

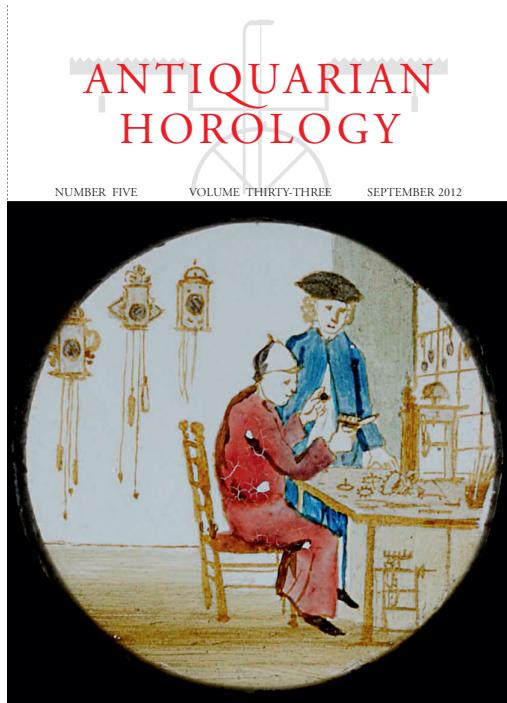
John A. Robey
Moorfields and Clock-Brass Founders
Part 2: The Mayor Family and Other Founders'

Antiquarian Horology, Volume 33, No. 5 (September 2012), pp. 609-623

The AHS (Antiquarian Horological Society) is a charity and learned society formed in 1953. It exists to encourage the study of all matters relating to the art and history of time measurement, to foster and disseminate original research, and to encourage the preservation of examples of the horological and allied arts.

To achieve its aims the AHS holds meetings and publishes a quarterly peer-reviewed journal *Antiquarian Horology*. It also publishes a wide variety of scholarly books on timekeeping and its history, which are regarded as the standard and authoritative works in their field. The journal, printed to the highest standards with many colour pages, contains a variety of articles, the society's programme, news, letters and high-quality advertising (both trade and private). A complete collection of the journals is an invaluable store of horological information, the articles covering diverse subjects including many makers from the famous to obscure.

For more information visit www.ahsoc.org



Volume 33 No. 5 (September 2012) has 144 pages. It contains the articles listed below, as well the regular sections Horological News, Picture Gallery, Book Reviews, AHS News, Letters to the Editor and For Your Further Reading.

Alun C. Davies, 'Horology at International Industrial Exhibitions, 1851-1900', pp. 591-608

John A. Robey, 'Moorfields and Clock-Brass Founders Part 2: The Mayor Family and Other Founders', pp. 609-623

David Hambleton, 'The History of Arnold & Dent Long Case Regulator No 308', pp. 624-630

William Linnard & Ann Parry Owen, 'Horological Requests in Early Welsh poems', pp. 631-636

Brittany Cox, 'God Save the King. The Automaton Ship and Silver Shagreen Case', pp. 637-642

MOORFIELDS AND CLOCK-BRASS FOUNDERS

PART 2: THE MAYOR FAMILY AND OTHER FOUNDERS

John A. Robey

Casting marks are sometimes found on brass clock components, the most frequently found examples probably being identified with the Mayor foundry in Little Moorfields. John Mayor was casting clock parts in the late seventeenth century and his descendants continued the trade for over a century. As well as discussing this and other founders, the ‘matchstick man’ casting mark found on London lantern clocks from the 1640s is also considered. For the background to the Moorfields area of London, where most of the people mentioned here worked, readers should refer to Part 1 of this article.¹

CASTING MARKS

The study of horology is hampered by the scarcity of documentary sources, there being very few surviving clockmaker’s notebooks or account books, which can be used to identify those who supplied components or specialist services, such as dial engraving. We usually have to rely on entries in trade directories, apprenticeship records and family histories, together with the occasional advertisement, watchpaper or trade card. Horology does have an advantage over, for instance, the study of antique furniture, as clocks and watches normally bear the name and location of the ‘maker’, who may be the person who actually made it, although very often (and usually for watches) he was only the retailer.

Some information may be found on the artefacts themselves, including names or initials engraved or stamped on movements and the infrequently found practice engraving on the rear of dials. Also repairers’ marks scratched on the movement or rear of the dial can shed light on a clock’s subsequent history. Less obvious are the casting marks occasionally found on clock wheels and other components. These marks were cut or stamped into the patterns so that they appear on all the castings subsequently made from them.

Even when marks existed on the rough castings, they would usually be filed away by the clockmaker, especially by one who was proud to produce good-quality work, to leave nothing to indicate its former existence. Where traces do survive they are often not recognised as marks, but may be confused with faults in the metal.

Casting marks have been recorded on both clock components and bells.² They are particularly obvious on bells, which did not require the same amount of finishing as other clock parts and although they are sometimes on the inside of the bell these marks were usually intended to be seen clearly.

Casting marks were probably used to identify:
a: the foundry, as a primitive form of promotion;
b: the clockmaker, so that his patterns were used by the foundry and not those from someone else;
c: the type or size of component by a foundry specialising in this type of work.
It is often very difficult to determine the function of a particular mark, but numbers were probably for component identification.

There would usually be no need for a clockmaker casting his own parts to include an identifying mark, but some appear to have done so, and the existence of casting marks may indicate that they also supplied these same parts to others. The noted Whitehurst firm in Derby made fusee bracket clocks with their name cast inside the spring barrels. No fusee clocks are known signed by other makers with these marks. The firm was also listed as a brassfounder in trade directories, but was this typical nineteenth-century hyperbole, and were the parts actually cast elsewhere?

Other large firms that had their own mark on components include the eighteenth-century London clockmakers Aynsworth and John Thwaites, later trading as Thwaites & Reed. Their wheel blanks have ‘AT’ casting marks,³

1. J. A. Robey, ‘Moorfields and Clock-Brass Founders Part1: The London Horological Trades in Moorfields’, *Antiquarian Horology* 33/4 (June 2012), 479–486.
2. J. A. Robey, *The Longcase Clock Reference Book*, Vol 1, pp. 82–3. The revised edition, in the course of preparation, will contain further examples.

but these were removed during finishing and do not appear on their finished clocks. The H•M casting mark is known on some early nineteenth-century clocks by Handley & Moore of London. It is likely that both these firms used parts cast for them from their own patterns.

Casting marks might also indicate a change in working practice. For instance, early clocks by Jonas Barber of Winster, Westmorland (working 1707–64), do not have casting marks and he may initially have cast the parts himself, whereas many of his later clocks (including those by his successor Henry Philipson) have 'IB' or 'IB W' on the blanks,⁴ which would not be necessary if they were made in-house.

While goldsmiths, silversmiths, pewterers and the like used marks on their products for identification, none are known from members of the Worshipful Company of Founders in London.⁵ Although the mark book of the Armourers' and Braziers' Company survives it does not include the marks of any of the people discussed here.⁶ It should be emphasised that the trade of a brazier was quite different to that of a founder, and the two tasks were not normally performed by the same person, although a few claimed to be both a founder and a brazier. A brazier hammered and shaped copper and brass sheets and then brazed the parts together to make cooking vessels, skimmers, warming pans, etc, while a founder poured molten metal into a sand mould to cast the items.

THE IM AND M MARKS

The casting marks most regularly found on clocks are 'IM' and the associated 'M'. These appear on clock components with a wide range of dates throughout the eighteenth century, with

'M' also appearing in the seventeenth century. The geographical spread includes London, Surrey, Devon, Hampshire, Herefordshire, Worcestershire, Lincolnshire, East Anglia and Kent. It is clear that these castings were not from a foundry local to a provincial clockmaker, but from one specialising in making parts for the clock trade, the most obvious central location being London. To date, these marks have only been found on clocks from the southern half of England, implying that further north there were alternative specialist suppliers. Details of the marks seen by or reported to the author, as well as examples noted in the literature, are listed in Table 1.

Figs 1–11 show some examples of these marks. It is noticeable that, whereas they appear on a wide variety of clock components, the marks do not often appear more than once or twice on any one clock, the one exception being an anonymous thirty-hour clock with 'M' on almost every part, together with numbers on some of them. This movement is much later than the others listed here and the castings may not have been from the same source.⁷

As the same marks appear on different clock parts and also on clocks by different makers, they were used to identify the founder, rather than either the part or the clockmaker. While many brass founders are listed in eighteenth-century London trade directories there is only John Mayor and later generations of his family with the initials IM or JM (I was often represented by J in the eighteenth century and earlier).⁸

Despite the very large number of clockmakers working in London, only a few of the capital's brass founders are known to have produced clock castings, whereas many more provincial founders

3. G. T. E. Buggins & A. J. Turner, 'The Context of Production, Identification and Dating of Clocks by A. and J. Thwaites', *Antiquarian Horology* 8/4 (September 1973), 374–5. The two letters are combined and appear as A with very extended serifs at the top. Close inspection of Figs 5 and 6 in the AH article shows this mark in the centre of many of the wheel castings, while a few also have numbers cast on the rims.
4. Information from Ian Haigh.
5. Information from Stephen Freeth, formerly Keeper of Manuscripts, Guildhall Library.
6. P. Hornsby, *Collecting Antique Copper & Brass* (1989), pp. 265–75. These lists were begun in 1708 and were formerly thought to be armourers' marks, but are now regarded as being braziers' marks.
7. P. Gosnell, 'A Poorly Finished but Interesting 30 Hour Movement', *Antiquarian Horology* 32/3 (September 2010), 424–30.
8. Most of the eighteenth-century London trade directories are included in the *Biography Database*, published on three CD-ROMs by Romulus Press Ltd in 1995, 1998 and 2000. Publication ceased after these three discs appeared and the remaining two (which would have included nineteenth-century London directories and many more provincial ones) have not been produced.

Table 1. Details of known IM, M and N casting marks.

Name on Dial	Type of Clock	Approx Date	Mark
Nicholas Coxeter, London	lantern	1660	M on bell strap. Also matchstick man on dial wheel
Henry Jones, London	lantern	1660	M on alarm pulley
Stephen Wilmshurst, Odiham	8-day longcase	1720	IM on hour wheel
Richard Monkland, Worcester	8-day longcase	1740	M on chapter ring
Richard Peckover	8-day longcase	1740	M on dial plate
Simon Thorne, Tiverton	8-day longcase	1740	IM on date ring & hour wheel
Thomas Moore, Ipswich	lantern (not reproduction)	1750	M on side frets, door latches, movement bar, hour wheel & countwheel
John Rogers, Leominster	miniature lantern alarm	1760	IM on frets. M on crown-wheel & alarm-setting disc. Large L below top plate (possibly for component identification)
Henry Smith, London	8-day musical long-case	1770	M on strike/silent ring
Alex Mitchelson, London	8-day longcase	1770	IM on hour wheel slip washer
John Snelling, Alton	30-hour hooded wall clock	1770	IM on both plates, M on back cock, fly & one wheel
Brumhead, Stamford	30-hour longcase	1790	M30 on both plates & both pulleys
Thomas Ollive, Cranbrook	posted-frame 30-hour	1800	M and N on bottom plate
anon	posted-frame 30-hr longcase		IM on bottom plate
anon	plated-frame 30-hr longcase	1830	M on most parts, some also with 30, 40, 43, 41 or 46?
Richard Stedman, Godalming	posted-frame 30-hour	1730s	N on pulley and movement bars
John Bronson, Stowmarket	posted-frame 30-hour	1740	N on chapter ring and movement bars
Nathaniel Hedge, Colchester	lantern clock	1740	N on chapter ring of
William Lee, Leicester	30-hr longcase	1740-50	N on cheeks of spike pulley
W. Harris, Chippenham (Cambs)	posted-frame 30-hour	1780	N or M underneath top plate



Fig. 1. IM casting mark on the calendar ring of an 8-day longcase clock signed for Simon Thorn, Tiverton, Devon, about 1740. This mark is also on the hour wheel. Both the dial and the five-pillar movement were probably supplied from London.



Fig. 2. M casting mark on the chapter ring of an 8-day longcase dial signed for Richard Monkland, Worcester, about 1740. The dial was probably engraved in Bristol.



Fig. 3. Moon humps on the Monkland dial showing a harbour scene on the left with buildings and a boat, on the right two fishermen and a dog near a tree stump. Both scenes are typical of the charmingly naïve Bristol style of dial engraving.

of clock parts are known.⁹ This emphasises that in London the trade was concentrated in the hands of just a very small group of founders. Abraham Rees stated in 1819-20 that if unusual sizes were required that were not included in the standard sets of clock parts obtainable from component suppliers

the brass-founders of Chancery-lane, and in other parts of London, as well as in Lancashire, will cast wheels to any model at a certain price per pound.¹⁰

In spite of this statement, none of the eighteenth-century London trade directories list any brass founders working in Chancery Lane, which in any event seems an unlikely location for such a trade.

A dial of about 1740 with M on the rear of the chapter ring (Fig 2) has typical Bristol style buildings and figures on the moon humps (Fig 3). Later in the eighteenth-century single-sheet brass dials with more prominent scenes and figures, still in the same style, were developed in Bristol. These used rolled brass, for which the city was an important manufacturing

9. Robey, *The Longcase Clock Reference Book*, Vol 1, pp. 68-70.

10. *Rees's Clocks, Watches and Chronometers* (1970), pp. 101-2. This is a facsimile reprint of the horology sections, written by the Rev William Pearson (1767-1847), from *The Cyclopaedia* (1819-20) by Abraham Rees.



Figs 4-6. Components of a miniature lantern alarm by John Rogers, Leominster, Herefordshire, about 1760, with casting marks: M on the crownwheel and alarm disc, and IM on the rear of the fret.

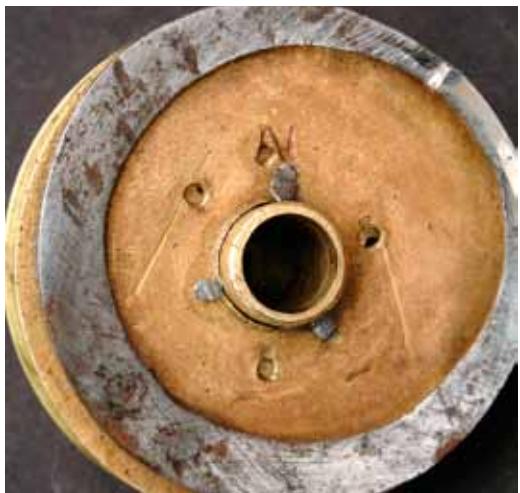
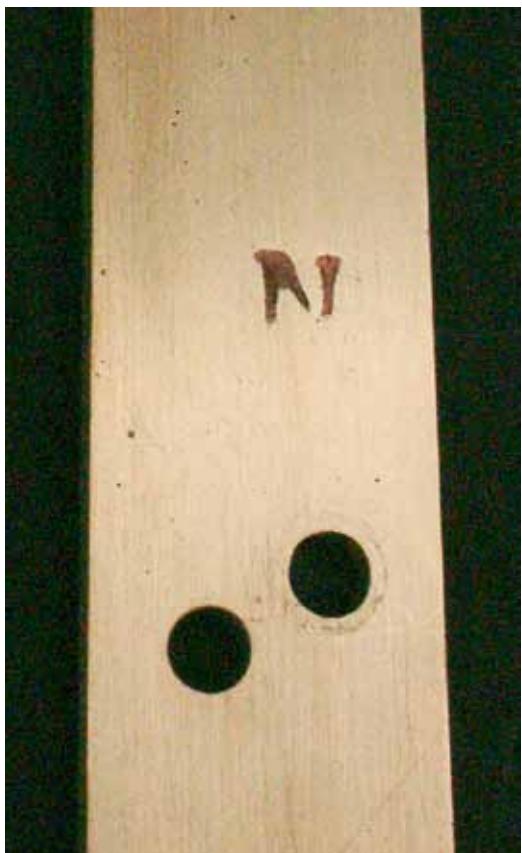


Fig. 7. IM mark on the hour wheel of an 8-day clock by Stephen Wilmshurst, Odham, about 1720. (Photo: M. Forrester)



Figs 8 (above) & 9 (left). N casting mark on all three movement bars and the rope pulley of the striking train of a posted-frame 30-hour clock by Richard Stedman of Godalming, about 1730.

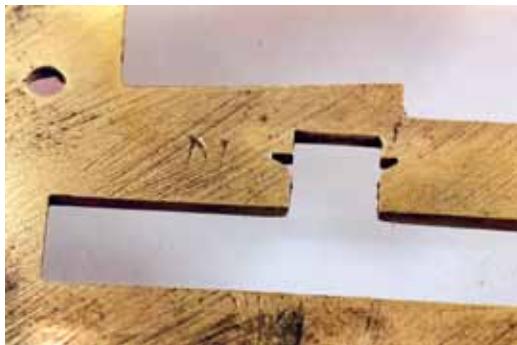


Fig. 10. N or M underneath the top plate of a 30-hour posted-frame longcase movement by W. Harris of Chippenham, Cambridgeshire, about 1780.

centre,¹¹ but earlier dial castings must have been obtained from London. Alternatively, only the chapter ring, either as a casting or fully engraved, may have come from London.

Table 2 lists twenty-two London brass founders and their apprentices who are thought to have supplied the clock trade. Four of these were primarily clock-bell founders, although John Drury, founder of watch and clock bells, is likely to have cast the parts of a posted-frame thirty-hour clock by Richard Cole, Ipswich, about 1800, with 'DRURY' on one of the movement bars.¹²

The Nemes and Mayor businesses are discussed below, while Thomas Hunter, about whom very little is known, is one of the few who, in 1790, was specifically listed in trade directories as a clock and bell founder. As his other entries, as well as a Sun Alliance insurance policy of 1786 on his premises, refer to him as 'Clockmaker & Bell Founder', this may have been his actual occupation, rather than a founder of brass clock parts.

Some of the larger clockmaking concerns in London may have cast their own parts; John Smith & Sons of Clerkenwell certainly did in the nineteenth century.¹³ But most clockmakers



Fig. 11. N casting mark on all three movement bars and the chapter ring of a posted-frame 30-hour clock by John Bronson, Stowmarket, Suffolk, about 1740. (Photo: R. Fryatt)

would have used wholesalers and specialist suppliers, who in turn obtained their stock from the actual founders. It is significant that Peter Stubs of Warrington, who had a large business at the end of the eighteenth and into the nineteenth century supplying clock parts, including castings, throughout Britain, neither bought nor sold clock brass in London.¹⁴

THE NEMES FAMILY

Robert Nemes (or Neames) senior was a founder who was apprenticed in the Clockmakers' Company in 1669 and free in March 1677/8. He was also a member, but not an apprentice, of the Founders' Company.¹⁵ Table 2 includes ten apprentices of Robert Nemes (excluding others who appear not to have completed their apprenticeship) as well as his sons Robert junior, born 1688, and John, born 1696. When his children were born he was living in the parish of St Benet Paul's Wharf, due south of St Paul's Cathedral.

When John Nemes took on seven apprentices (not included in Table 2) in 1730-53 he was described as 'Citizen and Clockmaker' (i.e. a member of the Clockmakers' Company),¹⁶

11. J. Day, *Bristol Brass: a history of the industry* (Newton Abbott, 1973).

12. Robey, *The Longcase Clock Reference Book*, Vol 1, p. 84.

13. 'Visit to a Clerkenwell Clock Factory', *Antiquarian Horology*, 12/3 (Autumn 1980), 274-80. (Reproduced from *The London Illustrated News*, 20 September 1851).

14. Information from A. A. Treherne.

15. B. Loomes, *The Early Clockmakers of Great Britain* (1981). None of these apprenticeships appear in C. Webb, *London Livery Company Apprentices*, Vol 21 (1998), *Founders' Company 1634-1800*. Subsequent references to apprentices in the Founders' Company are from Webb's book.

16. D. Moore, *British Clockmakers & Watchmakers Apprentice Records, 1710-1810* (2003), p. 241.

Table 2 London brass founders supplying the clock trade in the eighteenth century

Name	Address	Date	Details
Thomas Boad		1692-1704	Apprenticed to Robert Nemes in Clockmakers' Co
John Briggs		1716	Apprenticed to Robert Nemes in Clockmakers' Co
Aubrey Davis		1686	Apprenticed to Robert Nemes in Clockmakers' Co, also made clocks
James Drury	Red Lion St, Clerkenwell	1751-1811	Bell founder. Apprenticed in the Clockmakers' Co
John Drury	Richard St, Islington	18C	Watch & clock bells
Griffith Ellis	Little Moorfields	1760-70?	Trade card known, but not in directories. Related to Mayors
William Gardner		1717	Apprenticed to Robert Nemes in Clockmakers' Co
Thomas Hunter	54 Goswell St	1784-1807	Clockmaker, clock & bell founder
Samuel Ladd		1710	Apprenticed to Robert Nemes in Clockmakers' Co
William Lyne		1703	Apprenticed to Robert Nemes in Clockmakers' Co
Jane Mayor	Little Moorfields	1768-d1798	Widow of Thomas Mayor. Also Jane Mayor & Son [Joseph]
John Mayor	Old Bethlem	1696-1702	Clock brass and bell founder. See text
Thomas Mayor	Little Moorfields	1758-d1768	Brass founder. Succeeded by his widow Jane Mayor
William Millett		1715	Apprenticed to Robert Nemes in Clockmakers' Co
John Nemes	St Thomas the Apostle	1710-70	Apprenticed to his father Robert Nemes sr in Clockmakers' Co
Robert Nemes/Neames	St Benet Paul's Wharf	1677-pre-1735	Member of Founders' and Clockmakers' Cos
Robert Nemes jr		1702-45	Apprenticed to his father Robert Nemes snr in Clockmakers' Co
Robert Romley	Middle Moorfields	c1740-d1779	Clock bell founder. Issued a trade card. Musical clock known. Succeeded by James Green
James Saunders [Sanders]	Smithfield	1789-90	'Clock ball [finial] maker & turner; clock bell maker'
Joseph Stanton		1703	Apprenticed to Robert Nemes in Clockmakers' Co
Richard Whitton		1731-48	Apprenticed to Robert Nemes in Clockmakers' Co
Thomas Wood		1691	Apprenticed to Robert Nemes in Clockmakers' Co

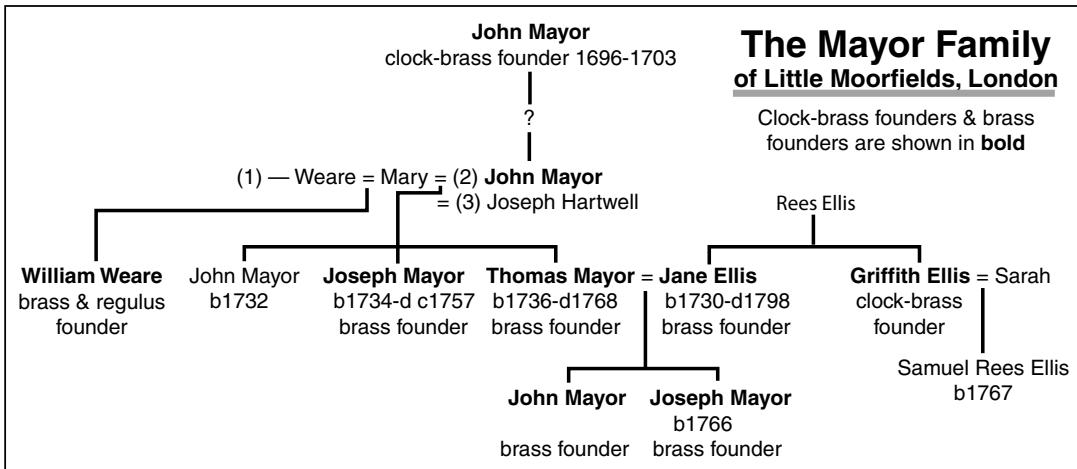


Fig. 12. Simplified family tree of the Mayor family, showing the relationship with Griffith Ellis and William Weare.

but when he died in 1770 his actual trade was given as a founder in the parish of St Thomas the Apostle (to the east of where his father had lived).¹⁷ The association of the Nemes family and their apprentices with the Clockmakers' Company makes it likely that they supplied brass clock castings, but there is no positive evidence for this. If they did cast clock parts then the 'N' casting mark (Figs 8-11) might be associated with them, rather than with 'Mr Newton', who is discussed later.

THE MAYOR FAMILY OF BRASS FOUNDERS

The family tree in Fig. 12 shows the relationship between some of the people discussed here. The first mention of John Mayor is in 1694 when he paid property and rental tax on premises at Bethlem in the parish of Bishopsgate Without,¹⁸ but his earliest reference as a brass founder is an advertisement in the 1696 edition of the almanac *Merlinus Liberatus* by John Partridge 'Student in Physick and Astronomy, at the Blew Ball in Salisbury-street in the Strand':

John Mayor, Founder, that Casteth all sorts of Clock-work and Bells, and makes

The Mayor Family of Little Moorfields, London

Clock-brass founders & brass founders are shown in **bold**

Flower-pots of hardened Metal, Liveth at the Sign of the Five Bells in Old Bethlehem, alias Bedlam, Lond.

Old Bethlehem or Bethlem was a street off Bishopsgate, just north of the City walls, and near the site of the original medieval Bedlam Lunatic Asylum, redesigned by Robert Hooke in 1675,¹⁹ on a new site just a couple of blocks west in Lower Moorfields. In 1815 the hospital moved again, to Southwark, south of the River Thames, to a new building that now houses the Imperial War Museum.

This advertisement confirms that by the end of the seventeenth century, and no doubt earlier, the casting of clock components and clock bells had become a specialist trade. He placed an advertisement in the *Post Man*, 2-5 March 1700/1 without the mention of clock work, while an advertisement in the *Post Man*, 3-5 February 1701/2 and 17-19 February 1702/3 reads:

Flower Pots and Urns, made by John Mayor at the 5 Bells in Old Bedlam, Founder, where all sorts of Clock-work and small bells is cast.²⁰

17. Will in the National Archives, available online, PROB 11/958.

18. www.londonlives.org, ref ahdsfsp_34_3425.

19. This was at the height of Hooke's dispute with Christiaan Huygens regarding the invention of the balance spring for use in watches, and Hooke's perceived deceit by his adversary Henry Oldenburg, Secretary of the Royal Society.

20. I am grateful to Jeremy Evans and Chris Pickford for these references.

He may have been John Maior, son of Thomas and Bridgett Maior, christened on 28 June 1655 at St Giles Cripplegate Without, the parish that includes Moorfields. The parish records include people with the spelling variants of Mayer, Meyer, Miers, Myers and Moyer, but the brass founders appear to have consistently used the Mayor version (apart from the possible earlier Maior), and these others are probably not directly related. There was a John Mayor in the Lorimers' Company listed in the oath of allegiance that members of all companies had to sign in 1697, although some, such as Quakers, refused to do so. This may be the same man, but it is not confirmed as the apprentice records of the Lorimers' Company before 1722 are not available. There were no members of the family in the Founders' Company in 1697.

How long John Mayor continued in business is not known, but on 15 December 1739 'Trench a Founder at the 5 Bells in Old Bedlam' had been offered stolen copper.²¹ No further details of this Mr Trench are known as he does not appear in directories and it is not known if he continued John Mayor's business of supplying clock castings.

There are no further references until Thomas Mayor appears in trade directories in 1761 as a brass founder at 30 Little Moorfields, situated between Gun Alley and Tenter Alley, and these entries continue regularly until his death in 1768. By 1766 he also had a workshop just round the corner in Gun Alley. He was in business at least a year before his first directory entry when he paid Land Tax on the Little Moorfields property.²² He had taken over from his younger brother Joseph Mayor who was there in 1757 (but not in 1755) and who died shortly afterwards. For a period in 1763-7 Thomas Mayor is also listed as a merchant at the same address. He was born in 1736, son of John Mayor (who had married in 1730), but he may have been the grandson, rather than the son, of John Mayor of Bedlam.

In 1754 Thomas Mayor married Jane Ellis at St George, Mayfair, Westminster. She was probably born in Merionethshire, Wales. He took two apprentices in the Founders' Company in 1758, one of whom had been originally apprenticed the previous year to his brother Joseph Mayor, who had subsequently died. The fact that they were both founders and members of the Founders' Company implies either that their ancestors had been in this trade, or an ancestor had been apprenticed to a member of the Founders' Company, or that they had paid to join (membership by redemption).²³

After Thomas Mayor's death in 1768 at the age of only thirty-two, the business was continued by his widow Jane until her death twenty-eight years later. By 1781 the brass foundry was listed at 29 Little Moorfields, but as Horwood's map of London in 1799 (Fig 13) shows number 30 as a double-sized property with no number 29, it is clear that the business had expanded to include both 29 and 30, rather than a move or a renumbering.²⁴ In 1789 the firm appeared in trade directories as 'Jane Mayor & Son' (possibly with her son John, who had been apprenticed to his mother in 1769), but in 1791 her younger son Joseph (apprenticed to his mother in 1780) was 'entitled to one half part in the trade carried out between us'.

As Joseph Mayor was also listed under his own name as a brass founder at 29 Little Moorfields in 1789-90 he may have taken over the running of the firm, despite it being still listed as Jane Mayor & Son in 1794. This is the date of the family's last inclusion in directories, but Joseph Mayor was still paying Land Tax on the workshop in Gun Alley and the Little Moorfields premises in 1810. By 1815 the premises were assessed for the 'Late Mr Mayor'. Clock-brass founding had ceased on the site by 1816 when 29 Little Moorfield was insured by Jonathan Dawson, gentleman, and in 1826-7 by a saddler.

21. Old Bailey Proceedings Online (t17400116-3).

22. Land Tax Registers, Cripplegate Without ward, Guildhall Library. (Many of the Guildhall Library's collections are now at the London Metropolitan Archives.)

23. In the early years of a London guild its members would work in its particular trade, but an apprentice could be free of his father's or master's company, and that might not represent the trade in which he had trained. By the eighteenth century it was unusual for an apprentice to be free in the Company representing his trade, unless his ancestors had also worked in the same trade.

24. Horwood's map is the most detailed eighteenth-century map of London and attempted to show every building and its number, although the latter was not complete.

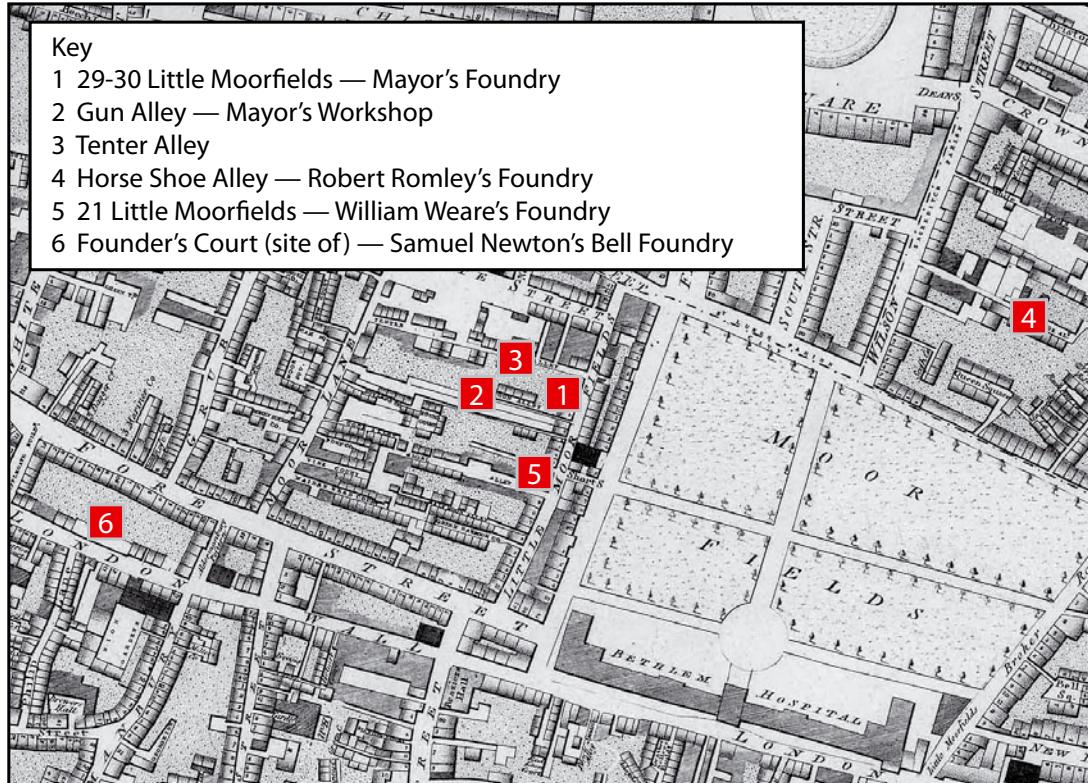


Fig. 13. Detailed map of Moorfields from Richard Horwood's survey of 1799. Compared with Rocque's map of 1746 (see Part 1 of this article, Fig. 1), Middle Moorfields has been developed as Finsbury Square, but Lower Moorfields is still parkland with Hooke's Bethlem Hospital on its southern edge.

GRIFFITH ELLIS

Another figure involved with the Mayor business, in an as yet unknown capacity, was Griffith Ellis, whose trade card (Fig. 14) states that he was a 'Clock-Founder' at 29 Little Moorfields. The card is in the collection of bill heads preserved by the clockmakers John and Richard Stone of Aylesbury, Buckinghamshire, and Thame, Oxfordshire.²⁵ It states that Ellis was 'Successor to Mr. Newton', who, although not listed in London trade directories, may be John Newton, who was apprenticed to his father Samuel in the Founders' Company in 1712.

Samuel Newton was free of the Founders' Company in 1690 and performed various official roles in 1706-10, before being elected as Master in 1711. He worked in Founder's Court, on the south side of Fore Street and only a short distance from Middle Moorfields.

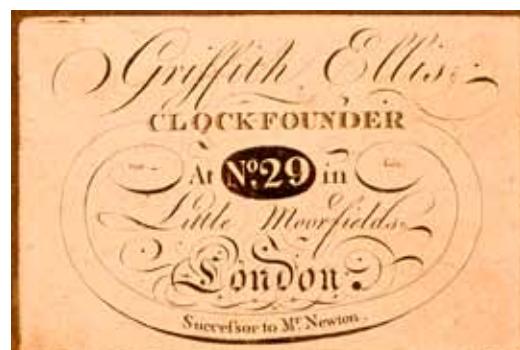


Fig. 14. Trade card of Griffith Ellis, clock founder of Little Moorfields. (Guildhall Library)

It is shown on John Rocque's map of 1746, but not on Richard Horwood's map of 1799. It is not to be confused with Founder's Court in Lothbury, where the Founders' Company had their hall. Samuel Newton died intestate in the

25. C. F. C. Beeson, *Clockmaking in Oxfordshire* (3rd edition, 1989), p. 23. The trade card is now in the Stone Collection, Guildhall Library, London.

early part of 1716. He was primarily a founder of church bells, and his bells are known in Kent, Hertfordshire, London, Middlesex, Essex and Suffolk, with dates ranging from 1701 to 1708.²⁶

Apart from the apprenticeship to his father, the only information discovered about John Newton is that he took an apprentice in the Founders' Company in 1736. As no church bells by him are known he may have concentrated on casting other items, possibly clock brass. Was it this business that Griffith Ellis succeeded to?

To add to the uncertainty a Samuel Newton, founder, of the Minories, near the Tower of London, was working in 1737-52, and a John Newton, also a founder of the Minories and probably related, in 1742. Like the Newtons of Fore Street they are also absent from London trade directories of the period. From his dates this Samuel Newton cannot be the bell founder, and he appears to have been operating on the fringes of the law, being involved in several trials relating to stolen metal. In one instance it was claimed that he bought parcels of brass nails, knowing them to have been stolen.²⁷ These men are unlikely candidates to have been the predecessors of Griffith Ellis, who surely would not have included either of them on his trade card.

A few examples of an 'N' casting mark are known (see Table 1), mainly from about 1730-50, which would be the correct period for either the enigmatic Mr Newton or the Nemes foundry.

Despite the existence of his trade card Griffith Ellis is another person absent from the London directories, but he was Jane Mayor's brother and clearly involved in the family business. He is first recorded in 1766 when he occupied Thomas Mayor's property in Gun Alley. He took an apprentice in the Founders' Company in 1767, but the boy was turned

over to a member of the Lorimers' Company after less than four years, perhaps because he was not suited to the work. He had children in 1767-9,²⁸ and he is almost certainly the same Griffith Ellis of Merioneth and Moorfields, who in 1777 was a member of the Honourable Society of Cymmrodorion in London.²⁹ This society was founded in 1751 as a gathering of London Welshmen and for the encouragement of Welsh literature, science and the arts.

The exact role of Griffith Ellis in the Mayor business is not yet clear. His trade card gives the same address as that occupied successively by Thomas, Jane and Joseph Mayor, yet he himself occupied a workshop in Gun Alley owned by them in 1766-70 and possibly later, but was not there in 1785. Was he the actual caster of the clock parts, living above the foundry, which were then sold by the Mayors from their Little Moorfields premises? If so, why would he need a trade card? Or were the roles reversed with the Mayors casting the parts, and Griffith Ellis being the salesman? The latter is more likely, with his card being given to clockmakers such as the Stones in Aylesbury as customers or potential customers of the Moorfields foundry.

Why Griffith Ellis stated that he was the successor to Mr Newton, rather than claiming an association with his sister's well-established business, at present also remains unexplained.

The fact that John Mayor was definitely selling brass clock components in 1696-1703, as was Griffith Ellis about sixty years later, makes it very likely that Thomas, Jane and Joseph Mayor were also clock-brass founders, even though this is not stated specifically in their directory entries or other documents. It also gives additional weight to the suggestion that they are the source of the clock parts with the 'IM' and 'M' casting marks.

26. J. C. L Stahlschmidt, *The Church Bells of Kent* (1887), pp. 103-4 (available online at openlibrary.org). Also information from Chris Pickford, who supplied most of the other information on church bells included in this article. Bells dated 1701-2 were cast by the partnership of Samuel Newton & Isaac Hadley, in 1703-5, by Samuel Newton & John Peele and in 1707-8 by Newton alone.
27. City of London Sessions Papers, LMSLPS150480022, April 1737, www.londonlives.org. In December 1742 John Newton, founder, had bought four brass cocks, not knowing that they had been stolen (Old Bailey Proceedings Online, t17430114-45). In October 1751 Samuel Newton, brazier and founder, had a copper pot stolen (Old Bailey Proceedings Online, t17511016-37). In April 1752 an apprentice of a Mr Newton, founder of the Minories, stole brass from him (Old Bailey Proceedings, t17520408-27).
28. Griffith Ellis's wife was Sarah, who is probably the woman buried at Bunhill Fields Burying Ground, Moorfields, on 21 Dec 1794, aged 69.
29. *Constitution of the Honourable Society of Cymmrodorion in London, 1777*. Indexed in *Biography Database*, Vol 2 (see footnote 8).

THE WILLS OF THOMAS AND JANE MAYOR OF LITTLE MOORFIELDS

Thomas Mayor made his will in 1761,³⁰ seven years before he died in 1768, aged only thirty-two. The implication of making his will when he was only twenty-five is that he was already in poor health. This will is very informative, and it is apparent that the family were quite prosperous and had accumulated property in London and Essex. His mother was Mary, by then the widow of Joseph Hartwell, gentleman of Little Moorfields (from her third marriage in 1752 at Allhallows London Wall), with brothers Joseph (as mentioned above) and John and a sister Mary.

Thomas Mayor owned property in Warwick Lane and New Broad Street Buildings, both in the City of London, as well as in Little Moorfields — where he presumably lived and worked — and in Gun Alley (off Little Moorfields). He had also inherited from his brother Joseph a half share of Bents-hill Farm and South Bernfleet [Benfleet] Hall, Essex, together with the great tithes. All this property he left to his brother John of ‘Gately in the County of Southampton’, possibly either Grateley near Andover, or Yateley near Farnborough, Hampshire. The rents and profits from these premises were to be used for the maintenance of his son John, or if he died before the age of twenty-one for his daughters Elizabeth and Mary.

His three children were left £1,000 each — a not inconsiderable sum³¹ — invested in Government securities, with the interest used for their maintenance and education, until they received the capital on reaching the age of twenty-one. He left smaller sums to other relatives, including £20 to William Ware ‘my Brother by my half Blood’, from his mother’s first marriage. William Ware or Weare was also a brass founder (see below).

Three other children were born after the writing of Thomas Mayor’s will in 1761: Sarah in 1763, Joseph in 1766 and Ann in 1767. Surprisingly the will was not revised

to make provision for these offspring, all of whom survived into adulthood. The rest of his estate was left to his wife Jane, presumably including the brass founding business, but there is no specific mention of it. One of the three witnesses to the will, Thomas Cooper, had been apprenticed to Mayor only three years earlier, so he would have still been learning the trade. Another witness, Jacob Savell, was almost certainly also involved in the trade and probably related to William Savill, partner with William Weare, Thomas Mayor’s half-brother.

The will of his widow, Jane Mayor, made in November 1796, is similarly informative about her family.³² She first requested that she was to be interred in Tindal’s Burying Ground, Upper Moorfields, just north of the New Artillery Ground (not to be confused with the Old Artillery Ground at Spitalfields, which it replaced), and used by dissenters, including the Mayor family.³³ She left the same property mentioned in her husband’s will, with additional property in Islington, together with her share of the brass-founding business, to her younger son Joseph. The elder son, John, was to receive a portrait of his father, which indicates that Thomas Mayor had thought himself of sufficient social status to warrant a portrait, not forgetting that he died at a relatively young age. Jane Mayor had a collection of silverware, which she left to various members of the family.

She left ten guineas each to her nephews William Weare and Samuel Rees Ellis. The latter was the son of her brother Griffith Ellis, who may have been dead by then as he is not mentioned. She left £10 to William Williams, who had been apprenticed to her in 1775. He was from Dolgelly, Merionethshire, and was no doubt an employee.

Five times this amount³⁴ was left to Thomas Cooper, founder of Gun Alley, Little Moorfields, who had been a witness to her late husband’s will thirty-five years earlier. As he does not appear in directories in his own right (nor are there any other tradesmen working in Gun Alley listed) and Thomas and later Jane Mayor

30. Will in the National Archives, available online, PROB 11/937.

31. The £3,000 left to his children in 1761 would be worth almost £400,000 today.

32. Will in the National Archives, available online, PROB 11/1284.

33. Although her birth has not been established, it is known that her father was Rees Ellis and her brother, and no doubt she herself, was from Merionethshire.

34. £50 would be worth about £6,600 today.

owned property there (it was a very small alley with only four buildings shown on Horwood's map), he is likely to have been an employee working in an extension of the Little Moorfields foundry. Thomas Cooper senior occupied one of Joseph Mayor's Gun Alley buildings in 1802, and in 1805-10 it was occupied jointly by Thomas Cooper senior and Thomas Cooper junior. By then they were probably working there in their own right and perhaps continuing the business as clock-brass founders, but on a smaller scale.

OTHER MOORFIELDS BRASS FOUNDERS

Some of the other brass founders who worked in Moorfields are of interest here; a number of them had family or apprenticeship connections with the Mayors.

The Government Brass Foundry at Windmill Hill, Moorfields, was discussed in general terms in Part 1, but more specifically the lease of the foundry — also known as the Kings Foundry — had been acquired by Matthew Bagley in 1705 following the death of Philip Wightman, its previous owner, three years earlier. Bagley is said, but not yet established, to have been a descendant of an extensive and important family of Northamptonshire bell founders. As well as casting guns Bagley's Moorfields foundry cast church bells, including eight new bells for St Martin-in-the Fields in 1714. Matthew Bagley and his son, also Matthew, were among those killed in the explosion of May 1716 while recasting cannon captured by Marlborough from the French.

As well as Robert Romley, clock-bell founder, discussed in Part 1, Tompson Warner was a brass founder, including casting church bells, in partnership with his brother John in Wood Street, Cheapside from 1762 to 1770, after which they moved to Fore Street, Moorfields. The partnership was dissolved in December 1782, with Tompson Warner continuing at Fore Street until his death in 1816. 'Old John Warner' moved to Fleet Street and in the second half of the nineteenth century the firm he had established developed into Britain's largest bell foundry.

Anthony Andrews was another brass founder, working a little further west at 68 Fore Street, Cripplegate, in 1762-90, but he is listed in 1784 as a 'cabinet founder' specialising in brass furniture fittings, which might have included those for clock cases.

Related to the Mayor family was William Weare, 'brass and regulus founder' at 21 Little Moorfields in 1761-72, who was in partnership as Weare & Savill in 1772. In December 1776 the partnership was dissolved and William Savill bought out William Weare's share in the business.³⁵ William Savill then worked alone until 1786 at the same address. Shortly afterwards Savill moved to Squirrel Yard, Minories, near the Tower, where he was a brass and regulus founder in 1789-91. William Savill, son of William of Bocking, Essex, baymaker (bays, now called baize, being woollen cloth made in nearby Colchester), had been apprenticed in the Founders' Company to Joseph Mayor in February 1758, but after his master's death sometime in that year he was turned over to William Weare in November 1758.

William Weare was Thomas and Joseph Mayor's half brother from their mother's first marriage and their premises were only a few doors away from each other. William Savill's son, also William, was apprenticed to his father in 1784 along with another apprentice on the same day, and a further one in 1787, all in the Founders' Company.

The business was listed in the London trade directories successively as William Weare, Weare & Savill then William Savill, brass and regulus founders, the only people to be so listed. Regulus was the archaic name for antimony metal, to distinguish it from the sulphide ore stibnite (also known as antimonite) Sb_2S_3 , which was known at that time simply as 'antimony'. Antimony was alloyed with lead to produce type metal, so the main part of their trade might have been producing type metal for printing, but they do not appear to have been actual founders of printing type.

A church bell is known by Weare & Savill dated 1776, just before the break-up of their partnership, while four bells, all dated 1777, are known by William Savill. It has been suggested, but not confirmed, that these may have actually

35. *The London Gazette*, available online.



Fig. 15. 'Matchstick man' casting mark on the countwheel of a lantern clock by Peter Closon, about 1650.

been cast by the Whitechapel Bell Foundry. Despite Weare's close family relationship with the Mayors and Savill's apprenticeship to Joseph Mayor, there is no evidence at present that they cast brass clock components.

Another founder working in Rope Maker's Alley, Little Moorfields, not far from the Mayors, was Joseph Flude who was bankrupt in 1761. As it is not known if he was a founder of brass, iron or any other metal, or if he cast parts for the clock trade, and does not appear in directories, he is not considered further here.

THE 'MATCHSTICK MAN' CASTING MARK

A casting mark found on a number of early London lantern clocks (particularly those made in Lothbury) has been dubbed the 'matchstick man'.³⁶ This takes the form of a schematic human figure on a sunken circular ground, and is most often found on the countwheel (Fig 15), hour wheel (also known as the dial wheel) and the starwheel ('ratch') of lantern clocks (Fig 16). It is known inside the spring barrel of three bracket clocks, on the hour wheel of an early anonymous longcase clock, and has also been seen by the author beneath the top plate of a lantern clock of about 1650 by Peter Closon of Holborn Bridge.

The matchstick man mark has been recorded

on the clocks of about a dozen makers, and the clocks of William Selwood of Lothbury usually have at least one example. It has been found on clocks ranging in date from about 1640 to about 1685.³⁷ There has been speculation as to the origin of this mark, possibly it was to identify castings from a founder called Mann, but no suitable candidate of this name is known.

A lantern clock by Nicholas Coxeter is known with the matchstick man casting mark on the dial wheel and 'M' on the bell strap. It is reasonable to assume that a clockmaker would, wherever possible, obtain his castings from the same source. If this was the case with this particular clock, then it might be concluded that the founder of both these marks was John Mayor of Bedlam (from the dates it is more likely to be his father or another close relative), only a comparatively short distance from Lothbury and London's other early clockmaking centres. Is it stretching the imagination too far to suggest that the matchstick man was symbolic of a person of importance, such as a mayor? If this is the case, then the matchstick man mark could be an early mark used by the Mayor foundry, replaced later by 'M' and 'IM'.

A much scarcer mark, known on only a couple of London lantern clocks, depicts a bell with its clapper visible (Fig 17).³⁸ As John Mayor worked at the sign of the Five Bells, are these clock components also a product of his Bedlam

36. G. White, *English Lantern Clocks* (1989), pp. 489-94.

37. B. Loomes, 'Pictures of Matchstick Men', *Clocks*, July 2004, 21-5.

38. B. Loomes, *Lantern Clocks & Their Makers* (2008), pp. 417-18. Examples of other casting marks on lantern clocks are shown on pp. 415-19.



Fig. 16. Less clearly defined marks on the starwheel ('ratch') and hour wheel of the same Closon lantern clock.

foundry or some other founder whose workshop was denoted by the sign of a bell?

Unfortunately, there is little in horology that is straightforward, and the matchstick man mark has been found on four other lantern clocks in association with three different casting marks.³⁹ Hence, while the above suggestion — and it is no more than that — may be correct, many more examples need to be recorded before the origin of the matchstick man mark can be identified with certainty.

CONCLUSIONS

Any study such as this, where documentary sources are limited, is bound to rely on much circumstantial evidence and reasonable speculation, but notwithstanding, some definite conclusions can be drawn. The production of cast brass clock parts in London was a specialised trade by a very small number of founders, the most important being the Mayor family, the earliest recorded being John Mayor in Bedlam in 1696–1703, but a previous generation had probably also been involved in the trade. In the eighteenth century their foundry was situated in Little Moorfields, and continued into the early nineteenth century.

The business became prosperous enough for Thomas Mayor and his widow to own property



Fig. 17. Bell casting mark on the rear of the chapter ring of an unsigned Lothbury lantern clock of the 1650s, possibly by Thomas Loomes. (Photo: Brian Loomes)

in London and Essex, and to leave sizeable legacies and silverware to their children. Other relatives and former apprentices worked nearby and may also have cast clock parts. The Mayor foundry was almost certainly the source of parts with 'M' and 'IM' casting marks, but any positive links with the earlier matchstick man mark await further evidence.

George Somersal and his son Mandeville were clock-dial engravers working very close to Mayor's foundry,⁴⁰ and the castings for the dials that they supplied to clockmakers are also likely to have come from the same source. The author would be pleased to receive details of *any* casting marks found on clock movements or dials, so that the origin of at least some of the other recorded marks may eventually be established.

ACKNOWLEDGEMENTS

Grateful thanks are due to Jeremy Evans and Brian Loomes for information, and to all those who have supplied details and photographs of casting marks. Special thanks are due to Chris Pickford who has supplied much information on the founders of church bells who worked in Moorfields, and this has significantly augmented an earlier draft of this article. All illustrations are by the author, unless otherwise acknowledged.

39. White, *English Lantern Clocks*, pp. 491–4.

40. Robey, 'Moorfields and Clock-Brass Founders, Part 1' (see note 1).