

Building a Fortune: The Finances of the Stonemasons Working on the Rebuilding of St Paul's Cathedral 1675-1720

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ABSTRACT: A number of writers have postulated that the rebuilding of London after the great Fire saw the birth of the modern building firm and speculated on the amount of money that contractors made from building in the period. Actually calculating the amount of money some of the contractors made has proved much more difficult. This paper looks at the problems involved. It concentrates on a number of individuals for whom more information survives than any others: the stonemasons at St Paul's Cathedral. It shows that, while most craftsmen were poorly paid, a few could get very rich indeed.

INTRODUCTION

Early in the morning of 2 September 1666 a fire started in a baker's shop in Pudding Lane in the heart of the City of London. It burned for four days, destroying an estimated 13,200 houses, 87 parish churches, six consecrated chapels, 52 livery halls, the Guildhall, the Royal Exchange, the Customs House, Newgate prison, and three city gates. Remarkably only six people died, but 80,000-100,000 inhabitants were rendered homeless (Stephen Porter 1996, pp. 69-74). Virtually everything within the old City walls was reduced to smouldering ruins including the centrepiece of the whole city, St Paul's Cathedral.

THE BUILDING TRADE IN SEVENTEENTH CENTURY

It is widely recognised that the Great Fire of London marked a changing point in building history in England. Because of this, the period has long attracted the attention of building historians. The rebuilding itself was detailed in Reddaway (1940), McKellar (1999) and Summerson (1946). The removal of restrictions and the need for extensive construction led to a building boom. The government sought to restrict both wages and the prices of commodities, but there is no doubt that the economic climate allowed many building operators to profit substantially. Building workers were still organised into separate trades (carpenters, masons, bricklayers, plumbers, joiners, etc.) and the evidence suggests that these remained largely separate (Campbell 2002), but increasingly wealthier tradesmen embarked on speculative building projects. This practice was outlined in Summerson (1946) and elaborated on by Elizabeth McKellar (1999). The latter's study relied entirely on the records of the Courts. While these were incredibly revealing about building practice they gave only limited information on the money the tradesmen were making, allowing her to make only general observations about the increasing financial wherewithal of building craftsmen.

Masons were covered in studies of the rebuilding after the Great Fire as one of many types of craftsmen. Stone buildings were always rare in London. Before the Fire a great majority of buildings were timber-framed. Masonry was restricted to churches, palaces and the houses of the very rich, the aristocracy and wealthier merchants. Even then, most masonry buildings were built of brick not stone and even if they were faced in stone, the walls behind were always constructed of brickwork not stone. The methods and tools masons employed are not the subject of the present paper. They have been detailed by myself and others elsewhere (Campbell

2007, pp.78-80; Ayres 1998, pp.66-92). The economic activities have not been so well documented. The closest to such an assessment being made is Knoop and Jones (1935). However the Restoration of the monarchy with its related work on the Royal Palaces and the rebuilding after the Great Fire — which included the City Churches, public buildings in the City and St Paul's Cathedral — created a period of great activity for stone masons. It would thus not be unreasonable to suppose that some of them might have profited and this is what this paper seeks to study. The paper will focus on the group of masons who worked on St Paul's. The reason for this is simple: a huge number of records survive.

RECORDS

Few building projects have been as well documented as the building of St Paul's Cathedral. The cathedral was built using funds from public donations and a tax on coal. Corruption was as rife in the seventeenth century as any period in history and thorough careful accounting were the only guard against it. Records were kept of every penny received and every penny spent on the building of the cathedral. At the end of each year the accounts were handed over and audited before a final signed and approved copy was made on vellum to provide lasting proof of that no money had been misused. Kept alongside the accounts, inventories were compiled of all the building materials arriving on site, registers were drawn up daily of all the men on site, and every letter was carefully filed. The result is an enormous archive of over one hundred volumes detailing every aspect of construction. Until the Second World War these were kept in the library of the cathedral itself. However they have since been deposited in the Guildhall Archives where they can be stored under controlled conditions and they are soon to be moved again to a new home in the London Metropolitan Archives. A small number of these documents were transcribed in the volumes *Wren Society* (*Wren Society*, 1923-43; hereafter abbreviated as *WS*). I have referred to these where possible in this text as they are generally more accessible but in all cases I have checked the original sources. The accounts of the City Churches (those churches reconstructed to replace those destroyed in the Great Fire) are stored alongside the St Paul's documents. The other great sources of the period were the comprehensive records kept by the Office of the King's Works (the Government Department responsible for the building and maintenance of all Royal and Government buildings). These records are kept in the National Archives. These sources collectively record the names, contracts and payments to masons together with details of the work that they undertook. Further information on the lives of the individuals is more thinly spread. Baptisms, marriages and deaths are recorded in parish registers, some of which have been transcribed in the International Genealogical Index. Wills and their settlements have survived more sporadically and only a portion can be easily traced. Livery company records provide other details about their professional lives, particularly their status within the City hierarchy. All these are useful in understanding the wealth of the individuals involved. Key however are the accounts and the way these are interpreted and how useful they are depends on the type of contracting employed.

METHODS OF PAYMENT/CONTRACTING

Elsewhere I have discussed the methods of contracting used in the seventeenth century in more detail (Campbell 2005, pp.331-339). All these accounts are based on Wren's own description (*WS*, V, p. 20) in which he divided types of contract into "by Great", "by Measure" and "by Day". The latter was payment of workers at day rates. It was the most common form of payment in the Middle Ages, but was falling out of favour in the seventeenth century. It was nonetheless still used in certain situations where quality was important beyond all else. For example, the carpenters at St Paul's were seen as critical to the success of the project because they had to build all the scaffolding for the works. They were thus paid by day. Payment "By Great" required the craftsmen to provide a fixed price for a set piece of work, which might be a whole building or part of a building. The client would usually, but not always, provide the materials. The contractor was the chief carrier of the risk, but there were problems, particularly as most contractors were ill-equipped to estimate the cost of the work and sometimes got themselves into financial trouble as a result, threatening the whole project. To guard against such an eventuality the better contractors charged a premium for working by Great and as Wren commented "made great profit by it". Wren's preferred solution was thus the third method, payment "by measure". Rates were agreed in advance for carrying out work (*ibid.*). Rates were usually, but not always, agreed for labour only, with the client procuring the materials. Payment by measure also required the use of trusted measurers who could accurately and fairly measure the work carried out so that payment could be agreed. The masons' contracts at St Paul's were "by measure", measuring being done quarterly. Because of this the accounts do not list the number of masons on site, although they do give very detailed breakdowns of work done.

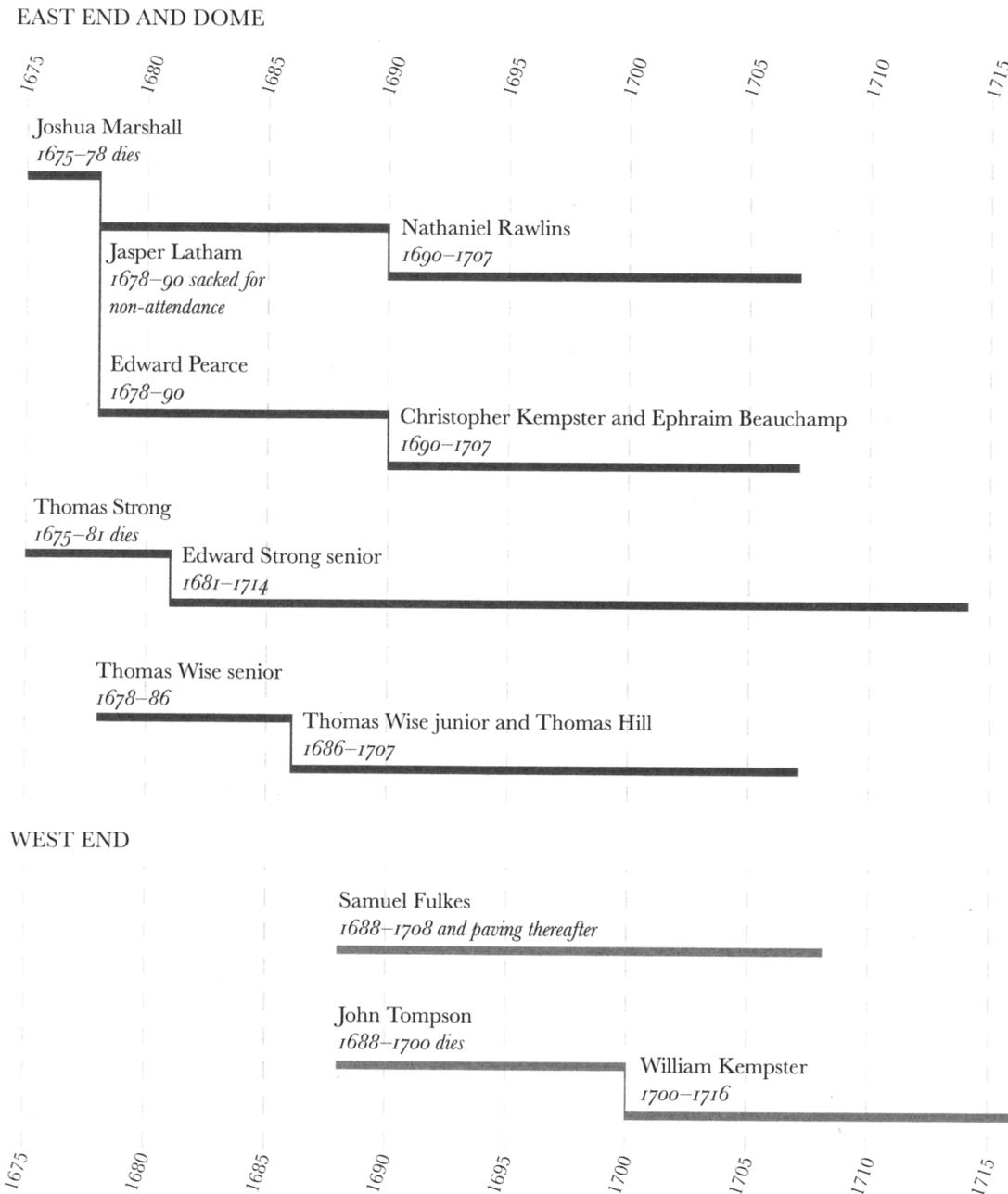
Masons in the period were divided into apprentices (or servants), journeymen (qualified masons, paid by the day) and Masters Masons. The Masters were only distinguished from journeymen in that they employed others. On most building projects there was a single Master Mason who was in charge of all the masonry work on the project. They usually worked on an equal footing with a Master Carpenter, although sometimes employers would appoint one or other as the overseer of the whole works. The newcomer on the scene was the architect. Architects did not really exist in England before the seventeenth century. They were first only used on grand buildings but by the end of the seventeenth century were employed on even quite modest public pro-

jects. The architect took over the design role that had been carried out by the Master Craftsmen and increasingly they were reduced to simple building contractors. To do so they had to themselves adapt.

THE CONTRACTORS AT ST PAUL'S

Wren, the architect of St Paul's, from the outset realised that the size of the project and the speed of work required was beyond the ability of any single seventeenth century masonry contractor, most of whom employed no more than a few dozen men. His solution was to divide the project between teams of masons. At first there were just two teams, but when in 1678 one of the masons, Joshua Marshall, died. Wren decided that more teams were required. He divided Marshall's share in three. Thereafter four teams worked on separate parts of the building until in 1688 Wren added two further teams to complete the West End. The building was completed by six teams of masons, each controlled by one or more Master Masons. Their names are shown below:

Table 1: The masons for St Paul's; (from Campbell, 2007: p.24)



Wren chose his masons carefully. They represented the largest and best-known mason contractors in England and it is likely that they were also among the wealthiest. First amongst them were Joshua Marshall and Thomas Strong. The mason-contractors at St Paul's fell into three types: those that were statutory masons, those whose families owned quarries and those that made their living entirely from building contracting. Joshua Marshall had been a mason of the first type. Thomas Strong (c. 1634-1681) was one of the second.

Joshua Marshall

Joshua Marshall (1629-1678) was a natural choice as a Master Mason for St Paul's. He was Master Mason of the King's Works, a position that he had inherited from his father, Edward Marshall in 1673 (Colvin 1995, p. 641). Edward Marshall (c.1598-1675) had been Master Mason at the building of Lincoln's Inn Chapel. Made free of the Mason's Company in 1627, Edward was admitted to the Livery in 1631, made a Warden in 1643 and was Master in 1650 (Knoop 1935, p.35). Edward had also acted as an architect and contractor for a number of country houses and had a practice as monumental mason, working from a shop in Fetter Lane (Colvin 1995, p.641). He died before St Paul's began on site, but his son Joshua had already been working for Wren as a contractor and established a considerable business as a tomb-maker in his own right (BL Harl. MSS 1618, 1657 & 1658). Now Master Mason of the King's Works, he too was made Master of Mason's Company, first in 1670 and then again in 1677. He was paid £2525 for rebuilding the steeple of St Clement Danes in 1669-70 and £11 300 for building the Monument at New Fish Street Hill in 1671-75 (Knoop 1935, p.35). He went on rebuild six of the City Churches – St Brides Fleet Street, St Mary at Hill, St Mary Aldermanbury, St Stephen Coleman Street, St Peters Cornhill, and St Swithin Cannon Street – for which he was paid £19 477 (WS X, pp. 46-55) and Temple Bar (with Thomas Knight) for £700 (Knoop 1935, p.35). At St Paul's he had the largest contract and was paid £5 543 (WS XV xiii). Records also survive for work he carried out on the Deanery and houses for the residentaries but these amounts add up to less than £100 (WS XIII, pp.54, 63). Marshall would have no doubt gone on to carry out a great deal more of the work at St Paul's and elsewhere had he not tragically died in 1678 at the age of just 49 (Colvin, 1995, p.641). The other Master Mason at St Paul's at the beginning of the building was Thomas Strong.

Thomas and Edward Strong

Thomas Strong's family had been quarry owners in and around Burford (a village on the Oxfordshire/Gloucestershire border) for generations (Colvin 1995, p.934). Ownership of quarries gave them control over stone supply. By engaging in contracting they could also offer a complete service, from the supply of the decorative carving. However the quarries were a long way from Oxford, the principle market for their product. It was possibly for this reason – or possibly by an invitation from Wren for whom he had built a new quadrangle at Trinity College in Oxford in 1668 (Colvin 1999, p.936) – that Thomas Strong left Oxfordshire for London after the Great Fire. Strong joined the Mason's Company in London in 1670 (Knoop 1935, p.43). He worked on four of Wren's City Churches: St Stephen Walbrook (with Christopher Kempster, *qv.*), St Clement East Cheap, St Mary Magdalene and St Michael Cornhill (Knoop 1935, p.43; WS X, pp.45-53). He probably also worked on St Benet, Thames Street and St Austins, two contracts that were later taken over by his brother. St Paul's seems to have been Thomas Strong's chief work in London at the time, earning him £7,918. He rose to the Livery in 1671 and was made a member of the Court of Assistants in 1675. He might well have gone on to become Master, but he died in 1681 at the age of 47. He had never married or had children. On his death he bequeathed his quarries and his contracts to his younger brother Edward Strong (1652-1724) (Colvin 1999, p.936).

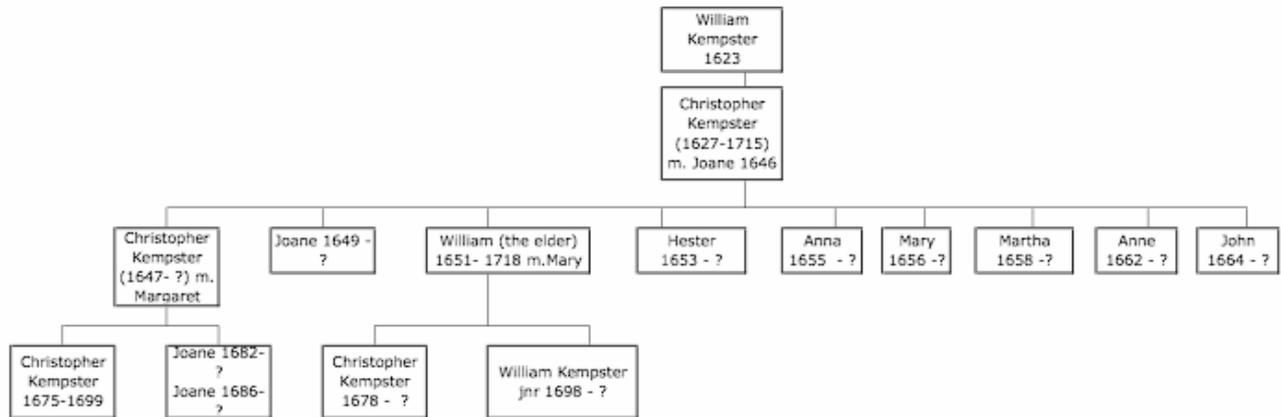
Edward Strong was 18 years younger than his elder brother. He seems to have arrived in London, in his late twenties, only a year or two before his brother's death. He was a highly able man who quickly picked up work, – no doubt helped initially by his brother's contacts – and swiftly established himself through his own skill as one of the major contractors of the age. He was to remain the Master Mason at St Paul's until its completion, earning £46 466, twice as much as any other contractor (WS XV p. xiv). He joined the Mason's Company by redemption in 1680, was Warden in 1694 and made Master in 1696. He worked for Wren on seven of the City Churches and was paid in total more than any other contractor in any trade, a sum of £19 548 (WS X p.54). He also worked for Wren at Winchester Palace, and Greenwich Hospital and on Marlborough House and Mordey's Hospital Blackheath (which he may have designed) (Colvin 1995, p.936). He also held the contract with his son, Edward Strong jnr. (1681-1741) for Blenheim Palace. It was Edward who took over his father's contracts in his increasing retirement from practice after 1710. Family and other connections were as critical to obtaining work in the seventeenth century as they are today. Those at St Paul's have not been outlined before. This paper will now attempt to do so for the first time. Two families were connected to the Strong's: the Beauchamps and the Kempsters.

Ephraim Beauchamp and the Kempster Family

Edward Strong (1652-1724) married Martha Beauchamp, sister of Ephraim Beauchamp (Knoop 1935, p.33). The Beauchamp family came from Burford like the Strong's. Martha's other brother, Joseph was a carpenter there, whose son went on to be apprenticed to Edward Strong Junior. Burford and its neighbouring villages of Taynton and Little Barrington were tiny places and families must have known each other well. It was no doubt through his brother-in-law that Ephraim moved to London and got work at St Paul's. Apart from a contract at St Dunstan-in-the-East, we only have records of Beauchamp working at St Paul's and even then he seems to have worked as a partner of Christopher Kempster, taking over the contract previously allotted to Edward Pearce (*qv.*). Between them they were paid £15 132 for their work which included one quarter of the dome. The Kempster family owned a quarry in Burford, Oxfordshire near the quarries owned by the Strong family at Taynton and Little Barrington. They moved to London through the Strong connection. The Kempsters had an annoying habit of calling most of their sons Christopher or William – see table 2 (below) – which makes it difficult to distinguish between them in documentary sources and has caused a great deal of confusion. Two of the family worked at St Paul's, Christopher Kempster (1627-1715) who held the contract with Ephraim

Beauchamp mentioned above and William Kempster (1651-18) who was his third child and second son. While Christopher (1627-1715) was working in London, it is probable that the quarry was looked after by his eldest son Christopher (1647-?), who probably hoped to inherit it and pass it onto his son also called Christopher. We do know the younger Christopher died in 1699 possibly after his father but not before his grandfather. When Christopher (1625-1715) died he passed the quarry on to his son John (1664-?).

Table 2: First published version Kempster family tree; (compiled by the author)



Christopher Kempster (1625-1715) and Beauchamp's contract at St Paul's began in 1690, but Kempster already had considerable experience in London by this time. He was made free of the mason's company in 1670, but his first known contract in London was with Thomas Strong for St Stephen Walbrook (1672-9). He was contractor in his own right for three other City churches – St James Garlickhythe (1674-87), St Mary Abchurch (1681-7) and St Mary Somerset (1686-94). In the same period he was also responsible for Abingdon Town Hall (1678-80) and Tom Tower (1681-82, with Thomas Robinson) and he worked on Winchester Palace (1683). He also built the Perrot chapel in North Leigh Church, Oxfordshire in 1687 and re-fronted a house for himself at Upton near Burford, where he died in 1715. He gained considerable status in his lifetime within the trade, being admitted to the Livery of the Mason's Company in 1671, being a Warden in 1687, 1688 and 1689, and Master twice, once in 1691 and again in 1700 (Knoop 1935, p.45). The William Kempster who worked at St Paul's is almost certainly his son and not –as many sources have stated– his brother. I have yet to find a reference to the elder Christopher having a brother, while his son's birth is recorded (IGI). Certainly the father son relationship fits the dates better. This paper will assume that this is the case.

William Kempster is made free of the Mason's Company in 1677, was Warden in 1700 and was Master of the Company in 1705 (Knoop 1935, p.46). The first record of him is at St Paul's working for John Tompson in 1694 and on the latter's death in 1700 he succeeded to his contract. The total value of his work at St Paul's amounted to £9 019 (WS X, p.xiv). He died in 1718 (WS XVI, p.133).

Jaspar Latham and Nathaniel Rawlins

Jasper Latham, a London Statuary Mason, appears on the yeomanry (freedom) lists of 1663. He was raised to the Livery and Court of Assistants in October 1678, and made a Warden in 1689 (Knoop 1935, p.20). He was the mason-contractor at the building of St Mildred, Poultry, 1670-79, receiving £2 910 and Portland stone to the value of £324 in payment (Knoop 1935, p.20; WS X, p.50). We also know from a search that he kept a shop and employed three men (Knoop 1935, p.20). Latham was one of the masons appointed to St Paul's in 1678 as one of the successors to Joshua Marshall's contract. In March 1686, Latham, Pearce and Wise petitioned the commission to be considered for work to the West of the dome. They were reassured that they would be given notice when the contracts were about to be let (WS XVI, p.52. In the event, the work was divided between two new contractors: John Tompson and Samuel Fulkes. After this, Latham seems to have lost interest. In June 1688 the committee had summoned Latham to explain why he did not attend regularly at St Paul's (WS XVI, pp.62, 66). Latham finally fell out with Wren when in January 1690 he gave evidence against him in the dispute over the collapse at Hampton Court. Latham's work at St Paul's was suspended in March 1690 (WS XVI p.65). Rawlins was given his contracts in July 1690. The total value of Latham's work on St Paul's from 1678–1690, a period of 12 years amounted to £10,537 (WS XV, p.xiv). None of his work as a statuary mason has been identified.

Nathaniel Rawlins who took over his contract was probably the Nathaniel Rawlins who worked as a mason for 2s 6d a day at Greenwich in 1664 (Knoop 1935, p.34). Nathaniel Rawlins is a common name and thus he is difficult to identify in records with any certainty. A Nathaniel Rawlins was admitted to the freedom of the Haberdashers' Company by Redemption on 28 October 1678 (Knoop 1935, p.34) and as Rawlins was listed as a Haberdasher was listed in a search of masons St Paul's in 1678 (Knoop 1935, p.70) it seems likely it is the same man. How he came to work for Jasper Latham is not clear, but it was because he was his foreman that he came take over his contract at St Paul's. He carried on working at St Paul's from 1690-1707 and was contracted for a quarter of the dome. He was paid £15,751 for his work there (WS XV p.xiv). Nothing more is known about him.

Edward Pearce

Pearce or Pierce (c.1630-1695) was – like Jaspar Latham and Joshua Marshall – a man his living as a statuary mason before acting as a mason-contractor. Although Pearce has been more widely researched than any of the other masons here (see Colvin 1995, p.754), nothing is known about his early life and training. His father was a painter-stainer, and made his son a member of the Painter-Stainers' Company by patrimony in 1656 (Knoop 1935, p.25). Although the younger Pearce seems always to have been a mason rather than a painter, he became a member of the Livery in 1668 and Master of the Company in 1693 (Colvin 1995, p.754). He was a sculptor on Wren's first architectural project: Pembroke Chapel in 1663-5 and acted as a mason-contractor is for Sir Roger Pratt on the house he designed at Horseheath in Cambridgeshire. His early-association with Wren was crucial. Vertue records that Wren admired him and used him both for his drawing and carving ability (Colvin 1995, p.754). He was the mason contractor for two of the City Churches: St Matthew Friday Street 1681-86 (£2,301) and St Lawrence Jewry 1670-86 (£11,870) (WS X, p.54). He also worked on the Guildhall 1671-73, and Emanuel College Chapel (1676). He was paid £13,494 for his work on St Paul's Cathedral from 1678 to 1690 (WS XV p.xiv). Pearce also acted as an architect and throughout his career carried out carving work of the highest standard. In the 1670s he was involved in developing the former site of Norfolk House in London and leased for himself a house with a massive 45 feet wide frontage. It was here he died in March 1695. He was buried at St Clement Danes (Colvin 1995, p.755).

The Wise Family and Hill

There remains that last group of masons: those who were neither quarry-owners nor statuary masons, but were only known as mason-contractors. They were a product of the time; men who had profited from the rebuilding and operated substantial firms. The first and most important of these independent firms was run by Thomas Wise. It is now accepted that Thomas Wise senior came from a family of masons from the Isle of Portland (Knoop 1935, p.35). The quarries there were owned by the Crown but worked by local families, who also retained rights to dig stone from common land. Stone working was the main trade on the Isle. We know Thomas Wise senior was in London before the Great Fire. He only took the freedom of the Mason's Company in 1672. He was admitted to the Livery only a few months later, and became Master in 1681 (Knoop 1935, p.35) But records show he had been working for the Crown in Greenwich as early as 1664. After the Fire he did paving work in Whitehall in 1669-70 (WS VII, pp. 101-5) and held the contracts for three of the City of Churches: St Michael Wood Street 1670-87 (£1,019), St Benet Gracechurch 1681-87 (£2,658) and Nicholas Cole Abbey 1671-81 (£3,141) (WS X 46-56). At St Paul's he built the south side of the nave and the south-west legs of the dome for which he was paid £5 616 (WS XV p.xiv). When he died in December 1685, he left three sons: Thomas (jnr), William, and John. Thomas (jnr) had been born and trained in Portland. He acted for Wren at Portland in procuring stone for St Paul's (Bettey 1971). He seems to have come to London shortly before his father's death, being made free by patrimony of the Mason's Company in 1684 (Knoop 1935, p.39). He took over the contract for St Paul's with Thomas Hill who had been working under his father there for years and had also worked with him at Whitehall and Chelsea. Hill and Wise thereafter ran the masonry-contracting firm together, accruing £24 509 for their work at St Paul's. Thomas jnr became Master of the Mason's Company in 1695. William Wise also became a mason and worked with Samuel Fulkes at Winchester Palace (WS VII, pp.23, 36-8, 62-64, 66).

Samuel Fulkes

Samuel Fulkes is first mentioned being paid 2s 6d as a mason on Duke of York's Lodgings in October 1664 (BL Harl MS 1618). On 1 September 1671 he took the freedom by redemption of the Haberdashers' Company. In the 1670s he had small contracts on four of the City Churches. He is listed as working under Thomas Strong during a search of St Paul's in 1678 (Knoop 1935, p.10) and he then took a contract for Winchester Place in partnership with William Wise (see above). Other contractors there were Edward Strong, Kemspter and Tompson. In the 1680s he undertook work on five more churches, making him the mason who worked on the largest number of city churches (eight) for which he was paid a total £11,216 (WS X, p.54). Finally in 1688 he gained the crucial contract for part of the West end of St Paul's, for which he would eventually be paid £23,115 (WS XV, p. xiv). He had a house and workshop in Fetter Lane (WS XV, p.3; Knoop 1935, p.78). In 1694 he was employing fifteen men at St Paul's. Fulkes also supplied Purbeck and "Swedish stone" for the portico and rubble and carried out paving contracts in the choir and west portico (WS XIV, p.143; XV pp. xxvi & 29). By 1717 when he was completing the tower of St Michael Cornhill, Fulkes must have been at least 70. His place of birth and death is not known.

John Tompson

John Tompson held the contract for the other half of the West End of the Cathedral. Like Fulkes, he was a London mason (WS XVI, p.54). Tompson had been made free of the Masons' Company in 1667. He appears to have immediately profited from the Fire (or to have inherited money) because he was wealthy enough to take Livery in 1669 (Knoop 1935, p.43). He made his name and reputation as a mason-contractor for Wren on the City churches, winning contracts on seven of them for which he was paid a total of £19,336 (WS X, p.54). The Lord Mayor himself recommended that Tompson should be employed at St Paul's in 1686 and his advice was followed two years later when in 1688 Tompson was given the contracts for building half of the West End of the Cathedral. He carried on this work until he died in 1700 by which time he had earned £ 8,089 (WS X, p.xiv). On

his death the outstanding funds were paid to his executor, his son Robert, but his contract was passed to William Kempster (see above).

CALCULATION OF THEIR INCOME

Having identified the craftsmen at St Paul's, the question remains: how much did they earn? Table 3 attempts to summarise what is known to date.

Table 3: Incomes of the masons who worked on St Paul's in rank order

	St Paul's	Churches	Others	Total		St Paul's	Churches	Others	Total
E. Strong	£46,466	£19,548	£11,030	£77,044	Kempster & Beauchamp	£15,132	£8,658	£608	£24,398
J. Marshall	£5,543	£19,292	£26,646	£47,481	N. Rawlins	£15,751	-	?	£15,751
T.Wise jnr & Hill	£24,509	-	£13,571	£38,080	T.Wise senior	£5,616	£6,818	£1,075	£13,509
S.Fulkes	£23,115	£11,216	£447	£34,778	J. Latham	£10,537	£2,910	?	£13,447
J. Tompson	£8,089	£19,477	?	£27,566	W.Kempster	£9,019	-	?	£9,019
E.Pearce	£13,494	£8,296	£2,664	£24,454	T.Strong	£7,918	see E.Strong	?	£7,918

This table should be used with caution. It contains only that information the author has managed to gather so far. Many of these contractors must have worked elsewhere – on private houses and other public buildings – for which records are scarce. However the amounts shown are certainly not too low, it is just that the actual amounts may be much higher.

One thing that is clear is that the individuals to whom the contracts were let were not expected to be on site at all times. They were sometimes simultaneously running seven or more contracts. The Master Masons who were putting their names on these contracts were not mere overseers. They were businessmen who could run multiple projects and pay large numbers of workmen: they were running building firms. It has been said that the nineteenth-century builder Thomas Cubitt ran the first building contracting firm in England (E. W. Cooney cited in Mckeller, 1999, p.104), but this study and others (Mckeller 1999; Campbell 2005) show that this is not true. Cubitt may have been an early example of a contractor who kept a permanent staff of craftsmen and paid them regular wages, but the contractors at St Paul's are recognisably building firms. We know that contractors felt responsibility for those under their employ and kept them on even when they were old and incapable of heavy work (WS XVI, p.151). We can presume that they had to pay them regularly, typically on day rates at the end of the week or month or else they would have stopped work. As I have shown elsewhere, even if the contractor was paid by day rates, he kept a percentage of the rates for himself, only passing on a portion to his workmen (Campbell 2005, pp.332-336). This was his profit. But it was needed to pay off interest on loans, because the contractor was rarely paid on time. At St Paul's the amounts owed to most contractors were calculated at the end of each month, but they often had to wait many years to be paid, and in some cases on Royal works, the delay in payment might be decades (Campbell 2005, pp.341-345).

INCOME VS PROFIT

The mason-contractor expected to make a profit because he had to carry debt – whether from his personal wealth or borrowing from friends and family – to tide him over from when he paid his men until he received his money. Banks did exist in this period but do not appear to have loaned to craftsmen (Knoop 1935, pp.50-55). The problems with financing this debt explain why no single contractor could take on the whole of the stonework at St Paul's. The question is how much profit did they hope to make? I have shown elsewhere that the Master Carpenter at St Paul's made somewhere between 20% and 40% profit (Campbell 2005, pp.332-336). He was paid "by day" and claimed he could have made more if paid "by measure" or "by Great". (WS XVI, p.151). This seems to be born out by examination of the figures. In general we do not know how many masons were on site, but on a few occasions we do have figures. A search in September 1694 showed that Strong had 65 men at St Paul's (Knoop 1935, pp.73-77). For the same period the payment for the quarter to Strong was £690 (WS XIV, p.137). Assuming 66 working days then he was paid £10 9s for each mason he had on site. Assuming he paid them 2s a day, then over 66 days he would have paid them £6 12s, implying that he pocketed 37%. This is of course a very rough calculation with a large number of assumptions made, but it shows that about 40% profit was not unreasonable. Applied to the figures in table 3 this gives us some measure of their profit. This leaves us with one last question: would these sums have made the masons wealthy by the standards of the day?

THE WEALTH OF MASONS

A detailed study of wealth in this period has shown that £20,000 of accumulated capital represented a considerable fortune, £10,000 indicated that you were rich, substantial merchants could expect to have between £5,000 and £10,000, middle-range merchants £1,000 - £ 5,000 and prosperous shopkeepers £500-1000 (R.Gassby 1970). In a period where £200 was the annual salary of Wren at St Paul's, Edward Strong was making

£250 a quarter just from his contract there. There seems little doubt that the masons at St Paul's were very well off indeed. This is born out by what we know of their later years. When Joshua Marshall died he left over £10000 in his will. He was undoubtedly rich. Edward Strong retired to the Hertfordshire countryside with not just one but two country houses. Beauchamp owned several properties in London.

CONCLUSION

This paper has sought to give a brief insight into the finances of building contractors in the late seventeenth century. I use the term "building contractors" deliberately. What I hope is clear is that the idea of the humble craftsman working for a meagre wage does not apply to these individuals. They hired in workmen and paid them regularly as modern contracting firms do. They had teams of men working under them at several different places at the same time. They were providing the capital, not their own labour. The sums involved were considerable and they bore huge financial risks from which they expected to (and often did) profit handsomely. For the masons at St Paul's were the forerunners of modern building contractors and they were not just building landmarks for the city, they were each looking to build fortunes for themselves.

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