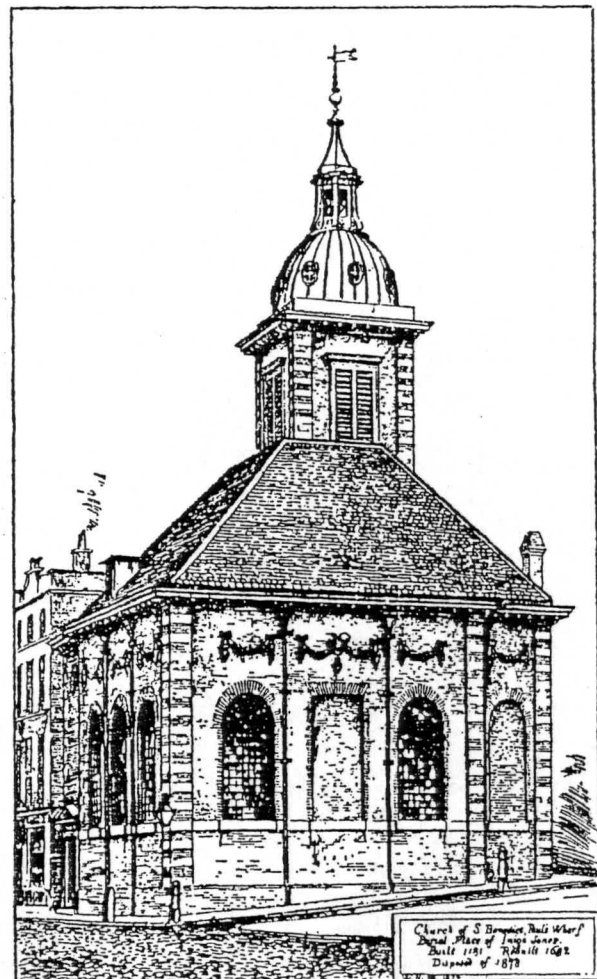


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Cover Illustration:

Drawing by W. Niven of the church of St Benet, Paul's Wharf, City of London. The church and its brickwork are considered by T.P. Smith in this issue of *British Brick Society Information*, pages 9-18. The church was the first of those visited during the society's Autumn Meeting.

Editorial

"Brick is Backward": a Curse of the Twentieth Century

Glass brings us the new age
Brick-culture does us nothing but harm

The final phrase of the quotation from Peter Scheerbart serves as another voice in the litany from the twentieth century's critics of brick, of whom the most notable must surely have been neither an architect nor an architectural historian but a political leader, Nikita Khrushchev. For the genial peasant with the big shoe, using brick was not merely technically backward but also pandered to bourgeois taste.

There is a crazy story of the construction of Akademgorodok, the scientific city in Siberia, in 1959. The area is one which is hot in summer and has temperatures well below freezing in winter. The thermal properties of brick are excellent in these extremes. However, when building had been in progress for a year, Khrushchev ordered the immediate replacement of brick by prefabricated concrete panels, technically inferior in these conditions. Chaos followed: the factory making the panels could only produce one-fifth of the quantity needed and other factories, several thousand miles distant, had to be mobilised to make the panels, with all the transportation problems that ensued.

Another tale, also from the Soviet Union, is of the concrete houses in Khazakstan which could not be lived in because they were too hot in summer and too cold in winter. They were replaced by brick houses, the traditional building material of the region.

Standardization is all very well but no profession nor any artist likes to be *told* how to do their job. Certainly the bio-climatic influences on architecture are site-specific and what will work in one place will not be appropriate for another.

Architects who wished to use brick or, for that matter, terracotta have suffered from the indifference of the critics, if not from the outright hostility expressed by Henry-Russell Hitchcock and Philip Johnson in *The International Style*:

from an aesthetic point of view, brick is undoubtedly less satisfactory than other materials, including stucco.

The judgement of 1932 remains set in concrete, steel and glass.

It is a sad fact of life that brick has often been so little regarded. I recently came across a beautiful book, *City of Stone Searching for the identity of Brescia*, by Antonio Rapaggi and Valerio Vitali. There are stone buildings in Brescia: Roman monuments, the lower part of the Pallata tower, the older churches, for example. But Brescia like other north Italian cities is a city of brick buildings, albeit many of them are covered with stucco, often now peeling away.

Brick environments in Britain have frequently been treated with scant respect. There is the remark by James Lees-Milne in *The Shell Guide to Worcestershire* on Kidderminster:

the aesthete will find little to interest him.

Excepting the churches, Kidderminster is largely a brick-built town dominated by the carpet mills, which themselves are built of brick. Architectural history is not only a question of art aesthetics; it also encompasses technology and economics, politics and the social milieu as expressed by literature.

One never knows quite what to make of a comment on a town, like that by Sir Nikolaus Pevsner on Burton-on-Trent:

There is plenty that is dreary at Burton, terraces of dreary brick cottages and big industrial buildings behind high walls.

The big industrial buildings are the "dreary breweries", to quote Pevsner's phraseology again. For these, the town is famous and the town's prosperity was (and is) built on them. Those that survive in 1999, twenty-five years after *The Buildings of England: Staffordshire* was published, are very fine indeed; they are built of brick.

Modern brewery premises are great upright steel drums; early versions were clad in concrete, but later ones, the majority, are exposed to the elements. They are functional without being attractive.

For the record, this observer did not find the town at all dreary. Indeed, the brick buildings are exciting in their uses of the material. Banded brickwork of blue engineering bricks on brewery offices of 1859-60; a set of shops, built in two phases (in 1893 and in 1903), with a surviving wyvern on the top of a half-hipped roof to one bay of the latter; one of four big brick railway warehouses, now business start-up units; and a nineteenth-century chapel, now used by the Salvation Army: all this before one has barely walked out of the station forecourt. On the way to the town, the buildings include a Methodist chapel of 1860 with stone columns representing an Egyptian frontage as well as some attractive big brick houses built for brewery managers and the premises of the former Guild Street School. In the town are various Edwardian shop premises, one of which has a terracotta façade. A modern retail shed, on the corner of Union Street and New Street, has a brick skin with three panels recalling the town's principal industry in the form of a reaper with a scythe, a cooper hammering the bands on to the outside of a barrel, and a monk tasting ale: Burton Abbey was a major monastic house.

In the next issue of *BBS Information* we begin the survey of 'Brick and its Uses in the Twentieth Century' promised in earlier issues. In issues planned for the next four years, when writing on Britain, various authors will doubtless disabuse readers of notions like those referred to in the previous paragraphs.

A feature on dragons is planned for either *BBS Information* 81 (October 2000) or *BBS Information* 82 (February 2001). The editor holds a long list of dragons from the counties of the valley of the River Thames and the issue will also include a drawing of the wyvern from Burton-on-Trent cited in a previous paragraph.

Revisiting Burton-on-Trent: there is so much to be excited about that the town has been added to the list of places for which an urban visit is planned. Arrangements for our visits in 2000 are well in hand. We have been fortunate to be offered a visit to the Glyndebourne Opera House, East Sussex. This is open for visits only during one two-week period in November each year, hence the date of the visit on the programme on the inside back cover.

Although there is a healthy list of ideas and proposals for meetings, the officers of the society welcome suggestions other than those which reflect their particular interests and areas of geographical knowledge.

DAVID H. KENNETT

Editor, *BBS Information*,

Shipston-on-Stour, 12 April 1999 and 7 December 1999

BRICKMAKING GAZETTEERS: A Note of Further Work

Compiled by David H. Kennett

The last issue of *British Brick Society Information* included an extensive 'Review Article: The County Gazetteer'. As perhaps is inevitable, there were omissions which should have been included and two new publications, for Lincolnshire and Sussex, were notified to the compiler in the latter part of 1999.

There had been various delays in the publication of the earlier review article. The original article was written in about April 1997; it followed a request for information on work in progress which was published in *BBS Information* 68, July 1996, a brief account of the responses from which was provided in *BBS Information* 60, October 1996.

This compilation records further published work which has been notified from Dorset, Lincolnshire, Norfolk, Sussex, and East Yorkshire and unpublished work from Shropshire and Warwickshire. References to published work are provided but available space in this issue of *BBS Information* does not permit new maps to be included with this note.

Following receipt of the material recorded in this compilation, the compiler has looked again at the maps about brickmaking in individual counties whether these are published in gazetteers or in an historical atlas. In particular, a four-page table has been drawn up which distinguishes between maps essentially showing the location of sites within a county and/or within parishes and those maps which are confined to brickyards operating at a specific date or within a recognisable date range

Further work is required before this is prepared for publication in a future issue of *BBS Information*. It is possible that by then, further gazetteers and/or maps will have been published.

DORSET

The late Donald Young published an article on 'Brickmaking in Dorset' in 1972. This was based on the historic county. Martin Hammond completed a list of Dorset brickyards in connection with a project for the Historic Buildings section of the Planning Department of the Dorset County Council in 1992-93 to analyse the sources of building materials used in the county, and whether matching materials could still be obtained. It was an update of Donald Young's survey but using the post-1974 county boundary; thus including Bournemouth and Christchurch. This is a bound report for internal circulation within the county council.

Martin Hammond also has manuscript notes of his own for a more detailed look at the brick, salt-glazed stoneware and terracotta industry of Poole. A few sites outside the county boundary are included as they were reckoned to have supplied sites within the county. A 10-mile radius of delivery, a day's return journey for a horse and cart, for yards with no other form of transport available.

Martin Hammond has provided an analysis of the two Dorset gazetteers based on the categories used in the table which accompanied the article in *BBS Information*, 78, October 1999. These are included in Table 1 together with an analysis of the county gazetteer for Hampshire, which was not included in the similar table in article in *BBS Information*, 78, and the analyses for the Somerset and Sussex gazetteers to provide comparison with the other counties in England south of the River Thames for which a full county gazetteer has been published.

	Dorset	Dorset	Hampshire	Somerset	Sussex
Author	Young	Hammond	White	Murless	Beswick
Year Published	1972	1992-93 unpublished	1971	1991	1993
Gaz.nos.	1	1	1	1	1
Name	1	1	1	1	1
Location	1	1	0	1	1
NGR	0	1	1	1	1
Date	1	1	1	1	1
Operator	1	1	1	1	1
Brick/ Product	1	1	1	0	1
Further Inf.	1	0	1	0	1
Geology	0	1	0	0	1
Condition	1	0	1	0	1
Kiln details	0	0	0	0	0
Refs.	1	1	0	0	1
County SMR	0	0	0	0	0
Archive ref.	1	1	0	1	1
Date of visit	1	0	0	0	0
County map(s)	1	1	1	1	1
Geology map	0	0	0	0	1

Table 1 Inclusions and omissions in county gazetteers for counties in southern England. 1 equals Present; 0 equals Absent.

Donald Young's text describes in general terms for the county the methods and equipment used, including kilns. The gazetteer itself is added as an appendix and lists about 120 sites. Martin Hammond has located about 325 sites, some of which are only likely: surviving field names with suitable geology.

The brief given was to identify brickmaking sites, the products they made, and the geology. He had the assistance of a professional geologist whose speciality is building stones. The brief was not to produce a full gazetteer.

Roofing tiles were also within the brief. Many came from the Bridgwater area, the west midlands, and from Gillingham, Dorset, and other towns and villages within a 10 mile radius of each brickworks.

LINCOLNSHIRE

In connection with Lincolnshire Heritage Open Days 1999, the Heritage Trust of Lincolnshire produced a useful booklet written by David N. Robinson OBE with contributions from Hilary Healey and David Start entitled *Lincolnshire Bricks History and Gazetteer* (reviewed below, page 24).

On page 39 of *Lincolnshire Bricks*, the authors provide a map showing brick and tile works in the county in the 1880s, the period of the maximum number of such works. The base map is parishes within the county superimposed on which are the Heath and the Wolds. Production was related to outcrops of suitable clay. These are Keuper Marl in north-west Lincolnshire; Lower and Middle Lias to the west of the Heath; Oxford-Kimmeridge Clays of the central clay vale; and silts in the Fens; together with glacial and marine clays to the east of the Wolds. This map is in part derived from that produced by David Robinson in his contribution to *An Historical Atlas of Lincolnshire*, which was noted in the previous review.

NORFOLK

In 1993, reprinted in 1994, *An Historical Atlas of Norfolk* edited by P. Wade-Martins was published by Norfolk Museums Service. This contains an essay on 'Brickmaking' by Robin Lucas with an accompanying map. The map is based on the printed maps of Norfolk by William Faden in 1797 and A. Bryant in 1828 and the first edition of the Ordnance Survey compiled between 1824 and 1838. These have respectively 49, 122 and 92 brickyards. The essay covers a longer period.

The same volume has other essays, each with accompanying map, which are of interest to members of the British Brick Society. Peter Tolhurst reports on 'Brick as an Indicator of Wealth, 1450-1750'. Robin Lucas uses glebe terriers and other sources for accounts of 'Walling Materials of Parsonage Houses, 1794' and 'Roof Coverings of Parsonage Houses, 1794'; some of the information shown on these maps is derived from documentary sources of 1801. The volume has three essays and accompanying maps by Brian Funnell covering solid geology, glaciers, and recent geology, an important consideration when searching for brickworks sites.

SHROPSHIRE

Robert Simpson has begun work on researching brickmaking and tilemaking in Shropshire and is looking for information on both rural, farm-based and the more industrial, town-based brickmaking in the county. Interested in oral reminiscences, textual record and visual remains, Robert Simpson can be contacted at Hopesay Farm, Craven Arms, Shropshire SY7 8HD.

SUSSEX

Following the publication of *Brickmaking in Sussex History and Gazetteer*, Molly Beswick has contributed an essay on 'Brick, Tile and Pottery Manufacture' with a map to *An Historical Atlas of Sussex*, published in December 1999. The map shows the distribution of brickyards and potteries in the eighteenth and nineteenth centuries.

WARWICKSHIRE

Lyndon Cave, with the help of other interested local historians, has been working on a gazetteer of the brickmaking sites of Warwickshire for much of the past twenty-five years and in 2000 hopes to be able to begin work on drawing together his accumulated mass of information. This is derived from maps, trade directories, conversations with brickmakers, evidence of placenames and field names, fieldwork with visits to sites.

EAST YORKSHIRE

In 1996, Peter G. Los and W. Ann Los contributed an essay on 'Brick and Tile Making' to *An Historical Atlas of East Yorkshire*. The accompanying map distinguished brickmaking sites by century: those pre-dating the nineteenth century, those operating in the nineteenth century and those operating in the twentieth century. The symbols chosen for the two last-named are such that yards operating in both the nineteenth and twentieth centuries can be distinguished. One feature of the map is the 60 metre contour designed to designate the Yorkshire Wolds, significantly whilst there are several sites on the Wolds edge, there are almost no brickyards above this contour.

East Yorkshire is defined as the East Riding of Yorkshire and the information includes Kingston-upon-Hull. The volume has a geological map compiled by Stephen Ellis.

SOURCES FOR TABLE 1

Dorset: see text and bibliography.

Hampshire: W.F.C. White, 'A Gazetteer of Brick and Tile Works in Hampshire', *Proceedings of the Hampshire Field Club*, 1971, pp.81-97.

Somerset: B. Murless, *Somerset Brick and Tile Makers: a Brief History and Gazetteer*, 1991.

Sussex: M. Beswick, *Brickmaking in Sussex: A History and Gazetteer*, 1993.

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By D. Young, *Proc. Dorset Natural History and Archaeological Society*, 1972.

An Historical Atlas of Norfolk

Edited by P. Wade-Martins

Norwich: Norfolk Museums Service, 1993, second edition 1994.

'74. Brickmaking', by Robin Lucas, with map, pp.154-155.

Lincolnshire Bricks History and Gazetteer

By David N. Robinson OBE.

Heckington: Heritage Trust of Lincolnshire, 1999.

Distribution map of brick and tile works in Lincolnshire in the 1880s, page 39.

An Historical Atlas of Sussex

Edited by K. Leslie and B. Short, maps by S. Rowland
Chichester: Phillimore & Co., 1999

'53. Brick, Tile and Pottery Manufacture' by M. Beswick, with map,

An Historical Atlas of East Yorkshire

Edited by S. Neave and S. Ellis

Hull: The University of Hull Press, 1996

'Brick and Tiles Making' by P.G. Los and W.A. Los, with map, pp. 82-83

ACKNOWLEDGEMENTS

The compiler would like to thank those members who provided the information recorded in this note, in particular Molly Beswick, Alan Cox and Andrew Parker for directing my attention to the historical atlases of Norfolk and East Yorkshire; and to Lyndon Cave, Martin Hammond and Robert Simpson for note of their on-going researches. Molly Beswick supplied information about *An Historical Atlas of Sussex*.

A SOURCE FOR IDENTIFYING NEW BRICKWORKS IN THE 1930s

Government collects statistics in all manner of areas. Not all are published, but for six years prior to the Second World War, 1933-1938, the Board of Trade issued an annual *Survey of Industrial Development* which listed every new factory and extension opened and the employment thus provided. Sadly, the volume also records factories closed.

One of the sections records 'Bricks, Pottery and Glass' and gives a location for each new works opened but only a general area for closures. Each volume has a summary of the year's activities in the industry which allows the researcher to try to find all the new works opened in those twelve months.

An abstracted list, made in November-December 1997, is to be checked in the course of the next two months.

DAVID H. KENNETT

ST NICHOLAS CHURCH, BURNAGE, MANCHESTER

St Nicholas Church, Burnage, Manchester, was one of a number of brick churches designed by N.F. Cachemaille-Day in the 1930s. It was given a less than successful western extension in the 1962 which has been vandalised more than once. Now the National Lottery Heritage Fund is giving £1.1 million to provide new social facilities at the west end to include a circular chapter house of etched glass, a meeting hall and toilet provision as well as much needed general maintenance. The new work is designed by Anthony Grimshaw of Wigan was the result of a limited competition and will leave untouched the original bull-nose east end. It is noted in the report in *The Architects' Journal* for 24 June 1999 that the large size of the grant is to include improved security measures so that the money spent is not immediately the victim of an arson attack as have been previous attempts to provide social facilities inside the church.

MICHAEL HAMMETT

THE CHURCH OF SAINT BENET, PAUL'S WHARF, CITY OF LONDON, AND ITS BRICKWORK

Terence Paul Smith

On the night of Monday 3 September 1666 the Great Fire of London, fanned by the wind, reached and engulfed, amongst much else, the medieval church of St Benet Paul's Wharf.¹ It was one of the City's smaller churches, first referred to in 1111 and described by the Tudor antiquary John Stow, under its alternative names of 'St. Benet Hude, or Hithe', as 'a proper parish church'; the earliest illustration, that on the mid-sixteenth-century Copperplate map, shows a small square structure with a square west tower, and this appearance is confirmed by Wenceslaus Hollar's pre- and post-Fire panoramas of the City.² Stow mentions a number of monuments, although the most important monument in the church was to come after his time - that to Inigo Jones, who was buried in the church in 1652; sadly, Jones's monument was destroyed in the Fire.³

A replacement church was begun, as part of the post-Fire rebuilding of London, in 1678 and was substantially complete, including the steeple, by 1684, at a cost of £3,328 18s. 10d.; a small vestry (subsequently demolished) was added in a separate campaign in 1692-3, at an additional cost of £143 3s. 1¼d.⁴ The steeple, incidentally, is especially important - iconically important - at this church, since without it the building would scarcely look like an Anglican place of worship at all but more like a dissenters' meeting-house, an aspect of the structure not normally noted though remarked by Sacheverell Sitwell.⁵ The brickwork is patched in places, but the church remains relatively untouched, both inside and out. Its simple brick Dutch style has touched most commentators, and it is indeed a fine surviving

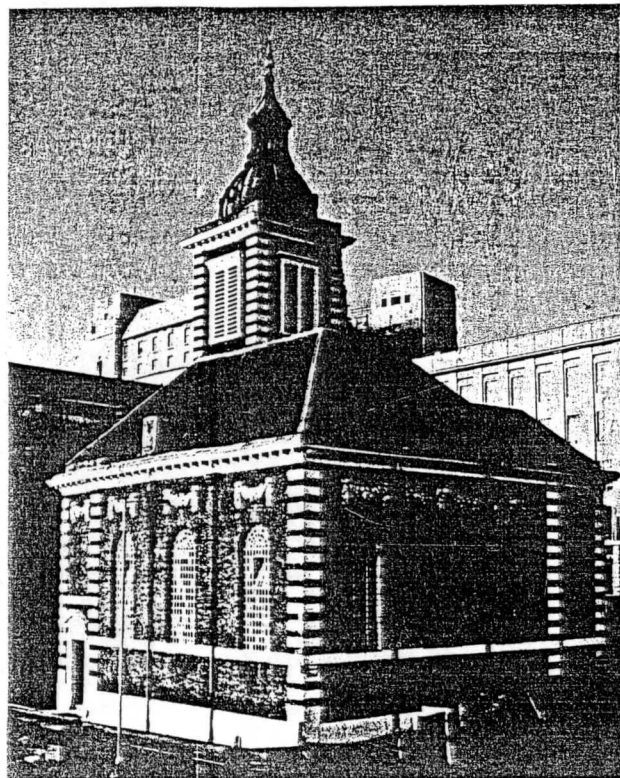


Fig.1 Church of St Benet, Paul's Wharf,
London, from the south-east

gem of the immediately post-Fire period. Unfortunately, it is a gem within an unworthy setting. First, part of the churchyard to the north was sliced away when Queen Victoria Street was laid out in 1867-71, and it was then too that the vestry was demolished and a new one formed in what had been the vestibule; a new doorway was knocked through the west wall of the tower. More recently, and even more drastically, the White Lion Hill fly-over and unsympathetic buildings have increased the unpleasantness of its environs. Designed to be seen from the south and east, it is now fully visible only from the west and north - and in the latter case only from the noisy, fume-polluted Queen Victoria Street; Thames Street has been re-aligned and the part of it on which the church was built exists now only as a forlorn short stretch leading nowhere. Fig. 1 is a photograph taken during the building of the City of London Boys School in 1983 and the view is no longer possible. That the building survives at all is a matter for gratitude since in 1877 it was proposed for demolition. Fortunately, it was made available to the Welsh Episcopalian Church in 1879. It is still used for services in the Welsh language.

St Benet - like most of the other City

churches – is, of course, commonly described as one of *Wren's City churches*.⁶ This is entirely proper, since Sir Christopher Wren (1632–1723) was the principal architect within the Office concerned with the rebuilding; as such, he had *ultimate* responsibility for each and every church. As recent writers have emphasised, however, it is not to be supposed that Wren – busy with St Paul's and with much else – actually *designed* each church personally. Robert Hooke (1635–1703), Wren's subordinate and personal friend, was specifically engaged as an architect, although, like Wren, his initial work had been in science; he was certainly responsible for *some* of the City churches. The other member of the principal trio in the Office – John Oliver at the time of the building of St Benet – was more of a craftsman, probably responsible for supervision of construction on site rather than for design work.

Simon Bradley believes that St Benet is 'almost certainly' by Hooke since drawings of it exist in Hooke's hand.⁷ The fact is suggestive but far from conclusive. We simply do not know enough *in detail* about how Wren's Office worked – the extent of collaboration between the two men or the extent to which Wren's subordinates might produce, or copy, drawings of designs by the senior member, although we *do* know that both practices were followed.

There is other evidence which may be used to link the design to Hooke. First, there is its decidedly Dutch character. Hooke was much influenced by contemporary Dutch architecture, most notably at Ramsbury Manor, Wilts. (1680–83).⁸ It has even been suggested that he had travelled to the Netherlands although there is no evidence to confirm this.⁹ In 1674, just four years before the commencement of St Benet, Hooke had purchased the books of engravings of projects by Filips (or Philips) Vingboons;¹⁰ Vingboons (or Vinckeboons, 1614–78) was a leading Dutch architect and his projects were published, in French, as *Œuvres d'architecture*, in two volumes of 1648 and 1674. Secondly, all the elevations of St Benet are asymmetrical (see further below), and it may be questioned whether Wren himself would have done this, even if he was prepared to allow it in the work of a subordinate.

None of this is conclusive, however. In the first place, Wren himself was extremely knowledgeable about Dutch architecture, albeit 'from paper' rather than from travel in the Netherlands, and its influence is clear in some of his secular buildings. Significantly in this regard, St Benet is the most *domestic* of the City churches, with its chequer brickwork, its overhanging architrave-cornice at the eaves, and its red-tiled hipped roofs. Illustrations of Dutch buildings were available as easily to Wren as to Hooke, of course, whilst for an actual building in Dutch style there was no need to look further than Hugh May's Eltham Lodge, Greenwich of 1663–4.¹¹ As regards the lack of symmetry, it may well be that Wren was willing not only to permit but also himself to design in such a manner in a small parish church; as Sir John Summerson commented, he may have 'conceived the churches on a less formal and more experimental plane than his cathedral'.¹²

There is, moreover, one particular perplexity in attributing the church to Hooke. The latter kept a diary in which he recorded his visits to the various churches; parts of the diary are missing, but it is extant for the whole of the period during which St Benet was building; and yet, as Paul Jeffery notes, no visits to St Benet are recorded: 'It seems hardly likely that he would have designed a church without making a visit...'.¹³ The designer of St Benet must therefore remain uncertain: Hooke, on some grounds, seems the more likely, but Wren cannot be entirely ruled out; nor indeed can one be certain that this was not a collaborative venture. It is perhaps worth reiterating the point that, whoever was responsible for the building, it is still appropriate to refer to this as one of *Wren's City churches*.

If the architect is not certain, we are on much surer grounds with regard to the craftsmen, who are recorded in the Vestry records. Here too, however, a small problem arises. For the vestry added in 1692–3, Edward Strong was the mason and Thomas Hughes the bricklayer; but for the main building in 1678–84, *two* masons – the brothers Edward and Thomas Strong – are recorded but no bricklayer.¹⁴ The most likely explanation, assuming that the records are not defective, is that in this stone-trimmed brick building the masons themselves were responsible for the brickwork. If so, this is an interesting sidelight on Stuart building practices, with some men at least able to carry out work in both brick and stone.

The new church of St Benet was set out on the restricted site of the old, thus determining the basic outline and the position of the tower towards the north of the west façade. In fact, the interior of the tower is of rubble stone and when Sir Albert Richardson, as a young man,

produced annotated measured drawings of the church he considered that the presence of this stone 'seems to suggest that the materials left intact from the old foundation were reused...'.¹⁵ He was almost certainly correct. Indeed, the fact that the base of the tower and of some other parts of the building is of stone, not brick, suggests that its Portland stone finish is no more than a facing to medieval work which survived the fire. So too the irregularities in plan, particularly at the south-west corner (fig. 2), and the octagonal wainscotted pedestals to the columns, probably reflect the re-use of medieval footings. Archaeological work has demonstrated the extent to which some of the post-Fire churches made use of medieval footings and sometimes even of standing walls.¹⁶ It is worth remembering that although the churches are conventionally described as having been destroyed by the Fire, Hollar's immediately post-Fire panorama makes it clear that nearly all,

though gutted, retained their walls and towers, often to their full heights.¹⁷ Of course, much of the masonry would have been rendered unsound by the flames and heat, though this would have varied from church to church. For reasons of economy, it made good sense to re-use whatever remained sound in the way of walling and footings.

The medieval church of St Benet would have had a central nave flanked by two aisles, well fitted to the earlier liturgy. But in late Stuart London this was no longer suitable. What was needed was a more open preaching space – an *auditory*, to use Wren's own word. This was achieved at St Benet (fig. 2) by combining the former nave and south aisle into a single space, roughly square in plan, whilst retaining the north aisle as an additional space with a gallery at about one third height. The whole is contained within a larger square, the south-west portion forming a vestibule with the original entrance in its south wall. The tower is immediately north of this, mostly contained within the square of the building but projecting just a little to the west; a doorway in its west wall now provides the main entrance to the church, though this is an insertion dating from the time when the vestry was demolished. The vestry stood immediately north of the tower and projected slightly to the north of the main body of the building. The south-west vestibule is separated from the main body by a single Corinthian column, whilst the gallery section is separated by two such columns, their high pedestals reaching to gallery level. Against each internal angle of the tower is an attached Corinthian column, continuing the line of the column separating the vestibule from the main body; the spacing of these three is irregular. The main part of the church and the vestibule are under a hipped gambrel roof with a low-pitched lead-covered centre, whilst the gallery section is under a series of three transverse half-hipped roofs.

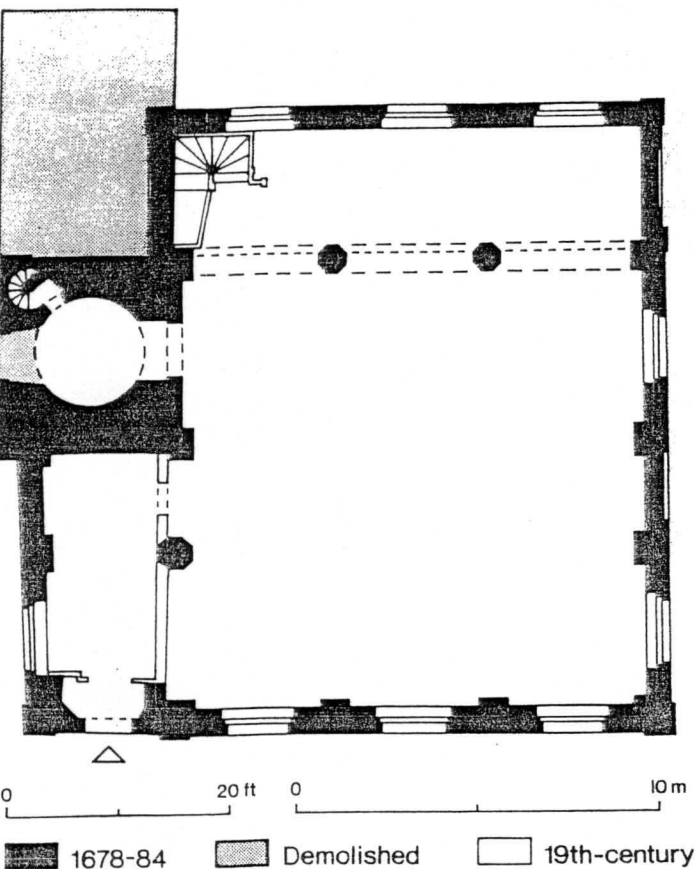


Fig.2 St Benet, Paul's Wharf: plan

entrance to the church, though this is an insertion dating from the time when the vestry was demolished. The vestry stood immediately north of the tower and projected slightly to the north of the main body of the building. The south-west vestibule is separated from the main body by a single Corinthian column, whilst the gallery section is separated by two such columns, their high pedestals reaching to gallery level. Against each internal angle of the tower is an attached Corinthian column, continuing the line of the column separating the vestibule from the main body; the spacing of these three is irregular. The main part of the church and the vestibule are under a hipped gambrel roof with a low-pitched lead-covered centre, whilst the gallery section is under a series of three transverse half-hipped roofs.

These arrangements give the building that asymmetrical aspect already remarked upon, especially notable in the (former) entrance or south façade: here there are three equal bays each containing a round-headed window (fig. 3), but to their west is a further bay containing the doorway under a simple triangular pediment. Above this is a straight-headed recess in lieu of a window. And whilst the presence of similar (but not identical) festoons with terminal drops serves to draw all four bays together, the separateness of the entrance bay is

emphasised by its flanking rusticated brick and stone pilasters; that to the west forms the south-west quoin of the building and is echoed at the south-east quoin, but the pilaster to the east of the doorway is *not* repeated between the windows. These pilasters – like all others on the building – alternate four courses of flush brickwork with projecting blocks of stone equal in height to four brick courses (= 292 mm). The plain stone band at sill level serves to link the three windows but at the same time emphasises their dissociation from the entrance bay.

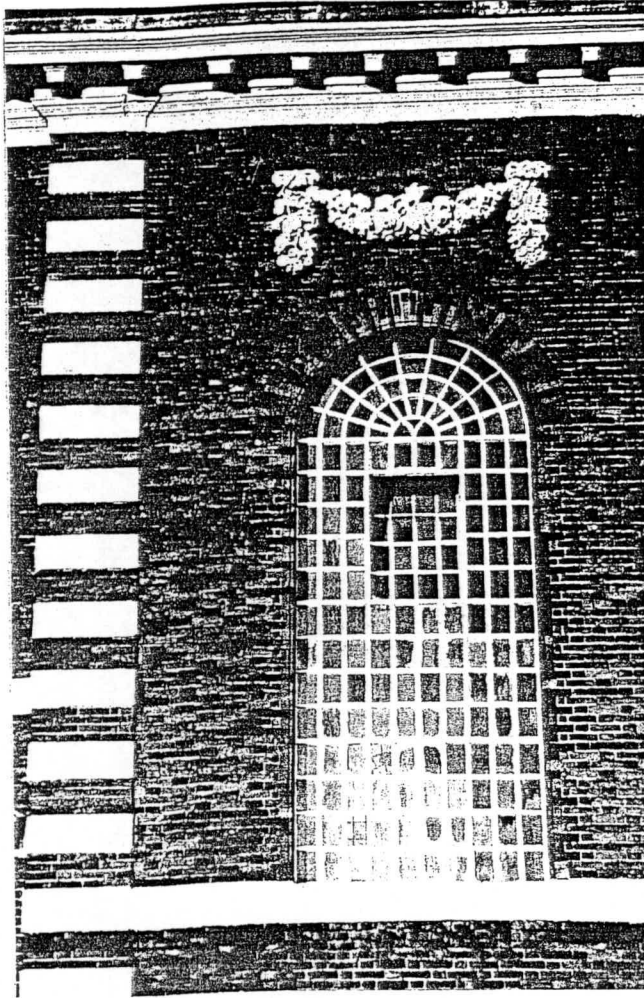


Fig.3 St Benet, Paul's Wharf: detail of south face

The east front too shows this asymmetry. Its main portion consists of three bays, the central one (where the altar and reredos are placed internally) has a straight-headed recess, whilst the side bays have round-headed windows. A stone band at sill-level runs across the whole face and there are festoons with terminal drops in each bay; the middle one is distinguished by having a winged cherub's head at its centre. To the north of this symmetrical unit, however, is a further bay, the east end of the gallery section. It has a round-headed recess echoing the windows in the main face. The stone band at sill-level is continuous with that of the main face, and again there is a festoon with terminal drops. But, as on the south front, the separateness of the bay is emphasised by the rusticated pilaster, echoing the quoin pilasters at each end of the façade. In the case of the east face, the asymmetry is further stressed by the lower transverse half-hipped roof of the gallery bay against the higher hipped roof of the main section; moreover, as Richardson noted on his annotated drawings,¹⁸ the main roof itself is not symmetrical: the south pitch is at 50° whilst the north pitch is at only 45°; this curiously lop-sided effect is due to the irregular inter-columniation of the interior western colonnade, which itself is almost

certainly due to the re-use of the medieval footings.

The asymmetry of the north wall is less apparent now than it would have been before the vestry was demolished. It has three round-headed windows above a continuous stone band at sill-level; there are festoons with terminal drops above them. The quoins are rusticated, and the three transverse half-hipped roofs emphasise the regular disposition.

The west face is dominated by the off-centre tower. The west wall of the vestry was continuous with the west wall of the tower. Above the vestry was – and indeed still is – a lunette window, formed by blocking the lower section of a round-headed window, presumably in 1692–3, when the vestry was added. The vestry itself had a window in its west wall, close to the tower, and a doorway in its east wall, where it projected north of the main body of the church. The vestry was the only part of the building to be provided with a fireplace.

To the south of the tower is a single round-headed window, once more asymmetrically placed; it was continued below original sill level in the late nineteenth century, when the vestibule was converted into a new vestry – with an ungainly result for the building! The windows in the west wall do *not* have festoons above them.

The lowest portion of the tower is of Portland stone, the west doorway, as mentioned, being a later insertion. The upper stages are of brick with rusticated stone

quoins; there are stone bands crossing the tower at each stage. The west wall has a large round-headed window in the ringing chamber stage, a bull's-eye window in the clock stage, and a large square-headed window of stone in the belfry stage; this is unglazed and is provided with louvres of stone slate. The belfry opening is repeated in the three other faces of the tower, but otherwise these are of plain brickwork. The tower contains a spiral stair at its north-west angle and tiny rectangular windows light this at the north end of the west face and at the west end of the north face. A notable refinement of the building is that the belfry walls are slightly battered externally so that the belfry-opening architraves project more at the top than at the bottom. The purpose of this was presumably to counter any tendency of the tower to appear top-heavy. The tower is topped by a lead-sheathed timber cupola with eight bull's-eye windows, itself topped by a small octagonal lantern, a concave-sided spirelet, and a weather-vane.

The church is built on - indeed, partly *into* - a sloping site, so that internally the floor is much lower than appears from the external north elevation, where the windows come down fairly close to ground level.

The general form of the church, with its overhanging eaves rather than a parapet and with its hipped and half-hipped roofs, give the building its familiar Dutch appearance. This is enhanced by the use of building materials - red brick with stone trim for the rusticated quoins and pilasters, for the belfry openings (and their louvres), for the south doorway, for the horizontal bands at various points, for the decorative festoons above most of the windows, and for some of the cornices and for parts of others. The main cornice to the building and the upper cornice to the tower (both of which also serve as gutters) are of stone in their lower portions but of timber in their upper sections, including the modillion courses. The gutter of the main cornice is lined with lead, which is carried over the outer upper edge of the feature. The tower cornice, because of its vulnerable position, has its upper section, above the modillion course, cased in lead.

St Benet is one of the smaller City churches, although after the Fire its parish was amalgamated with that of St Peter Paul's Wharf, whose church was not rebuilt. Jeffery stresses the 'air of economy [in] its brick-faced walls'.¹⁹ It is true that the building makes only occasional use of the Portland stone which was the material - at least, the *facing* material - of the more prosperous churches. It would be a mistake, however, to see the use of brick, economical though it certainly was, as an indication of *impoverishment* or *meanness* in construction. Not only does the red brickwork form a telling foil to the stone detailing, especially to the blocks of the rusticated quoins and to the festoons, but there are also indications of care and refinement in the brickwork itself.

The main fabric is in Flemish Bond forming a chequer pattern, the stretchers being in varying shades of red or purplish red, the headers in dark grey or black, though not vitrified. The trim of the windows is of cut and rubbed bricks in fairly bright red. The general fabric bricks measure 210-20 × 105-10 × 60-65 mm. Against the window trims the darker headers are cut to form closers. The bricks used for the window trims measure, in their rubbed state, 212 × 106 × 70 mm; they would, of course, have been somewhat larger when delivered to the site. Even so, it is unlikely that they would have conformed in length to that laid down for 'the Citie of London and Confines of [the] same' in a proclamation of Charles I in 1625 and which was still nominally in force in the late seventeenth century: this stipulated a (minimum) size of 9 × 4¾ × 2¼ inches (= 229 × 111 × 57 mm).²⁰ The general fabric bricks, too, fall short of this legislation. It is especially interesting to note this disregard of legislation in projects which were, after all, prompted by the Crown! Such disregard is not confined to St Benet but occurs also in other City churches using brick. In breadth and thickness, however, the St Benet bricks *do* conform to the 1625 legislation.

The bricks used for the window trims are laid in lime putty with very fine joints of only 1 mm. To accommodate the difference in thickness, the general fabric bricks are laid with thicker joints of 12-15 mm (fig. 4). In several places there is evidence, in the form of grooves in the mortar, of tuck pointing in the general fabric. Although it is impossible to be certain, this was probably primary: it would have given a finer, more regular finish to the whole than is apparent today. The brighter red bricks used for the window trims have been cut to shape on one angle to form a three-quarter-round beading, which runs up the outer

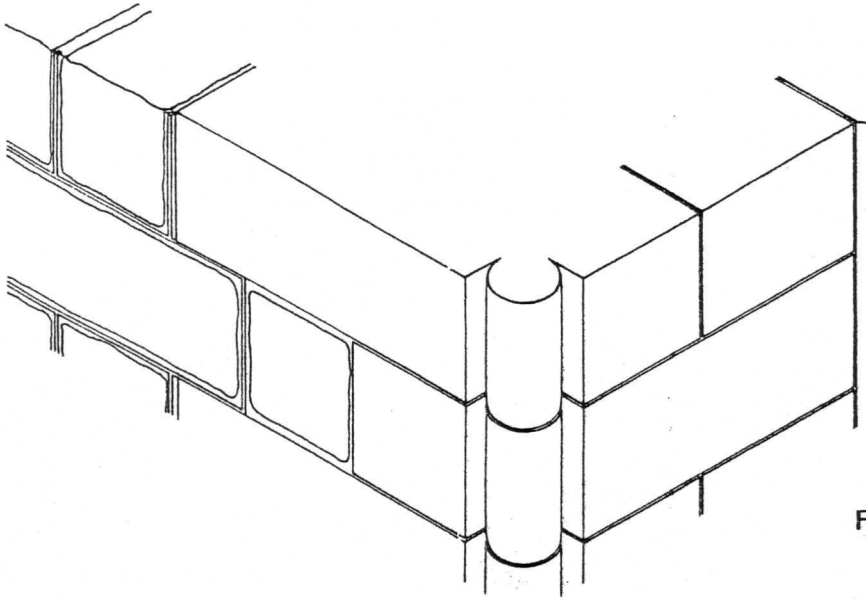


Fig.4 St Benet, Paul's Wharf:
brickwork at angles of
windows and recesses

edge of the jambs and around the round arches or across the straight heads of the rectangular recesses; it also runs right round the bull's-eye window in the west face of the tower, and is even applied to the tiny slot-windows lighting the tower stair. The beading was rubbed after cutting to give a smoother finish, probably when the bricks were *in situ*. All the bricks used in the window trim have been rubbed on their bedfaces. For the arch-heads of the round-headed windows and recesses, for the straight arches of the rectangular recesses, and for the bull's-eye window in the tower this involved proper gauged work: cutting and rubbing the bricks to precise voussoir or radial shapes, a time consuming practice involving setting out the bricks on the ground before erecting them. All in all, a good degree of finesse is exhibited in the St Benet brickwork. All this would significantly have increased the costs of the building: the bricks required for cutting and rubbing would have been more expensive than the general fabric bricks, not only because finer and more carefully treated raw materials were required for their manufacture, but also because they had to be brought into London from further afield (see further below); the tasks of cutting and rubbing them and of laying them in lime putty would also have been time consuming and hence costly. Even the general brickwork would have been fairly costly: tuck pointing, as Batty Langley observed in the next century, almost doubled the price of brickwork.²¹

There was, obviously, no need for such care *within* the building, where most of the brickwork is plastered. Most of the tower, as previously noted, has brickwork facing rubble stone, but in the interior of the belfry-stage there is exposed brickwork in English Bond. Towards the top of the walling is a single course of headers set on edge; the reason for this is not clear, but obviously it alters the coursing and thus rather disturbingly suggests that the facing and the backing bricks of the belfry-stage are not properly bonded even at this height - 17 metres and more above ground level!

Four types of bricks are used in the construction. (There are other types used for later patching, repairs, or minor alterations; these are not considered here.)

Type 1. These are fairly soft bricks, orange to red in colour, and with a sandy fabric with few inclusions, although there may sometimes be small flints or other stones where the material has been insufficiently pugged; there are clear crease marks on the surfaces and many such bricks have sunken margins, although it is not possible to observe this on the *in situ* bricks of St Benet. Almost certainly such bricks were made within the London area itself. They date from the late Middle Ages down to the Great Fire of 1666, perhaps a little beyond, say down to c.1700.²² In St Benet they are used for some of the stretchers of the general walling, especially, though not only, in the east wall.

Type 2. These are harder bricks and are darker in colour, ranging from dark red to purplish red; often they have a distinct yellowish tinge to the surfaces, probably due to the moulding sand firing differently from the general fabric, although this is not greatly in evidence on the St Benet bricks. Iron and white or yellow carbonate specks show throughout the fabric, and there are often black spots formed by added organic material and/or small voids where such organic inclusions have burned out during firing. Such organic material was known as 'Spanish' at the time.^{2 3} Bricks of this type do not usually have sunken margins, although they are occasionally present. They date from the immediately post-Fire period down to the nineteenth century, although from the mid-eighteenth century onwards they were at first gradually and later more rapidly superseded by the familiar yellow/brown London Stocks.^{2 4} The type 2 bricks, like the type 1 bricks, were made at various locations within the London area itself. In St Benet they are used for most of the stretchers of the general walling.

Type 3. These bricks are similar to those of type 2, but are slightly overfired - though not vitrified or misshapen - giving a dark grey or black surface finish. In St Benet they are used for the headers of the general walling and for closers. They were made at the same yards as the type 2 bricks and their date range is, of course, the same.

Type 4. These are bright red or orange in colour. Superficially similar to the type 1 bricks, they are distinguished by their fine, homogeneous texture with few inclusions. As such they are suitable for cutting and rubbing, and in St Benet they are used for the cut and rubbed dressings to the windows and recesses. As previously remarked, they are notably thicker than the other bricks used in the building, being 70 mm thick even in their rubbed state. The raw materials available within the London area were not suitable for such bricks and they had to be brought in from elsewhere, probably from Kent: at the end of the seventeenth century Joseph Moxon observed that 'the best Earth that we have in *England* for making of *Bricks*, is in the County of *Kent*, from whence we have most of the *Bricks* which are Rubbed and Hewed for the Ornaments of the chief Fronts in the City of *London*.'^{2 5} They were used in London from the early seventeenth century onwards.

The type 2 bricks had several advantages over the type 1 bricks. Not only were they less soft and friable, but they were more convenient to manufacture, an important consideration immediately after the Fire, when vast quantities of bricks were required for the rebuilding of the City, as well as for the expanding suburbs. The 'Spanish' added to them aided firing and thus reduced costs by saving on the amount of coal required as fuel, at a time when the price of coal had increased because of the Coal Tax - imposed to raise revenue to pay for St Paul's and for the very churches in which some of the brick were used! The addition of 'Spanish' also made for a stiffer raw material, enabling the bricks to be set on edge for initial drying, as opposed to the type 1 bricks which needed to be laid flat. This saved space on the drying ground (the 'place') and also ensured quicker drying since a greater surface area was exposed to the air. This fact accounts too for the general absence of sunken margins on type 2 and type 3 bricks. There can now be no reasonable doubt that the explanation for sunken margins proposed by Ian Betts is the correct one.^{2 6} They were formed as an incidental effect of using the bottom of the mould to press down the small 'lips' which were sometimes pulled up on the edges of one (usually the upper) bedface during demoulding at the drying ground. The type 2 and 3 bricks, however, were made using wooden pallets onto which the newly moulded bricks were demoulded at the moulder's bench; they could then be carried to the drying ground in batches, with pallets between them, and set on edge; the pallets had the incidental effect of pressing down the small 'lips', so that there was no longer any need to use the mould for this purpose and thus sunken margins were not formed.

The combination in the church of type 1 and 2 bricks as stretchers and type 3 bricks as headers in a chequer pattern and as closers further testifies to the care taken with the appearance of the brickwork. The type 3 bricks are of the same fabric as the type 2 bricks but are more thoroughly fired. This would have happened during firing in a clamp, which always produced bricks of varying degrees of firing, from underfired ('samel') bricks to partly melted and fused bricks. Although, therefore, no special effort was required to produce the two types - that just *happened*, so to put it - care was obviously taken to *select*

the required number of each and to sort them on site prior to laying - once more, time consuming procedures which would have added to the cost of the building.

One interesting aspect of the St Benet brickwork is the presence of both type 1 bricks on the one hand and type 2 and 3 bricks on the other, for the latter types superseded the former type after the Great Fire. There are two possible explanations for this.

First, there must have been a period of transition during which some brickmakers were still manufacturing the older products whilst others were manufacturing the newer products. This is likely to have been during the later part of the seventeenth century. However, with a building as small as St Benet it does not seem likely that bricks would have been purchased from two (or more) yards producing different products.

A second possible explanation thus seems more likely, namely that the type 1 bricks in the church were salvaged from the Fire wreckage and re-used. Before the Fire, brick had made only slow progress within the City so far as complete structures were concerned;²⁷ on the other hand, bricks were quite extensively used for boundary walls, wells, and, above all, for chimney stacks in otherwise timber-framed buildings.²⁸ Indeed, one of the more melancholy sights in the immediate aftermath of the Fire was of 'rows of brick chimney stacks [which] stood up alone, the timber structure of the houses about them having been wholly consumed or fallen in debris on the ground'.²⁹ Of course, many of the bricks themselves would have suffered damage, but many others would have been sound and thus capable of salvage and re-use; many would not have been very old at the time of the Fire.³⁰ And there were good reasons for re-using them. First, and most simply, it would have been pointless to discard them when they were so easily available. Secondly, their use would have involved some saving in costs. Thirdly, and perhaps most important, the regular and sufficient supply of building materials was a problem during the rebuilding of the City: legislation required all replacement buildings to be of brick or stone; there was therefore a demand for bricks not just on an unprecedented but on a truly enormous scale. The wonder is, indeed, that brickmakers were able to meet it at all.³¹ The chance to augment new materials with salvaged older ones was obviously a considerable advantage, and indeed it is known that salvaged bricks (and other materials) were sometimes sold for re-use, for example those from St Mary Woolchurch Haw, which was not rebuilt after the Fire.³² That the type 1 bricks at St Benet are such salvaged material is therefore the more likely explanation of the presence of the different brick types within the church.

One final aspect of the bricks is worth brief comment. Several of the type 2 bricks show pressure-marks on their stretcher faces. These resulted from stacking the bricks in an open ('honeycomb') arrangement after initial separate drying - on edge in the case of these bricks: if the stacking were done too soon, whilst the bricks were still soft, then one would press into another, causing the pressure-marks. On a few of the St Benet bricks there are longitudinal pressure-marks but more often they are diagonal, sometimes even showing a corner impression of a superimposed brick. Diagonal pressure-marks are more common on 17th-century London bricks, as in some other areas,³³ but at St Benet we appear to be seeing the transition from one method of stacking to another - from diagonal to parallel arrangements - and thus a little earlier than has previously been suggested.³⁴

'As the noise and reek of diesel oil in the streets grow greater, and as the impersonal slabs of cellular offices rise higher into the sky,' wrote Sir John Betjeman, 'so do the churches which remain in the City of London ... become more valuable to us.'³⁵ Nowhere, perhaps, is this more needed than in the area around St Benet Paul's Wharf.

Notes and References

1. W. G. Bell, *The Great Fire in London in 1666*, London, 1923, re-issued as *The Great Fire of London*, London, 1994, p.86; this remains the classic work on its subject; but for the progress of the Fire see also G. Milne, *The Great Fire of London*, New Barnet and London, 1986; and see also, now, S. Porter, *The Great Fire of London*, Stroud, 1996; on the rebuilding of London after the Fire, T. F. Reddaway, *The Rebuilding of London after the Great Fire*, new edn, London, 1951, has not yet been superseded.

2. J. Stow, *A Survey of London* (1603 edn), ed. H. Morley, London, 1912, re-issued Stroud, 1994, *passim*; the relevant section of the Copperplate map has only recently been discovered and is in the Dessau Art Gallery, Germany; for a reproduction see Museum of London, *London's Lost Map*, folded broadsheet, London, n.d. but 1998; G. Perry, *Hollar's England: a Mid-Seventeenth-Century View*, Salisbury, 1980, pl.92.
3. J. Summerson, *Inigo Jones*, Harmondsworth, 1966, p.138; John Aubrey, though not naming the church, states that 'this tomb is on the north side of the church, but his body lies in the chancel about the middle': J. Aubrey, *Brief Lives*, ed. R. Barber, Woodbridge and Rochester, NY, 1982, p.177.
4. P. Jeffery, *The City Churches of Sir Christopher Wren*, London and Rio Grande, 1996, pp.219-20.
5. S. Sitwell, *British Architects and Craftsmen*, revised edn, re-set, London, 1973, p.87; the church was, in other words, what an early member of the Society of Friends (Quakers) would have referred to disparagingly as a 'steeple-house'!
6. As, for example, in T. P. Smith, 'Editorial: Wren's Hidden Masterpiece', *BBS Information*, 72, October 1997, 2; the whole issue of Wren's personal involvement and the contribution of others is well considered in Jeffery, 1996, pp.31-41.
7. S. Bradley in S. Bradley and N. Pevsner, *The Buildings of England: London 1: The City of London*, London, 1997, p.204; also pp.73, 78.
8. Good illustrations in N. Lloyd, *A History of the English House...*, new edn, London, 1951, p.227.
9. W. Kuyper, *Dutch Classicist Architecture*, Leiden, 1980, pp.115-16; on the other hand, amongst Hooke's drawings is an elevation of the Nieuwe Kerk at Den Haag 'which does not seem to have been made from an engraving': K. Downes, *The Architecture of Wren*, 2nd edn, London, 1988, p.62; in December 1672, as Prof. Downes points out, Hooke was teaching himself the Dutch language: H. W. Robinson and W. Adams, eds, *The Diary of Robert Hooke*, London, 1935, entry for 11 December 1672.
10. M. Whinney, *Wren*, London, 1971, p.60.
11. J. Summerson, *Architecture in Britain 1530-1830*, 8th edn, Harmondsworth, 1991, p.174 and p.175, pl.142; May's inspirations were the Mauritshuis (1633-44) and the nearby Sint-Sebastiaansdoelen (1636) in Den Haag: A. Gomme, 'Architecture', in B. Ford, ed., *The Cambridge Cultural History of Britain, 4, Seventeenth-Century Britain*, Cambridge, 1992, p.82. May (1621-84) was one of the surveyors appointed by the Crown, along with Wren, for the rebuilding of the City after the Fire; there is an obvious temptation, on beguiling stylistic grounds, to attribute St Benet to May, but it is a temptation best resisted since (i) May appears to have taken little part in the rebuilding programme, and (ii) from 1673 until his death in 1684 - that is, throughout the whole period during which St Benet was building - May seems to have been exclusively involved with the royal works at Windsor Castle: for May's career see H. M. Colvin, *A Biographical Dictionary of British Architects 1600-1840*, revised edn, New Haven and London, 1995, pp.646-8.
12. Summerson, 1991, p.192.
13. Jeffery, 1996, p.107.
14. Jeffery, 1996, pp.220, 219.
15. Richardson's beautiful drawings are reproduced, along with early photographs, in C. Amery, *Three Centuries of Architectural Craftsmanship*, London, 1977, pl.134-8; the Royal Commission on Historical Monuments considered that the 'core of the tower-walls may be mediæval to the height of about 10 ft. above the floor': RCHM (England), *An Inventory of ... London*, vol.1, *The City*, London, 1929, p.55.
16. N. Cohen, 'The Birth of Church Archaeology in London', *London Archaeologist*, 7, 12, Summer 1995, 315-20; for a particular example: G. Milne *et al.*, *St Bride's Church, London: Archaeological Research 1952-60 and 1992-5*, English Heritage Archaeological report 11, London, 1997, pp.48-9; for medieval work preserved in post-Fire churches: J. Schofield, 'Saxon and Medieval Parish Churches in the City of London: a Review', *Trans. London & Middx Archaeol. Soc.*, 45, 1994, 93, 98-100, 109-10, 116-23, 125-7, 130-32, with general discussion at 25.
17. Perry, 1980, pl.92.
18. Amery, 1977, pl.136.
19. Jeffery, 1996, p.219.
20. Quoted in N. Lloyd, *A History of English Brickwork...*, London, 1925, re-issued Woodbridge, 1983, pp.46-7.
21. Lloyd, 1925/1983, p.67; bricks for cutting and rubbing were, by the mid-eighteenth century and probably in the seventeenth century too, twice as expensive as red stocks, themselves costly products: J. Summerson, *Georgian London*, revised edn, Harmondsworth, 1978, p.80.
22. These bricks are Museum of London Archaeology Service (MoLAS), and now Museum of London Specialist Services (MoLSS), fabric 3033 and variant types; the type 2 and type 3 bricks mentioned below are MoLAS/MoLSS fabric 3032 and variant types; for consideration of the types see N. Crowley, 'Ceramic Building Material', in C. Thomas, B. Sloane, and C. Phillpotts, *Excavations at the Priory and Hospital of St Mary Spital, London*, MoLAS monograph 1, London, 1997, pp.200-201. My own acquaintance with them comes from my duties with MoLAS and more latterly with MoLSS, and, initially, from much help given by my colleague Ian Betts.
23. The addition of 'Spanish' was sometimes the cause of complaint. Successive Acts vacillated on the issue but in the end

- accepted the practice for its clear advantages: Lloyd, 1925/1983, pp.48-50. Wren's own opinion, it is worth noting, was that 'The Earth about London, rightly managed, will yield as good Brick as were the Roman bricks ... and will endure, in our Air, beyond any Stone our Island affords': *Wren Soc. Publications*, 11, 1932, 16. According to the Company of Tylers and Bricklayers in 1714, the advantages of adding 'Spanish' were discovered accidentally soon after the Great Fire when fields 'contiguous to the city' which had been 'much dunged with ashes' were dug for brickmaking and the products were found to burn 'with one half of the coles commonly used': D. Yeomans, 'The Quality of London Bricks in the Early Eighteenth Century', *BBS Information*, 42, May 1987, 13-15; A. Cox, 'Bricks to Build a Capital', in H. Hobhouse and A. Saunders, eds, *Good and Proper Materials: the Fabric of London since the Great Fire*, London Topographical Soc. Publications 140, London, 1989, p.4.
24. The yellow/brown colour of London Stocks results from the presence of chalk in the raw material or, more usually, from its deliberate addition to the raw material; this, and the added 'Spanish' (or 'rough stuff', as it later came to be called), provide the defining characteristics of such bricks: F. G. Willmott, *Bricks and Brickies*, Rainham (Kent), 1972, pp.18-22. Despite an apparent *imprimatur* from no less an authority than Ronald Brunskill, I am unconvinced by the claim that the term 'Stock' in 'London Stock' derives from the village of Stock in Essex: L. D. Jarvis, 'Stock Bricks from the Village of Stock', *BBS Information*, 54, December 1991, 15. More work is needed on London Stocks, but the *general* outline given in my text is entirely secure and there really is no need for the kind of confusion in which Liza Picard finds herself when dealing with the issue: L. Picard, *Restoration London*, London, 1997, pp.33-4; this, I should like to stress, is a minor blemish in a very good-natured and highly entertaining study - not least intriguing (p.130) is a recipe including brick dust for colouring the teeth red! There is a useful brief account of London brick colours in Summerson, 1978, pp.79-80; see also D. Cruickshank and P. Wyld, *London: the Art of Georgian Building*, London, 1975, p.178, and N. Johnson, *Eighteenth Century London*, London, 1991, p.18.
 25. J. Moxon, *Mechanick Exercises: or the Doctrine of Handy-Works*, London, 1700, pp.2-3.
 26. I. M. Betts, 'New Thoughts on Bricks with Sunken Margins', *BBS Information*, 68, July 1996, 6-10; after the 1997 Annual General Meeting of the British Brick Society, held at the Avoncroft Museum of Historic Buildings, Bromsgrove, Worcestershire on 14 June 1997, Martin Hammond gave an utterly convincing practical demonstration of Betts' suggested procedure; I am grateful to Martin Hammond for doing this at my request and to Michael Hammett for photographing the exercise for me.
 27. J. Schofield, *The Building of London from the Conquest to the Great Fire*, revised edn, London, 1993, p.170; J. Schofield, *Medieval London Houses*, New Haven (USA) and London, 1994, pp.151-2 and *passim*.
 28. Stow, 1912/1994, *passim*; Stow also mentions brick nogging to timber-framed buildings, thus confirming a statement by an Italian visitor, Alessandro Magno: C. Barron, C. Green, and C. Gobbi, eds, 'The London Journal of Alessandro Magno 1562', *London Journal*, 9, 2, Winter 1983, 141; various uses of bricks in the City are well shown in the survey plans drawn by Ralph Treswell in the late sixteenth and early seventeenth centuries: J. Schofield, *The London Surveys of Ralph Treswell*, London Topographical Soc. Publications 135, London, 1987, *passim*; see also R. Weinstein, *Tudor London*, London, 1994, p.31.
 29. Bell, 1923/1994, p.68.
 30. I owe this last point, which I had overlooked, to my colleague Ian Betts.
 31. It is worth quoting Reddaway, 1951, p.73 at some length (I have silently omitted his superscript reference numbers): 'To rebuild 13,000 houses in brick [as well as some public buildings, including churches such as St Benet] as the King had commanded meant an expansion in demand without precedent in the history of London. Proposals for the erection of brick kilns [which term was also used for the more common *clamps*] began almost immediately. Evelyn was concerned in one, as Pepys was in a scheme for fetching timber, but the City was not prepared to trust solely to unregulated private enterprise. It encouraged its tenants in the suburbs "to digg and cast upp the ... ground for the making of Bricke" and it appointed a committee to treat with brickmakers, limeburners, and other undertakers for building materials, but it also pushed forward with a Bill for "Regulating the Making of Bricks and Tiles". Its exact provisions are unknown, for it was later amalgamated into one great rebuilding Bill, but the preamble to the relevant clauses in the latter shows its intention clearly enough - "to the end the ... Builders may receive due encouragement by haveing [*sic*] the materials for building at reasonable prices". The Act for rebuilding covered all bricks made within 5 miles of the River Thames; offenders were liable to imprisonment or a fine, although the legal measure seems never to have been invoked: Porter, 1996, p.111. Despite the attempt to regulate prices, they did in fact rise in London during the last three decades of the seventeenth century - for example, those of bricks purchased by the Office of Works (which, exceptionally, was in a position to negotiate *favourable* prices): price tables in W. Beveridge *et al.*, *Prices and Wages in England from the Twelfth to the Nineteenth Century*, vol.1, *Price Tables: Mercantile Era*, London, 1965, p.497. John Evelyn's excursion into brickmaking was unsuccessful: he complained to Samuel Pepys on 23 September 1668 that he had lost £500 'in a late [= recent] attempt of making of bricks upon an adventure with others': S. Pepys, *The Diary of Samuel Pepys*, ed. R. C. Latham and W. Matthews, 11 volumes, London, 1970-83, vol.9, p.314.
 32. Reddaway, 1951, p.124, n.1, citing Guildhall Library MS 306.
 33. Norfolk: K. Faithfull and E. James, 'Brick Terminology', *BBS Information*, 64, February 1995, 5-6; Essex: P. Ryan, *Brick in Essex from the Roman Conquest to the Reformation*, Chelmsford, 1996, p.92.
 34. T. P. Smith, 'Skintled London Stocks at Lever Street, Islington, London', *BBS Information*, 72, October 1997, 19-20.
 35. J. Betjeman, *City of London Churches*, Andover, 1995 edn, p.5. The area around St Benet is redeemed by the College of Arms (1871-7) opposite. The City of London Boys School (1983-6), which embraces St Benet on two sides, is unexceptionable in itself, although it closes off views of St Benet which its architect intended. The real culprits are the British Telecom building (Baynard House, 1972-9) to the west and, immediately adjacent to the church, the White Lion Hill fly-over - a truly depressing piece of town planning.

Meeting the Brick Challenge

The British Brick Society held two meetings in the Summer and Autumn of 1999. In July some of our members participated in the Hull and Beverley brick day. In September a well-organised visit to the western part of the City of London ensured a highly successful Autumn Meeting for the society. Reports of these follow.

THE HULL 700 BRICK EXHIBITION

Although poorly reported in the local press apart from 'Brick-spotter cements show', an article about the society's treasurer and long-time stalwart Ann Los, it was considered that the exhibition was a success by the number of visitors who attended it.

Many of the members of the British Brick Society visited the exhibition and were pleased to see the results of those who contributed both time and effort to produce it on time. The exhibition was produced by Hull Museums and Art Gallery in conjunction with the University of Hull for several weeks in the summer of 1999 and was the brainchild of Dr David Neave of the University of Hull. He is quoted as saying:

I thought it would be a good idea for the Hull 700 celebrations ... which indeed it was. With the assistance of his wife Pat and many others behind the scenes, together with the Humber Field Archaeology and a few choice items from the magnificent collection of Ann Los, a grand display was produced.

Large informative panels introduced the brick novice and interested parties to the not so humble brick, though its life-cycle from its geological origins, manufacturing processes, building usage through the centuries, and the various influences that affected the shape, manufacture and country of origin. Further panels informed the reader of later brickworks recorded in the East Riding of Yorkshire and North Lincolnshire from the eighteenth century to the present day, with excellent use of old photographs, documents and posters.

The exhibition included brickmaking equipment such as wooden moulds, forms and a well-preserved wooden wheelbarrow used to transport the green bricks to the kilns, in addition to the bricks themselves. Examples of two thousand year-old Romano-British floor and roof tiles, various types of medieval hand-made brick, seventeenth-century 'Dutch clinkers', and nineteenth- and twentieth-century miscellaneous shaped bricks were on view. A display of 'frogged' bricks with a multitude of makers' names and/or logos showed the visitor a few of the many brick manufacturers who operated prior to the disappearance of most during the last and present centuries. A rather intriguing display of animal and bird footprints was also shown reminding visitors that early bricks were dried in the open before firing and, therefore, were at risk from such intrusions.

The exhibition, although of a smaller nature, was later moved to Sewerby Hall, near Bridlington, where it was billed as "A Christmas Special".

JOHN TIBBLES

THE CITY OF LONDON

Two of Wren's churches and four contemporary secular buildings formed the basis of the morning walk round the streets between Blackfriars and St Paul's Cathedral on Saturday 25 September 1999. In the afternoon three different portions of the city wall and two more churches were sufficient not to overload the memory.

Blackfriars is an area I had not visited for more than a quarter of a century and, quite by chance, I subsequently came across *London 100 Years Ago: a photographic record* compiled by Philippa Lewis (London: Parkgate Books, 1998) which reprints photographs from *Around London* published by George Newnes in 1896. Looking at this book, one is struck by contrasts with today: St Paul's looming above the city with Thames-side brick-built warehouses reaching no higher than the triforium of Wren's great masterwork. Similarly on Queen Victoria Street, only a public house adjacent to the church of St Andrew-by-the-Wardrobe and a stone-built late-nineteenth-century building on the site of Doctors' Commons survive from the view shown by Newnes looking east from the old *Times Newspaper* building fronting Printing House Square. In 1973, much survived from the nineteenth century. In 1999, the old *Times* building opposite Blackfriars underground station had become a big hole for yet another new building.

Of the four churches which we saw, the first, St Benet, Paul's Wharf, is the subject elsewhere in this issue of *BBS Information* of a long article by our guide for the day, the society's chairman, Terence Paul Smith.

Two of the other churches, St Andrew-by-the-Wardrobe and St Giles Cripplegate, offer the contrast of how churches in the city were and how often we would wish them to be: St Andrew's is hemmed in by other buildings but St Giles' stands proud, something dramatically brought out by an air photograph such as figure 1. It was not always like this: Lewis reprints a photograph from Newnes of Fore Street where the brick top of the tower of St Giles protrudes over a three-storey range with attics.

Fore Street received one of the first bombs to fall on London in 1940, which gave the opportunity for the Barbican development. St Giles had been outside the area affected by the Great Fire of London (1-3 September 1666) but the tower top of 1682-84 by John Bridges is contemporary with the work of Wren and his colleagues.

The brickwork of the church dedicated to St Anne and St Agnes with rustication round the three windows was particularly pleasing: the removal of the stucco on three walls has shown how fine the work is. Each wall is pierced by a central large round-headed window under a pediment and two smaller ones. The church was rebuilt between 1676 and 1687.

St Paul's Cathedral was rebuilt between 1675 and 1711. The secular buildings that we saw covered a slightly longer period in their construction dates: houses for the cathedral canons designed in 1670 and built in the three years following; the College of Arms begun in 1671 and still building in 1688; the former St Paul's Deanery of after 1672, and the Chapter House of St Paul's of 1712-14. Both of the larger buildings connected with St Paul's have rubbed red bricks: the Chapter House has dark red bricks with brighter red bricks, some cut and rubbed, as trim whereas the former Deanery uses them more exuberantly as trim.

My 1973 visit to Blackfriars had included the College of Arms. The northern, or central, block was constructed between 1671 and 1673; the wings belong to the 1680s. That on the west side was designed by John Hodge, carpenter; it was financed from the profits of the Visitation of Warwickshire and five other midland counties undertaken in 1681 and 1682 by Sir Henry St George, Clarenceux King of Arms, and the Rouge Dragon Pursuivant, Gregory King, better known to historians and statisticians for his 'Natural and Political Observations upon the State and Condition of England [1695]'. St George assigned the profits to the rebuilding and a note in Gregory King's hand records that the profits from this Visitation were £530 which "built up the west side and south-west corner of the Heralds' College, from Garter's staircase".

In talking about the various buildings, both secular and ecclesiastical, Terence Smith drew attention to individual craftsmen: bricklayers, masons, carpenters. One is struck by the availability of so many good craftsmen in the generation and a half between the Great Fire and the completion of St Paul's Cathedral. Edward Strong the younger, with his father and uncle, had worked on St Benet Paul's Wharf in the 1680s and was the mason for the Chapter House thirty

years later. He alone worked on more than one of the buildings viewed. The bricklayers who were recorded are R. Billingham at the Chapter House (1712-14); Maurice Emmett the younger at the central block of the College of Arms (1671-73); Thomas Horn at St Andrew-by-the-Wardrobe (1685-94); John Howard at St Anne and St Agnes (1676-87); Thomas Hughes at St Benet Paul's Wharf (1678-84).

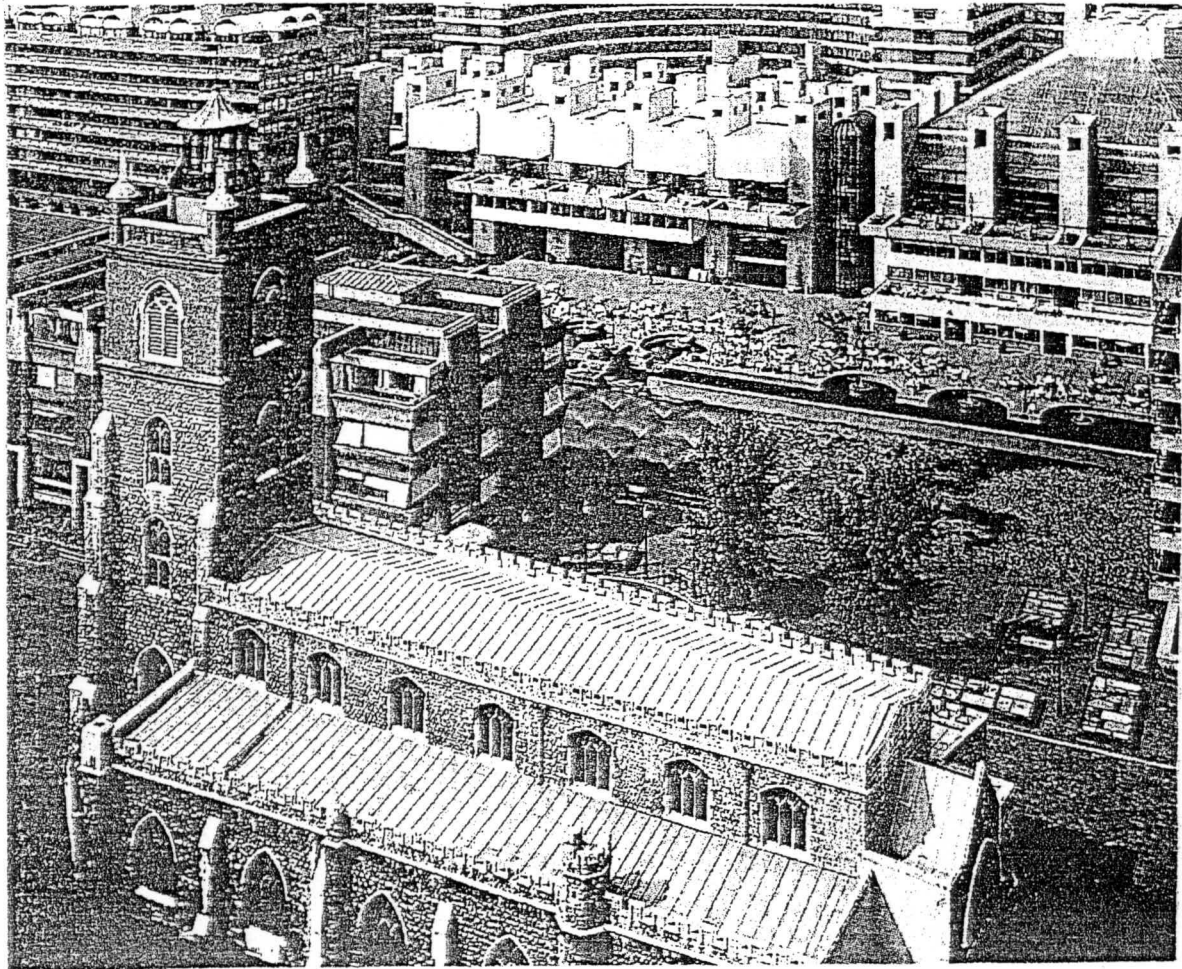


Fig. 1 The fifteenth-century stone-built church, St Giles Cripplegate, London, has a brick top to the tower designed by John Bridges, 1682-84, contemporary with the churches designed by Sir Christopher Wren after the Great Fire of London.

Clearly, the rebuilding of England's capital city would encourage men into the building trades: after the Fire, there was going to be work for your lifetime and if you did well the possibility of an extremely comfortable lifestyle for yourself and your family. Builders are prominent in the table of fortunes amassed by members of the sample of London manufacturers used by Peter Earle in *The Making of the English Middle Class*. They occupy the first, seventh and thirteenth positions; only three distillers, as a trade, have a similar record of good fortune. In first place was a builder/mason with a declared value at probate of over ten thousand pounds; with between five and ten thousand pounds was the builder/carpenter placed seventh; while the builder/mason occupying the thirteenth place on the list had accrued considerably more than two thousand pounds. These are fortunes equivalent to those of the merchants and bankers who occupy prominent positions in Earle's table of merchant's fortunes; the merchants would, of course, have been among the builders' clients. Even the builders in fortieth and forty-fifth positions each had an estate of over a thousand pounds, a considerable sum for the time.

The nineteenth century was not unrepresented on our visit. In Carter Lane, the former St Paul's Choir School by F.C. Penrose of 1874-75 is a riot of pale stone, buff terracotta and brick with on the first floor much sgraffito decoration. Almost contemporary are the second group of canons' houses in Amen Court, of 1878-80 by Ewan Christian in red brick with broken outlines, shell doorcases and large chimneys. The style is that of Norman Shaw, the big mansion flats of Ecclestone Place near Victoria Station in London S.W.1; in E.C.4, it is a bravura performance but the upkeep costs must be horrendous.

Much earlier the Romans, c.200, had encircled London with a wall with bastions, partly incorporating the wall of the late-first-century Cripplegate Fort. The Roman wall was re-used in the high middle ages and the gates were used control ingress and egress. In St Alphage Garden is one of the last embellishments of the city wall: the crenellated brickwork with diaper pattern added to the top of the wall by Mayor Ralph Jocelyn in 1477. It was there that our day ended. We had seen much but the day was without overload, for which much is due to the careful planning of the society's chairman, Terence Paul Smith.

DAVID H. KENNETT

BRICK AND THE CITY OF LONDON: A SELECT BIBLIOGRAPHY

Compiled by David H. Kennett and Terence Paul Smith

Because brick is such a prominent material in the rebuilding of London after the Great Fire, it seems worthwhile to include in this issue of *British Brick Society Information* a select bibliography from the vast literature available. Brick was not used extensively before the rebuilding but became the most important building material in London thereafter for nearly three hundred years. This listing is divided into four sections: general books and the pre-fire background are noted in the first two; the third covers the Great Fire with the rebuilding and its social background, and the fourth specifically records books on the City churches.

GENERAL

- F. Barker and P. Jackson, *London: 2,000 Years of a City and its People*, (London: Macmillan, 1974).
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- S. Inwood, *A History of London*, (London and Basingstoke: Macmillan, 1998).
- M. Jenner, *London Heritage: the Changing Style of a City*, (London: Michael Joseph, 1988).
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THE PRE-FIRE BACKGROUND

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- G. Home, *Medieval London*, (London: Ernest Benn, 1927; re-issued, London: Bracken Books, 1994).
- J. Schofield, *The Building of London from the Conquest to the Great Fire*, revised edition

- (London: British Museum Press in association with the Museum of London, 1993).
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THE FIRE AND THE REBUILDING AFTER THE FIRE

- W.G. Bell, *The Great Fire in London in 1666*, (London: The Bodley Head, 1923).
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 L. Clarke, *Building Capitalism: Historical Change and the Labour Process in the Production of the Built Environment*, (London and New York: Routledge, 1992).
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 M.D. George, *London Life in the Eighteenth Century*, (London: Kegan Paul, Taubner and Co., 1925; paper back edition, Harmondsworth: Penguin Books, 1966 and later reprints).
 H. Hobhouse and A. Saunders (ed.), *Good and Proper Materials: the Fabric of London since the Great Fire*, London Topographical Society Publication 140 (London: Royal Commission on Historical Monuments in association with the London Topographical Society, 1989). [Includes A. Cox, 'Bricks to Build a Capital, pp.3-17].
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 P. Thorold, *The London Rich The Creation of a Great City From 1666 to the Present*, (London: Viking, 1999).

THE CITY CHURCHES

- J. Betjeman, *City of London Churches*, new edition, ed., A. Lockhart, (London: Pitkin Pictorials, 1993)
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 S. Bradley, *The Buildings of England: The City Churches*, (London: Penguin Books, 1997).
 S. Bradley and N. Pevsner, *The Buildings of England: London 1, The City of London*, (London: Penguin Books, 1997).
 S. Briggs., *City of London Churches: an Illustrated Guide and Map with Historical and Architectural Notes*, (London: Richard C. Martin in conjunction with the Southwark Heritage Association, n.d.)
 P. Jeffery, *The City Churches of Sir Christopher Wren*, (London: Hambledon Press, 1996).
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BOOK REVIEW

David N. Robinson OBE, *Lincolnshire Bricks History and Gazetteer*.

40 pages, 28 plates, 4 figures, 1 map.

Heckington: The Heritage Trust of Lincolnshire, 1999 ISBN 0-948639-26-1, price £3-95.

The Heritage Trust for Lincolnshire is at The Old School, Cameron Street, Heckington, Sleaford Lincolnshire NG34 9RW

Lincolnshire has established a co-ordinated response to the Heritage Open Days held annually on the second or third weekend of September. In 1999, the theme was "Brick Lincolnshire" and this booklet is part of the response to the theme.

There are four introductory chapters and a bibliography to complement the seventeen pages of gazetteer. The balance is about right and the illustrations are evenly distributed. The first three chapters cover 'Brick Clays', 'How a Brick Was Made', and 'How Bricks are Laid'. The fourth and longest discussion is entitled 'A Short History of Lincolnshire Bricks', which is divided into 'Roman Brick and Tile', 'Medieval Revival', 'Fashionable Brick', and 'Common as Brick'. The third of these, 'Fashionable Brick', begins with Tattershall Castle, visited by the society after the 1995 Annual General Meeting, and ends with the Artisan Mannerist brick of Aslackby Manor House, visited as part of the society's Spring Meeting in 1998.

There follows a gazetteer of early brick buildings in Lincolnshire to 1760: no fewer than eighty interesting places to go in the hundred miles between the Humber and the banks of the Nene. Each entry gives civil parish, site, date (sometimes to the century only), location and opening hours, followed by a brief description. The county has much to recommend it. From the southern edge of Woodhall Spa, it would be easy to walk to Halstead Hall, Stixwold, or along the Spa Trail to the remains of the single fragment of the Tower on the Moor, or along the Viking Way to see Peter Hancock's Hospital and the chancel of St Lawrence's church at Bardney.

Page 39 is given over to a map of Lincolnshire brick and tile works in the 1880s, the time of maximum production facilities in many rural counties. The caption emphasises the importance of geology in the location of small brickworks. The map brings out the almost complete absence of brickworks from the Wolds and the Heath on the Jurassic limestone ridge cut by the River Witham at Lincoln.

David Robinson is a long-standing member of the British Brick Society; with the aid of Hilary Healey and David Start, he has produced an extremely useful booklet which many members will wish to own.

DAVID H. KENNETT

Received for review:

J.A. Loomis, *Revolution of Forms Cuba's Forgotten Art Schools*,
New York: Princeton Architectural Press, 1999.

A. Saint (Introduction), *London Suburbs*
London: Merrell Holberton, 1999.

These volumes will be reviewed in a forthcoming issue of *British Brick Society Information*.

Brick Queries

From time to time, the British Brick Society receives enquires and queries about bricks, brickmaking, other ceramic building materials and brick buildings. These are printed with responses received as space is available in *British Brick Society Information*.

DAVID H. KENNETT

DEJA VU - STAR FROGS

In *BBS Information*, 43, November 1987, there was an item in the 'Brick Queries' column seeking the identity of the brickmaker of a Staffordshire Blue type brick with a six-pointed 'Star of David' symbol in the frog. The illustration was included and shows the design:

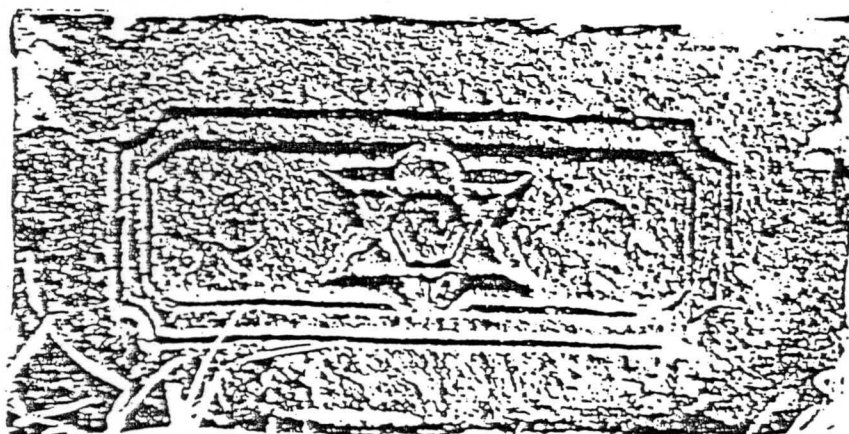


Fig. 1 Staffordshire Blue brick with six-pointed 'Star of David' in the frog.

The note requested anyone to contact the enquirer. We do not know if there was any response as the enquirer was not a BBS member. The reason for raising the query again is that since the original enquiry, the Hon. Secretary has had others for the same information, including two quite recently. They have not been from just one part of the country so there is no clue there. Until the most recent enquiry all references have been to blue or black bricks but a red one was found in Derbyshire.

The Avoncroft Museum of Historic Buildings at Bromsgrove have one of these bricks in their collection but they have not been able to identify the manufacturer. Can any member help? If so a note to Mike Hammett would be appreciated.

MICHAEL HAMMETT

Hon. Secretary BBS

9 Bailey Close, High Wycombe, Buckinghamshire HP13 6 QA

THE BRICKS OF THE CHELSEA PHYSICK GARDEN

There is an old brick wall round the Chelsea Physick Garden in west London. The wall is said to date from the seventeenth century. Has any member any idea as to where the bricks were made?

Mrs AVERIL HARPER SMITH

48 Perryn Road, London W3 7HA

EDMUND CARTWRIGHT'S INTERLOCKING BRICKS

Edmund Cartwright (1743-1823) is best-known for his invention of the power loom. He was sometime Rector of Goadby Marwood, Leics.

In 1795, he took out a patent for interlocking bricks to be used in the building of arches. Although they could be used without mortar, they would still need a timber centering to support them during construction as with conventional arch construction.

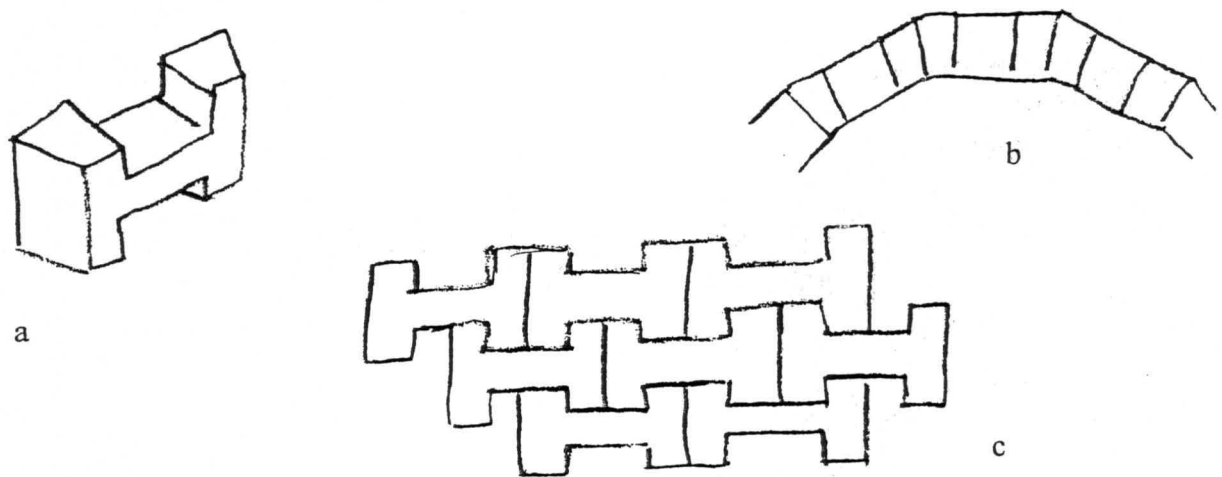


Fig. 2 The interlocking bricks of Edmund Cartwright's patent.

- a: The Brick
- b: An arch of these bricks, looking face on
- c: Diagram showing how the bricks interlocked.

These were mentioned by Adam Hart-Davies in a *Local Heroes* programme on BBC2 in October 1998. Can any member through any further light on their use and point to arches actually constructed of these bricks.

MARTIN HAMMOND

St Annes, 13 Jackson Road, Parkstone Poole, Dorset BH12 3AJ

BRICKMAKING IN RURAL SHROPSHIRE

Robert Simpson has begun research into all types of brickmaking and tilemaking, including the history of rural brickmaking and brickmaking on farms, in rural Shropshire. Any information, whether oral, textual or visual, would be welcomed.

This includes information on both farm-based and urban, industrial brickmaking in the county. Also welcome would be information on roofing rille and agricultural drainage pipe and tile manufacture on farms in rural Shropshire. He would like to know whether anyone has any knowledge of rural-based companies producing bricks, roofing tiles and agricultural drainage pipes in the county.

He would also request any information on the clamp firing of bricks.

ROBERT SIMPSON

Hopesay Farm, Craven Arms, Shropshire SY7 8HD

POSSIBLE PAVIOURS FROM HAMPSHIRE

A small number of bricks were found in the ground at Pigeon House Farm, Hatherden, Andover, Hampshire. Most of the farm buildings extant above ground are of seventeenth- or eighteenth-century date.

The brick size is 6 x 2.75 x 1.5 inches (150 x 70 x 40 mm). The body is a nasturtium red with small water-washed gravel and chips of chalk distributed throughout. The fire stain is variable. Some of the bricks have a noticeably burnt stain on one or two sides. One is thoroughly burnt but not warped. They have a frog on one side; a shallow indentation with four parallel incisions right across it, (sketch in fig. 3).

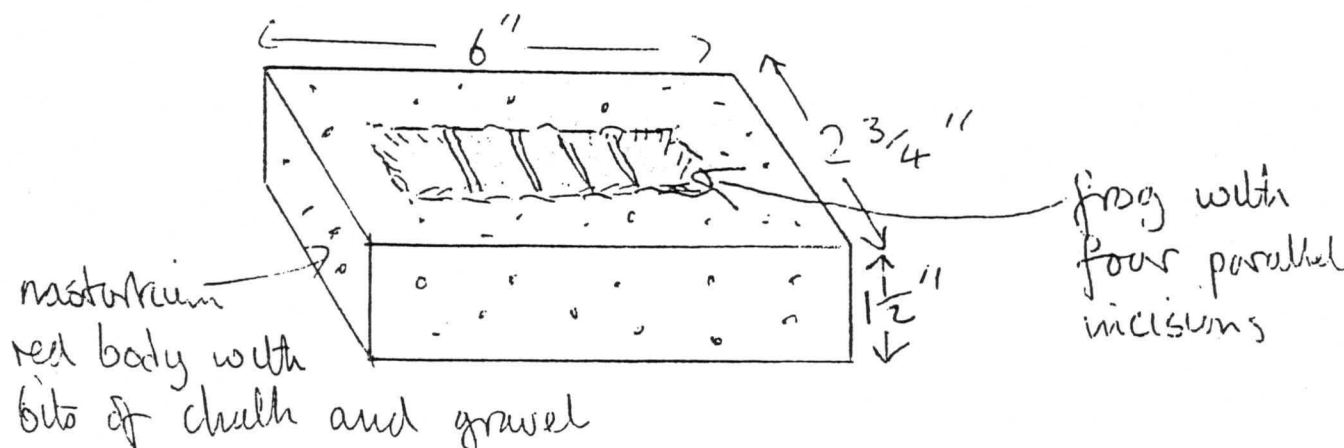


Fig. 3 Sketch of brick from Pigeon House Farm, Hatherden, Andover, Hampshire

Does any member recognise these bricks or can anyone suggest a possible source. They are clearly hand-moulded and possibly clamp burnt. Are they pavours? Does a collector want them? Photographs of the bricks are available.

J. PATRICK

Osborne's House West, 2 Portsmouth Road, Liphook, Hants., GU30 7AA

PINK LIMEWASH ON THE QUEEN'S HOUSE AT KEW

On visiting Kew Gardens recently and looking at the newly restored exterior of the Queen's House (or Dutch House as it is sometimes known), I was surprised to find the bricks coated with a pink limewash. On enquiring about this, I was given a short lecture on the limewashing of bricks in the seventeenth century and told that the colour used there toady - pink! - was the same as the original one: scrapings had been taken and the colour reproduced.

Do expert members have any comments?

Mrs AVERIL HARPER SMITH

48 Perryn Road, London W3 7HA

Brick in 2000

At various times the British Brick Society is informed of lectures, exhibitions and other events which are of interest of the membership.

BRITISH ARCHAEOLOGICAL ASSOCIATION

The British Brick Society does not organise a lecture series. Members of the Brick Section of the British Archaeological Association are invited to the association's lectures in the rooms of the Society of Antiquaries, Burlington House, Piccadilly, London. The association welcomes non-members to its lecture series. The chair is taken at 5.00 p.m.; tea is served from 4.30 p.m.

One meeting in 2000 is of especial interest to members of the British Brick Society.

Wednesday 3 May 2000

Millenium Review Lecture Series - 4

'English Historical Brickwork since Nathaniel Lloyd'
by Terence Paul Smith

Members of the British Brick Society are cordially invited to this lecture in memory of the society's second President, the late Nicholas Moore.

WALTER RITCHIE 'ONE MAN'S WORK'

Walter Ritchie is best known to members of the British Brick Society for his panels on 'The Creation' on the exterior walls of Bristol Eye Hospital and the statue of Sir Leonard Hutton at the Oval commemorating the then record score of 364 runs in one innings. Brick was not the only medium for his sculpture; there is 'Man's Struggle' in Portland stone on the walls of the Herbert Museum and Art Gallery at Coventry. There is also work in marble, metal, perspex, stone and wood.

Born in Kenilworth, the artist exhibited only twice in his short lifetime: he was only fifty-seven when he died. His sculptures were meant to be seen out of doors. A retrospective of his work under the title, "Walter Ritchie 'One Man's Work'" is to be held in the Art Gallery, The Royal Pump Room, Royal Leamington Spa, from 1 April 2000 to 21 May 2000. It will include smaller pieces and models for large works as well as drawings and photographs of his public work, together with other material from private collections.

The recently re-furbished building is interesting too, especially the brickwork of the Turkish Bath.

DAVID H. KENNETT

LAMBETH PALACE, LONDON

Lambeth Palace, the London home of the Archbishop of Canterbury, is rarely open to the public. However, as an event in the year 2000, part of the palace will be open between April and October. Guided tours are to include the great hall, the crypt, the chapel, some of the state rooms and the library. Admission price is reported to be £4-00 per visitor.

DAVID H. KENNETT

BRITISH BRICK SOCIETY IN 2000

Five visits and meetings have been arranged for 2000. The list of meetings is given below. Details of the morning part of the Spring Meeting were included in the last mailing. Full details of the Northern Spring Meeting and the afternoon part of the Spring Meeting are in this mailing.

Northern Spring Meeting

Saturday 8 April 2000

Wigan, Lancashire. Walking Tour led by D.H. Kennett.

Spring Meeting

Saturday 20 May 2000

Brighton area including Brighton sewers in the morning and Lewes in the afternoon..

Annual General Meeting

Saturday 10 June 2000

Kew Palace

July Meeting

Saturday 15 July 2000 (to be confirmed)

Essex, including a major house, possibly Layer Marney Tower.

Autumn Meeting

Saturday 11 November 2000

Afternoon viisit to Glyndebourne Opera House

Full details of all remaining meetings in 2000 will be included in the next mailing.

A visit to rural south-east Warwickshire is planned for March 2001 and will include the brick kiln of the Oxford Canal at Fenny Compton, where there was a tunnel at the canal's highest point.

Ideas for urban venues in future years include Blackpool, Boston, Burton-on-Trent, Coventry with a brickworks visit, King's Lynn, Oxford including Keble College, Rugby including Rugby School, Scunthorpe, Stafford, Stratford-upon-Avon, Warwick, Wolverhampton, and Worcester.

A further visit to the City of London, centred on its eastern part has been suggested. Two visits to outer London are in preparation: one in the Chiswick area including Voysey's factory building for Sanderson Wallpapers and the other in St John's Wood to include Lord's Cricket Ground with the terracotta pavilion by Frank Verity.

Ideas in preparation for include a Western Spring Meeting in Gloucester in 2002, based on Gloucester Docks with a rare opportunity to view the major maps of canals and brickworks. and a July Meetings for 2001 and 2002 in southern Suffolk and the Basingstoke area, including Lutyens' offices for the Old Basing Brickworks of 1905, Old Basing church of post 1659 and the site of Basing House, demolished in 1645 after a siege. A meeting in Nottinghamshire, including a brickworks is also planned.

The British Brick Society is always looking for new ideas for future meetings. Suggestions please to Michael Hammett, David Kennett or Terence Smith.