxide into magnetite, a compound of iron which is blue rather than red. The inclusion of the manganse dioxide into the clay body at the extruder assists with this colour development.

Fig.14 Left The new kiln project was called 'Blue Boy' with a plaque to commemorate this. The cream bricks that form the outside walls of the kiln came from Ibstock Cattybrook factory near Bristol.
Fig.15 Right General view of the rick stockyard with an Ibstock-liveried vehicle in process of being loaded.

Once the fired bricks leave the kiln the bricks are removed and selected via a semi automated dehacker which produces packs of 280 bricks (fig.15). Packs are not 'polywrapped' unless the custome specifies this.

In conclusion, Lodge Lane factory produces a range of traditional Staffordshire Blue bricks and complimentary special shapes to a very high-quality standard using modern methods of continuous manufacture.

The British Brick Society is grateful to Ibstock Brick, Ian Pilsbury and his staff for affording us the time for a most informative visit.

ACKNOWLEDGEMENTS

Figures 2 and 3: Maps courtesy of the National Library Service of Scotland, NLS Old Maps. Editing courtesy of BBS member Martyn Fretwell. For further information on the history of brick making in the wider Cannock area see 'The Named Bricks Blog' by Martyn Fretwell. All other photographs from the Mike Chapman Collection

BRICK IN THE NEWS: THE ROYAL CORNAWLL MUSEUM

The Royal Cornwall Museum, River Street, Truro, was originally built in 1845 as the Truro Savings Bank to a design by Philip Sambell and was adapted by Sampson Hill of Redruth as the Royal Institution of Cornwall in 1912-14, with an extension containing the main hall built to the same architect's design during the Great War. The building with a classically-inspire façade opened in 1919. In 1997-98, the museum was extended to encompass the almost adjacent former Baptist chapel of 1849-50, also by Sambell, with a link designed by Poynton Bradbury Wynter Cole.

Until financial year 2022-23, the museum has largely depended on grants from Cornwall County Council, a unitary authority, for its funding. On 9 July 2022, *The Guardian* reported that funding for the museum from Cornwall County Council was being completely withdrawn, something which seems to be a case of low-hanging fruit being discarded. We hope that new sources of long-term funding can be quickly found.

The museum has unique collections of Cornish artifacts, including a substantial collection of bricks made in Cornwall.

For the building see the brief account in P. Beacham and N. Pevsner, *The Buildings of England: Cornwall*, New Haven and London: Yale University Press, 2014, page 671, which makes no comment on the material used in the side and rear walls of the various parts of the building: the façade is granite ashlar. The newspaper article has a photograph of an interior galleried exhibition room.

For brick, its manufacture and uses in Cornwall see the volume by two deceased BBS members: John Ferguson and Charles Thurlow, *Cornish Brick Making and Brick Buildings*, St Austell: Cornish Hillside Publications, 2005.

D.H. KENNETT

Received for Review

Peter Hounsell,
Bricks of Victorian London: A Social and Economic History,
Hartfield: University of Hertfordshire Press, 2022,
xii + 284 pages, 39 black-and-white illustrations,
ISBN 978-1-912260-57-7, paperback, due April 2023,
Price, paperback, £18-00.

A flyer for this important book by BBS member, Peter Hounsell, is included in this mailing. A review will appear in a later issue of *British Brick Society Information.*

Alexander R. Brondarbit,
Soldier, Rebel, Traitor: John Lord Wenlock and the Wars of the Roses,
Barnsley: Pen & Sword, 2022,
ISBN 978-139-900347-6
Price, hardback, £19-99.

A review of this work will appear in a future issue of *British Brick Society Information* The review will focus on Wenlock's building activities in the medieval parish of Luton, Bedfordshire.

BRICK IN PRINT

Between October 2021 and October 2022, the Editor of the British Brick Society has received notice of a number of publications on brick and its uses of interest to members of the British Brick Society. 'Brick in Print' has become a regular feature of *BBS Information*, with surveys usually two or three times a year. Members who are involved in publication or who come across books and articles of interest are invited to submit notice of them to the editor of *BBS Information*. Websites and television programmes may also be included. Unsigned contributions in this section are by the editor.

D.H. KENNETT

Clive Aslet, 'Charity Begins at Home',
Country Life, 9 March 2022, pages 70-74.

The long subtitle reads:

> Built for the clergy, the military, retired estate workers, and most commonly, for the poor, almshouses are as important today as they ever were.

As one who is compiling material for a prospective book, *To Die in the Workhouse,* it is clear that almshouses have played and continue to play an important role in housing the retired, the infirm, and the dying, although the latter has largely been taken over by the hospice movement.

This article has five unattributed photographs, including a full-page rendition of the brick gatehouse of Abbot's Hospital, Guildford, Surrey (page 72); the hospital, a common name for an historic almshouse, was founded in 1619 by George Abbot, an early-seventeenth-century Archbishop of Canterbury, 'out of my love to the place of my birth'. The three-storeyed gatehouse, with four corner towers, has Abbot's arms incongruously placed above the elaborate entry of stone. Windows with mullions and transoms are also of stone; those on the ground floor complete with hood moulds.

Not all almshouses are so large as that at Guildford: the Fishermen's Hospital, Great Yarmouth, Norfolk, is more modest, originally single rooms for ten 'decayed fishermen with their wives if still living' are less than half the height of the Guildford building and they include attics with dormers: the number of 'decayed fishermen' accommodated has gradually been reduced over the last three centuries as the buildings have been upgraded to incorporate more modern requirements. The buildings of the Hospital of St John without the Barrs at Lichfield, Staffordshire, are single storey.

Most elaborate of all are the timber-framed cloister of the Military Knights of Windsor, founded in 1348, with the Order of the Garter and its chapel, St George's Chapel in the west bailey of Windsor Castle, for those wounded at the Battle of Crécy, Equally monumental is the Royal Hospital, Chelsea, for retired soldiers.

Michalis Bardanis, 'Migrant Brick- and Tile-Makers from the Island of Kythnos in Athens during the First Half of the Twentieth Century: A Gender Perspective',
in Beatrice Zucca Micheletto, ed., *Gender and Migration in Historical Perspective,*
Basingstoke: Palgrave Macmillan, 2022, pages 451-484.

The article by BBS member Michalis Bardanis discusses a large group of inner migrant brickworkers from the island of Kythnos (Greece) who worked at the brickyards of Athens, from a gendered perspective. Interaction of both sexes and their agency are studied by scrutinizing their families and their extended social and labour networks. Several contextual-methodological aspects, such as seasonal or permanent work, male and female migration, labour division among men and women, hands-on experience, and managerial responsibilities, as well as notions like kinship, marriage, family ties, ethno-local networks, skills, assets, and dowry will be taken into consideration. The analysis is divided into five sections: (a) labour division and transfer of knowledge; (b) decision making process and the role of the dowry; (c) paternalistic management; (d) permanent settlement and ethno-local labour network of Kythnos; (e) integration process and external networks.

AUTHOR ABSTRACT

Oliver Gerrish, 'A Most Welcome Return: Radbourne Hall, Derbyshire',
Country Life, 9 March 2022, pages 58-63.

Radbourne Hall is a three -storeyed house of seven bays, with the central three pushed forward surmounted by a pediment: owing to both leaves and sinking into the gutter, the pediment is difficult to see in Paul Highnam's

photograph (pages 58-59). The ground floor is carefully-laid rusticated stone; the two upper floors are red brick, with stone surrounds to the fenestration: windows and the door on the entrance front have alternating triangular and segmental pediments. The stone is from a quarry at Kirk Langley, nearby.

It had been preceded by an earlier house, described as 'a ruin' in 1789, being neither occupied by the Pole family nor let. John Leland, in the 1540s, had described it as 'no great thing', a sixteenth-century equivalent of 'no great shakes'. The pole family had taken over the estate in the fourteenth century, so by Leland's time, already their house contained elements at least a century old. Through descent, sometimes by the female line, the Pole family are still there.

The present house was built in the early 1740s for German Pole; an account book in 1745 concludes: 'Mr Smith completed the house for £500 under the estimate, which he had the honesty to return'. Smith's workmen included Michael Bates, a brickmaker. The house may have been designed by Francis Smith of Warwick (1672-1738); the 'Mr Smith' in the 1745 document was his son William (1705-1747).

It was remodelled, internally, possibly by Joseph Pickford of Derby (1734-1782), for Sacheverell Pole. A service wing was built about the same time, extended in about 1865, and demolished in 1958. Other work in the twentieth and twenty-first centuries has involved interior decoration by John Fowler, and construction of an external staircase at the rear of the house to the design of Harry Moore Gwyn s part of a major restoration and redecoration of the building between 2017 and 2020.

Radbourne Hall was the recipient of the 'Restoration of a Georgian building award' given by the Georgian Group in 2021 (see below). Another account of Radbourne Hall is C. Hartwell *et al, The Buildings of England: Derbyshire,* New Haven and London: Yale University Press, 2016, pages 557-559, written before the most recent restoration work.

John Goodall, 'Creating the Cambridge College: Queen's College, Cambridge, part I'
Country Life, 2 February 2022, pages 62-67.
John Goodall, 'A Gothic Revival: Queens' College, Cambridge, part II',
Country Life, 9 February 2022, pages 46-51.

Founded in 1446, Queens' was one of the earliest the Cambridge colleges to be built in brick and its plan provided the template for the multiple courts of sixteenth-century foundations, colleges such as Christ's (1505), St John's (1511-16), and Trinity (1546). Founded by land grants in 1446 from wealthy businessmen in Cambridge at the urging of the energetic priest of St Botolph's church, Andrew Dokett. Dokett became the President of the new institution, on 3 December 1446 taking over the corporate body of the existing St Bernard's College with four fellows. A new building plot, of some considerable size, was secured between the Carmelite Friary (the Whitefriars) and Silver Street, with frontages to the River Cam and Queens' Lane.

Early in 1448, Henry VI's queen, Margaret of Anjou, petitioned her husband that, unlike Oxford with The Queen's College, Cambridge University had 'no college founded by any queen of England hither toward'. She asked that the 'foundation and determination' of the new institution would be 'called and named the Queen's College of St Margaret and St Bernard' to provide for the 'conservation of our faith and augmentation of [a] pure clergy ... like as the two noble and devout Countesses of Pembroke and of Clare founded two colleges in the same university called Pembroke Hall and Clare,' Henry VI assented and gave a new charter to the college on 30 March 1448, with a writ from the queen nine days later authorising her chamberlain, Sir John Wenlock, to lay the foundation stone, which he did on 15 April 1448. On the same day Margaret issued a new charter for the college.

Contracts had already been issued for the carpentry of the main court and, separately, to provide the roof of the hall and equip it with benches, and to build the kitchen, pantry, and buttery. Final payment on the hall and kitchen contract was made on14 September 1450. It can be presumed that the main courtyard was also complete by then. Rapid construction implies greater financial resources than would be available to a beneficed clergyman.

Questions of responsibility for the design of Queens' and the choice of building materials — walls of clunch, a hard chalk, faced with high quality brick — suggest the involvement of men who worked for Henry VI at Eton and its sister college in Cambridge, King's, specifically Reginald Ely, the master mason at King's and a parishioner of Dokett's at St Botolph's church, and Robert Westerley, the king's master mason.

Whilst Margaret of Anjou had taken more than a passing interest in the college in the late 1440s, she seems to have been much less involved in the 1450s. Her rival, Elizabeth Woodville, queen to Edward IV, was highly supportive of the college, particularly in the 1470s, giving herself the title of the 'true founder' of the college in 1475 and promulgating new governing statutes. The college proudly displays her portrait in its hall; it shows her wearing the fashionable butterfly headdress.

In the third quarter of the fifteenth century, the establishment had grown from four fellows to twelve, and increased to eighteen in 1529. Also, the college was expanding physically; in the 1460s and 1470s, Cloister Court was built facing the Cam, and in 1544, the college bought the site of the Carmelite Friary for a garden. After the death of Henry VIII, Queens' became decidedly Protestant in its ethos and remained so during the reigns of Elizabeth I and James VI and I. A gallery for the president's lodging was constructed in the late sixteenth century; it was in existence in 1604. In 1616, a new, brick-built lodging range was constructed on the site of the Carmelite Friary to accommodate a membership of 230 fellows and undergraduates.

While its support of Charles I in the Civil War was not favourable to the college, in 1660, the president, Dr Martin, had those fellows appointed under the Commonwealth elected to the reconstituted college. Dr Martin also restored the chapel, lining it with 'cedar' panelling. There were major repairs in the early eighteenth century, culminating in the Mathematical Bridge over the River Cam, created by James Essex the younger in 1749 to a design by James Etheridge: it was replaced in 1905 to the same design.

Not being a wealthy college, the impact of the Gothic Revival and the Ecclesiological Movement could only be accomplished over a long period of time, beginning in 1845 with renovation of the original chapel and ending in 1891 with the completion of a new chapel designed by G.F. Bodley.

In the 1930s, Queens' crossed the river building more undergraduate accommodation with Cripps Court (1971-83: Powell, Moya & Partners) being in built in three stages. A new dining hall opened on 2 January 1979. And in 2012-13, James Campbell and Freeland Rees Roberts provided a porters' lodge on the west side of the Cam.

The first article has nine colour photographs of which five are of exterior brickwork. The eight photographs in the second article have only one external view, of the timber-framed President's Lodge. The photographs are acknowledged to Will Pryce in the second article but not in the first.

For other accounts of Queens' College see RCHM, *An Inventory ... of the City of Cambridge,* London: HMSO, 1959, re-issued in paperback 1988, pages 167-178, online at *british-history.ac.uk/rchme/cambs/pp167-178*; J.P.C. Roach, ed., *Victoria County History of Cambridgeshire,* volume **3,** London: Institute of Historical Research, 1959, pages 408-415, online at *british-history.ac.uk/vch/cambs/vol3/pages408-415*; and S. Bradley and N. Pevsner, *The Buildings of England: Cambridgeshire,* New Haven and London: Yale University press, 2014, pages 176-184.

John Goodall, 'Saluting the Georgian Spirit',
Country Life, 6 October 2021, pages 96-98.
Carla Passino, 'Ghost Town',
Country Life, 5 October 2022, pages 26-28.
Simon Thurley, 'A Shrine to Shakespeare: Theatre Royal, Drury Lane, Covent Garden, London WC2',
Country Life, 6 October 2021, pages 102-106.
John Goodall, "'A Georgian Celebration",
Country Life, 26 October 2022, pages 62-64.

This is a collection of articles which can be taken together. The Theatre Royal was the winner in the 'Restoration of a Georgian Building in an Urban Setting' section of the Georgian Group's 2022 Architectural Awards. Whilst the six photographs by Will Pryce in Simon Thurley's article concentrate on the revitalised interiors, it is worth noting that the rear and side walls of the theatre are brick; the façade is stucco with paint applied to the Tuscan columns. Carla Passino's contribution includes actors whose post-death shenanigans involved assaulting fellow actors when they are performing.

Every year, the Georgian Group makes up to ten awards for excellence in preserving a Georgian or Regency building or providing a new building in the spirit of the long eighteenth century (say 1689-1840). Brick buildings given awards in 2021 were Radbourne Hall, Derbyshire, for the restoration of a Georgian county house (see above); Wolverton Hall Folly, Worcestershire, as a new building in a Georgian context; and Gunton Tower, Norfolk, for restoration of a Georgian landscape. The Giles Worsley Award for new work in the Georgian spirit was given to Nithurst Farm, West Sussex.

Apart from the Theatre Royal, winners in 2022 included the former Holy Trinity church, Sunderland, County Durham, now called Seventeen Nineteen, reflecting the date when it was consecrated, winner of the re-use of a Georgian building category. Two buildings shared Diaphoros prizes, for buildings which do not easily fit elsewhere: the restored Shrewsbury Flaxmill Maltings and the Adrian Boult Building, a new music school for Westminster School, London SW1.

The brick buildings cited might suggest venues for a future visit by the British Brick Society.

Stephen Mileson and Daniel Miles, 'Restoring Mapledurham: A South Oxfordshire Estate and its Buildings, 1960-2019',
Oxoniensia, **87,** 2022, pages 105-126.

After the 1984 Annual General Meeting in Ewelme, Oxfordshire, members of the British Brick Society went to Mapledurham House, also in Oxfordshire, to view the house and some of the brik buildings on the estate. Their preservation and restoration was the life's work of Joseph John ('Jack) Easton, the owner of the estate.

The Mapledurham estate in south Oxfordshire is well-known for its rich and varied collection of historic buildings. Preeminent among them is the Grade I listed Mapledurham House, the largest Jacobean house in the county alongside which stands the surviving part of its medieval predecessor. Other nearby structures include the parish church and its estate-owned medieval aisle, a range of converted seventeenth-century almshouses, and a seventeenth-and eighteenth-century watermill. Outlying buildings include four medieval cruck-framed houses. The survival of these and other buildings and, in many cases, the lack of substantial alteration to them in recent centuries owes much to the longevity of the estate and the financial difficulties faced by its owners as Roman Catholic recusants. However, b the early twentieth century the future of the estate was uncertain and many of the buildings had fallen into decay. This article traces the contribution of John Joseph ('Jack') Eyton (1934-2019) to the continuation of the estate and in particular to the restoration of many of its historic buildings. The opening of Mapledurham House to the public and changes in attitudes towards the preservation of historic buildings are discussed.

The paper is illustrated with historic black-and-white photographs of the buildings before restoration and colour photographs of their appearance after restoration.

AUTHORS' ABSTRACT (the central paragraph) EXTENDED

David Olusoga, presenter, 'The People's Piazza: A History of Covent Garden',
BBC2, Sunday 13 November 2022

David Olusoga is best known for his 'History of a House' series. This was a one-off from the creation in the 1620s of London's first open square modelled on the Italian piazza to its present reincarnation as an area for leisure pursuits, taking in the three centuries from before 1672 to 1974 when London's principal fruit, vegetable, and flower market occupied the centre, at first in open stalls but more latterly in a purpose-built structure. It was one of three specialised wholesale markets serving the capital; the others were Smithfield for meat and Billingsgate for fish.

This was social history at its best. The piazza was designed as a high-class area with houses restricted to single-family occupation. But the lower classes moved in, first with entertainment at the Theatre Royal, Drury Lane, from whose stage Nell Gwyn flirted with King Charles III, then with harlots houses in brothels. Equally, the deprivations of the friendless and the destitute were not ignored: unshod flower girls who on some days did not eat and the abandoned orphan children, given names derived from where they were found, who died within a month or so of their baptism and few surviving to the second birthday. Such were the records of the registers of St Paul's church, Covent Garden.

There were many short accounts of persons connected with Covent Garden, usually with reproduction of a portrait. One name, however, that did not get a mention was Inigo Jones (1573-1652), responsible for the layout of the piazza, its early architecture, and the building of the church, 'the noblest barn in Europe' as it is known. And whilst the construction of the buildings was not the focus of the programme, it would have been helpful to have had reference to designers and builders. But the quality of the photography which allowed close-up views of the brickwork had much to commend it.

A minor quibble was that while the Covent Garden piazza was noted as the earlies London square, little mention was made of the role of successive members of the Russell family in promoting squares as the principal feature of the development of their other London estate which stretched from High Holborn to just south of Euston Road.

For accounts of the piazza at Covent Garden and the buildings in the vicinity are given detailed consideration in see F.H.W. Shepherd, ed., *Covent Garden* being *Survey of London,* volume **36,** 1970, and F.H.W. Shepherd, ed., *Theatre Royal, Drury Lane, and Royal Opera House, Covent Garden,* being *Survey of London* volume **35,** 1970, both available online at: *british-history.ac.uk/survey-london/* as individual volumes.

The buildings in the area might suggest a location for a future British Brick Society visit.

Rosie Paterson, 'Hidden in Plain Sight',
Country Life, 2 February 2022, pages 30-32.

Coming off the Hammersmith Flyover when driving into London on the A4, on the right is a terrace of eight artist's studios, the St Paul's Studios, designed by Frederick Wheeler for the fine art publisher James Fairless. Each property, approached by stone steps to a raised ground floor, consisted of a semi-basement flat for the housekeeper, an en-suite bedroom for the bachelor artist on the raised ground floor, and a well-lighted studio on the first floor. The eight studios have identical tall, north-facing arched windows, which make the terrace distinctive.

The terrace is distinctive in other ways. Externally of red brick, they have generous lashings of moulded and plain buff terracotta surrounding the porches at each entrance, beneath and beside the lower half of each studio window, beneath the eaves, and between the studio windows. This was the absolute self-confidence of 'the Empire on which the sun never set', in the aftermath of the Congress of Berlin (1888). The Talgarth Road studios were built in 1891.

But these were not all idyllic. For the men to whom they were let, bachelorhood was the absolute norm: the merest whiff of matrimony being in the air and the lease was terminated instantly. Conditions have changed somewhat in 2022. Some houses still retain an artist's studio: James Vaulkhard is one such owner and his neighbours include other artists, Isabella Watling, Clare Shenstone, James Hayes, and Christabel Blackburn, and Marcus Barran, an architect.

St Paul's Studios are considered in B.K. Cherry and N. Pevsner, *The Buildings of England: London 3: North-West,* London: Penguin Books, 1991, page 251 with plate 63.

British Brick Society Information: a future 'Brick in Yorkshire' issue

The British Brick Society will be holding its 2024 Annual General Meeting in Kingston upon Hull in June 2024. To coincide with this meeting, it is suggested that *British Brick Society Information,* **156,** June 2024, should have a strong bias towards articles on 'Brick and its Uses in Yorkshire'. It may include articles and notes on aspects of brick manufacture and brick buildings in the Lincolnshire part of Humberside and County Durham.

Members who feel that they could contribute to an issue of are invited to contact the Editor, *British Brick Society Information,* by post at 7 Watery Lane, Shipston-on-Stour, Warwickshire CV36 4BE or by email at *davidkennett510@gmail.com,* preferably the latter, and hopefully at or before the Annual General Meeting in Bridport on Saturday 17 June 2023, and to submit completed articles and notes on or before Wednesday 27 March 2024. Early submission would be appreciated as would submissions from new and occasional contributors to the society's journal.

DAVID H. KENNETT
Editor, *British Brick Society Information*

NOTES ON CONTRIBUTORS

MICHAEL CHAPMAN is Chairman of the British Brick Society. He spent his working life in the UK Brick Industry, gaining a range of professional qualifications enabling him to work in technical and managerial roles and gaining expertise in all aspects of brick production and general management. Since retirement, he has remained active as a consultant, working on environmental, training, and quarry projects. He also remains active in the industry's professional institution, the Institute of Materials, Minerals and Mining, being a Fellow of the Institute and through it a Chartered Environmentalist. His principal interests lie in all aspects of both historical and modern brick manufacture and the application of brick in the built environment and as a contributor to *British Brick Society Information.*

DAVID H. KENNETT is the Editor of *British Brick Society Information.* A retired lecturer in Sociology, he holds degrees in Archaeology, in Construction Management and Economics, and in Technology and Society from Prifysgol Cymru, Bristol Polytechnic, and Salford University, respectively. His brick interests centre on the relationships between building patronage, the building patron's wealth, and the resulting buildings; applying construction management skills to the documentary evidence about buildings; and on the use of brick in religious buildings. His brick publications include studies of 'Brick and its uses to 1600' in France, Italy, and Spain for the multi-volume *Grove/Macmillan Dictionary of Art,* published in 1996, and revised contributions on the two last-named countries for the new online edition of 2016.

TERENCE PAUL SMITH (1945-2022) was trained in Philosophy and taught in schools in Kent for over twenty years. Before taking early retirement in 2007, he had worked on buildings and building materials with the Museum of London Archaeology Service for a decade and a half. A co-founder of the British Brick Society, he was its Chairman from 1986 to 2006 and again from 2009 to 2011. He was Editor of *British Brick Society Information* from 1983 to 1990. His numerous publications — mostly on bricks, tiles, brick buildings of all periods — include a consideration of brick in the western world after 1600 for the multi-volume *Grove/Macmillan Dictionary of Art,* published in 1996.

ARTHUR WARD is a retired architect and town planner, primarily for City of Lincoln Council. Initially working as an architect, designing numerous social housing schemes across the city, qualification as a town planner led to his role as Head of Heritage. Responsibilities included supervising work on listed buildings and scheduled monuments, overseeing conservation areas and listed building grant aid schemes; and later managing the City's Archaeological Unit. Since retirement he has been a member of the Lincoln Cathedral Fabric Advisory Committee. He continues his interest in conservation, researching the life and careers of local architects, builders, and manufacturers of building products.

Submission dates for future issues of *British Brick Society Information*

BBS Information, **153,** June 2023; please submit by Wednesday 12 April 2023, for distribution at the Annual General Meeting in Bridport on Saturday 17 June 2023.
BBS Information, **154,** September 2023: please submit items for inclusion by Wednesday 23 August 2023.
BBS Information, **155,** February 2024: please submit items for inclusion by Wednesday 13 December 2023.
BBS Information, **156,** June 2024: please submit items for inclusion by Wednesday 27 March 2024, so that the issue can appear before the society's Annual General Meeting in Hull on a Saturday in June 2024.
Please contact the Editor, *British Brick Society Information,* if you have any queries regarding these dates and would like a possible *short* extension thereto.

Thank you,
DAVID H. KENNETT
Editor, *British Brick Society Information*

BRITISH BRICK SOCIETY
MEETINGS in 2023

Saturday 20 May 2023
Spring Meeting
St Marylebone south of the Marylebone Road.
Beginning at the Royal College of Music, we shall examine buildings for nonconformist denominations, Anglican and Roman Catholic churches, Hertford House (home of the Wallace Collection), hospitals, and finishing at the Landmark Hotel (formerly Great Central Hotel).
Contact: David Kennett, *davidkennett510@gmail.com*
7, Watery Lane, Shipston-on-Stour, Warwickshire CV36 4BE

Saturday 17 June 2023
Annual General Meeting
Bridport
Meeting in Town Hall. With afternoon visit to the brick buildings of the town.
Contact: Michael Chapman, *Chapman481@btinternet.com*
8, Pinfold Close, Woodborough, Nottingham NG14 6DP

Saturday 23 September 2023
Autumn Meeting
Outer Birmingham
A walk from Shirley Station through Shirley and Hall Green ending at Sarehole Mill: many brick churches, a crematorium, various secular buildings, the mill inspired J.R.R. Tolkien.
Contact: David Kennett, *davidkennett510@gmail.com*
7, Watery Lane, Shipston-on-Stour, Warwickshire CV36 4BE

It is hoped to include two visits to brickworks in the 2023 programme: due to Covid-19 restrictions no brickworks was open for works visits in either 2020 or 2021. Visits to Alcester, Warwickshire; Evesham, Worcestershire; Abbots Bromley and the Ridwares, Staffordshire; Risley and Ockbrook, Derbyshire; Cardiff Bay; and Tewkesbury, Gloucestershire are being planned for future years.

The 2024 Annual General Meeting will be held in Hull. Details to follow nearer the date.

All meetings are subject to attendance at the *participant's own risk*. Whilst every effort is made to hold announced meetings, the British Brick Society is not responsible for unavoidable cancellation or change.

Full details of future meetings will be in the subsequent BBS Mailings
The British Brick Society is always looking for new ideas for future meetings.
Suggestions of brickworks to visit are particularly welcome.
Offers to organize a meeting are equally welcome.
Suggestions please to Michael Chapman, 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