

**THE CHURCH OF  
ST. GEORGE THE MARTYR  
BOROUGH  
SOUTHWARK**

**AN APPRAISAL OF THE BELL FRAME**



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*Cover: Engraving of the church and spire of the church of St. George-the-Martyr, Southwark, published c.1776.*

**THE CHURCH OF ST. GEORGE THE MARTYR,  
BOROUGH,  
SOUTHWARK.**

**An appraisal of the bell frame**

**TEXT AND LAYOUT**

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**SURVEY**

Dr. J.C. Eisel

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**November 2011**

# **The Church of St. George the Martyr BOROUGH, SOUTHWARK**

## **AN APPRAISAL OF THE BELL FRAME**

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### **1. Introduction**

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In this appraisal the significance of the bell frame in the church of St. George the Martyr is assessed, with a site visit and using readily available sources. It indicates further lines of research to place the frame within its context in the eighteenth century.

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### **2. Outline History of the church**

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It is known that a church had been erected on the site by 1122, a church which was rebuilt in the late fourteenth century. Little, if anything, survives of any building earlier than the present, except two inscribed stones in the clock room of the tower, one of which is dated 1438.

Although repairs to the fabric were carried out over the years, by 1732 it was in a poor state and an Act to rebuild the church was applied for in 1732, which received the Royal Assent in the following year. The design for the new church was by John Price, the foundation stone was laid on St. George's Day, 1734, and the main part of the structure was completed the following year. A grant of £6,000 was made from the funds of the Commissioners for the Building of Fifty New Churches towards rebuilding the church in brick, but was inadequate to furnish the church as well as build it, and so a church rate was levied to cover the extra cost. The new church was opened in 1736.

The position of the church makes it vulnerable to outside factors, and the building of the nearby Tube station, which was opened in 1890, and the increasing traffic on either side of the church, combined with poor foundations, caused structural problems, and in 1930 repairs were carried out to the tower, spire and crypt. The foundations of the south wall, which were giving cause for concern, were strengthened in 1938. After war damage, a full restoration was carried out in 1951-2, the church being rededicated on 16 October 1952.

In recent years the foundations of the main body of the church continued to give cause for concern, with further movement taking place. The nave was declared unsafe in

2000 and after a fund raising effort, aided by the National Lottery Fund, restoration began in September 2005 and was completed in March 2007, the first service in the refurbished church being held on Palm Sunday, 1 April 2007. During this work, which cost some £3.6m, the church was underpinned and now rests on a concrete raft, supported on piles. As part of the work the levels within the crypt were lowered and this is now used extensively for community work.

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### 3. Description of the present Church and Tower

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**St. George's Church in the late nineteenth century. The view is very similar today, except that the traffic is of a very different nature, and the road is cluttered with modern street furniture.**

The following description of the church appeared in 1983 in *The Buildings of England. London 2: South*, by Bridget Cherry and Nikolaus.

'ST GEORGE, Borough High Street. 1734-6 by *John Price*, in replacement of a medieval church. A sound, sturdy church, uncommonly well sited, so the from N as well as S its tower appears to advantage. Square white W tower, two octagonal upper stages, and octagonal spire, nothing too transparent, all massive and trustworthy. The body of the church red brick; two tiers of windows in composition derived from Wren's St James, Piccadilly. E window Venetian with cartouche and garlands above. Interior altered by *William Hedger*, 1807-8. The usual three galleries. Flat plaster ceiling with graceful

cherubs designed by *Basil Champneys* (1897), restored by *T.F. Ford* after damage in the Second World War.’

The text then continues with a description of the internal fittings.

The tower is placed at the west end of the church and is clasped by both the north and south aisles, so that the ends of the aisles and the lower part of the tower form a single composition, with a pillared portico surrounding the west doorway and completed by a balustrade around the tops of the ends of the aisles. Externally the tower, which projects above the façade, is clad in Portland stone, but the core is made of a soft brick, with internal stone dressings at the corners. The square belfry stage is surmounted by two octagonal stages, the lower designed for the clock faces which are visible on each of the four sides, with an octagonal stage above which contains the clock bell, and an octagonal spire above.

Internally the lowest stage of the tower forms an entrance vestibule to the church, through a pair of external doors in the west wall, with a pair of doors in the east wall leading into the main body of the church. There are blind arches in the north wall and the corners of the vestibule are angled off. Access to the upper stages of the tower is via a spiral staircase in the north-west corner of the vestibule, and there is also a spiral stair at the south-east corner, which leads to an upper room in the west end of the south aisle. The spiral in the north-west corner leads in turn to the ringing chamber, intermediate or sound chamber, and the belfry itself. Access to the clock room, which is in the base of the spire, is by means of a ladder from the belfry stage, which rests on the frame heads.

The ringing chamber is immediately above the vestibule, its floor being an estimated 4.6m above that of the vestibule, and the corners of the room are, like those of the vestibule, angled off. Against the south-west angle there is a manual for an Ellacombe chiming apparatus. There are also tall blind arches in the north and east walls, and the room is lighted by a semi-circular window in the west wall, forming part of the composition of the west front. In the centre of the floor is a removable trap for installing the bells and removing them from the tower. Around the walls there is a fine series of peal boards, the earliest of which record a peal of Grandsire Triples rung by the Westminster Youths on 6 September 1805, which was claimed as ‘the greatest performance on these bells for a period of 20 years.’

There is a sound chamber immediately above the ringing chamber, again with the corners angled off, but with no blind arches in the walls. However, there is a small window in the south wall, and in the east wall there is a door which gives access to the space above the ceiling of the church. The floor of the sound chamber is about 5.77m above that of the ringing chamber and 3.14m below that of the belfry above, an ideal arrangement.

The spiral stair terminates at the belfry stage, and a short wooden flight of steps leads on to the frame heads. This is the only corner which is angled off, the angles in the other three corners terminating at the level of the foundation beams. Above the louvred

windows there are arches built out from corbels in the corners, which support squinches for the octagonal stage above.



**The squinches supporting the octagonal stage above the belfry.**

Access to the clock room in the lower octagonal stage, is, as mentioned above, via a ladder which rests on the frame-heads just inside the entrance to the belfry. In the centre of the floor is a wooden clock case, which now houses only the electric motor which drives the motion work for the hands on the external dials. One clock weight lies on the floor.

Above the clock room is the floor of the octagonal stage beneath the spire, which is lead-lined but with a chute for the clock weights at the south-east corner. Access to the floor is via a wooden ladder, and on the level of the floor are arched openings on four

sides of the spire, with only a thin wire mesh to prevent the entry of pigeons. The frame for the clock bell rests on this floor.

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## 4. The Bells and Fittings

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### 4.1 Bells

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The tower contains a ring of eight bells, cast by Abraham Rudhall I in 1718, and a clock bell cast by Richard Phelps and Thomas Lester of Whitechapel in 1738. Basic details of the inscriptions on the bells are given in Stahlschmidt's *Surrey Bells and London Bell-Founders* (1884, 201-2).

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### 4.2 Fittings

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The fittings consist of elm stocks, with plate gudgeons and ball bearings. The stocks are evidently those supplied during a restoration of the bells in 1899, described in *Bell News* on 8 May 1899, while hexagonal nuts indicate that the plate gudgeons were replaced at the same time as ball bearings were fitted at a rehang in 1936 (*Ringing World*, 8 May 1936). The bells are generally secured to the stocks with conventional ironwork, but the three bells that have been one-eighth turned are each supported by four bolts through the crown which were fitted in 1936, the marks where the former hanging irons were being carefully filled in. Independent crown-staples have been fitted, again in 1936, and the stays and sliders are of traditional form, as are the wheels. A set of Ellacombe hammers was fitted by Messers Taylors, chimed from a manual in the ringing chamber.



(Left)

**(Left) Typical ironwork supporting the second bell, viewed from the north.**



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## 5. The Bell Frame

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### 5.1 Description of the Frame

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This is of a standard layout, (Pickford Type 8.3), and is approximately square, but because of the angle at the north-west corner where the spiral stair gives access to the belfry, at this corner the frame is also angled. On the west side the treble and second bells swing north-south, mouth to mouth, while on the east side the fifth and sixth bells swing north-south, mouth to mouth. These are separated by four parallel pits, with the bells swinging east-west, containing, in order from the north, the third, fourth, tenor and seventh bells. The rope circle is clockwise. In order to improve the rope circle in the ringing chamber there has been a slight amount of drawing of the ropes both in the belfry and in the intermediate chamber, in the ringing chamber, but despite this the rope circle is still not as good as it might be.

For the four parallel pits, each bell hangs at the centre of a truss which is formed by two substantial braces, inclined to the centre, each of which is double jack-braced. The north-south trusses are of three different types, depending on the situation in the frame, with fewer or no jack braces.



**Typical use of a double jack-brace, on a massive brace at the south-west corner of the pit for the sixth bell.**

At sill level the frame was formerly closed by a diagonal timber at the north-west corner, which is now missing. How this was secured at either end is not obvious. It was lapped over the west sill, but no evidence was found to indicate how the lap joint was secured.

There are a series of carpenter's marks on the frame, which were cut with a one-inch chisel. The full series was not identified as the frame is covered with a thick layer of London grime and it was felt that to brush this layer away to uncover other of the marks was inadvisable.

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## **5.2 Later alterations**

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There have been few alterations to the frame since it was made, and these are of a minor nature. These included some tie bolts (but not a full scheme) and cast-iron angle brackets, and the removal of a timber at sill level at the north-west corner.

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## **5.3 Use of Secondhand Timber**

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The frame was constructed using a mixture of new and secondhand timber, some of which was unlikely to have come from a former bell frame, but other elements exhibit characteristics which make it certain that they were used in a former frame.

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## **6. The Supporting Timbers**

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The sills of the frame are all jointed together on the level and as such are designed to sit on a floor, with no mechanical connection to the floor, relying on gravity and friction to keep it in place. Subsequently the frame and floor were tied together with tie rods, almost certainly in 1936. The floor is integral with the tower and consists of two large north-south timbers, about 30 cm wide by 35 cm deep, dividing the area into uneven thirds, resting on wall plates built into the north and south walls. On the east and west sides there are 11 timbers, each about 15 cm wide by 22 cm deep, spanning from the main timbers to the tower walls, equally spaced, but the outer ones of uneven length because of the angling of the walls in the corners at this level. The outer ends of these timbers also rest on wall plates built into the walls, and the inner ends are double tenoned to the primary timbers, and probably pegged from the top, although this is hidden. Centrally, the middle three corresponding timbers were not installed, the space under the tenor bell being used for a bell hole to raise the bells into the belfry. In this central space two softwood timbers have been slotted, the rest of the structure being of oak, with a trap above. Outside the central area the timbers are covered with boards laid north-south, tying the whole structure together and effectively making it a diaphragm. The frame sits on this floor.

Generally the floor is as it was laid, except that a board has been removed beneath the treble bell, and a similar slot cut along the pit of the third bell. This slot, which is comparatively recent, cuts across the boards which are laid north-south and thus reduces the efficiency of the floor.

Immediately below the supporting timbers four tie bars have been installed, more or less parallel to the four walls and close to them, and these are designed to tie the corners of the tower together. These were probably installed as part of the work carried out in 1930.

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## **7. Assessment of the bell frame**

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Even without the circumstantial background, the frame is identifiable as having been made in the eighteenth century, probably earlier rather than later. It is a substantial piece of workmanship, well capable of carrying the present ring of bells, and is all of a piece, i.e. it was designed to hold a ring of eight bells from its initial conception, and is not a frame for a smaller number of bells extended. It is a very competent piece of work, and evidently made by a specialist in this type of carpentry.

The generic detail of the frame and lack of precisely dateable features can only give a broad range of dates for the frame. Circumstantial evidence suggests that the frame could either have been constructed when the ring was recast in 1718 and reused in the new church, or constructed afresh when the church was rebuilt in the 1730s. There is also the possibility that it was neither of those dates, as new frames were not always constructed at the same time that bells were recast.

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## **8. Recommendations**

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This appraisal has been made using published sources, combined with a site visit, and primary research. It is recommended that a Level 3 recording should be carried out in order to refine the dating, and identify if possible, the exact date of the frame.

(For the purposes of training, a Level 1 and Level 2 record has also been made so that the differences in the documents can be readily seen. Since Level 2 and Level 3 are much closer in content, those parts in Level 3 which are not part of Level 2 are recorded in blue.)

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