

The Whitechapel Bell Foundry



Survey of London

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The Survey of London's Histories of Whitechapel project is an experiment in the making of the history of a place. Sharing our knowledge and experiences will help us to understand the histories of buildings, streets and neighbourhoods, and through them the lives of the people of Whitechapel. The project has run from 2016 to 2019, and can be explored at www.surveyoflondon.org.

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Preface

Until its closure in 2017 the Whitechapel Bell Foundry was a remarkable survival. The business, principally the making of church bells, had operated continuously in Whitechapel since at least the 1570s. The Foundry was on its present site at 32–34 Whitechapel Road and 2 Fieldgate Street, with the existing house and office buildings, since the mid 1740s. The firm made claims on its business cards to being 'Britain's oldest manufacturing company' and 'the world's most famous bell foundry'. The first is not readily contradicted, the second is unverifiable but plausible. As long ago as 1951 it was said that the bell foundry 'is so connected with the history of Whitechapel that it would be impossible to move it without wanton disregard of the associations of many generations.'¹

But it has moved, or rather the foundry has closed. Now in 2019 there are proposals and discussions about future use of the site. This booklet arises from the Survey of London's current work in Whitechapel, which has grown through a website (www.surveyoflondon.org), and which is to be brought together in volumes 54 and 55 in the Survey of London series, set for publication in 2021. This booklet anticipates that, to engage with present circumstances through an illustrated history followed by transcripts of interviews. Altogether it addresses the historic use of the bell foundry as intrinsic to its meaning as a collection of buildings and as a place. The history of the foundry's products is set down elsewhere (see notes). So is the descent of ownership, which is revisited here for the sake of understanding the buildings.



The Plumbers Row elevation in 1958 (London Metropolitan Archives)

A history of the Whitechapel Bell Foundry

The Whitechapel Bell Foundry has been traced as originating with either Robert Doddes in 1567 or Robert Mot in 1572, giving rise to a traditional foundation date of 1570. The foundry is likely then to have been on a site just to the east of where Commercial Street meets Whitechapel High Street. This was later Church Alley, then Tewkesbury Court. Histories of the foundry refer to the place, without evident basis, as Essex Court. There is no continuous thread, but it has been suggested that the Elizabethan establishment grew out of a foundry in Aldgate that has been tracked back to 1363 and a bell-maker called Stephen Norton.²

From Whitechapel High Street to Whitechapel Road

By 1631 at the latest the antecedent bell foundry was definitely on the hinterland of what are now 101 and 102 Whitechapel High Street (this, incidentally, is another contested site in 2019). In 1627 Thomas Bartlett, a bell-founder, had purchased the freehold of the site's two High Street houses with plots extending back to Sugar Loaf Alley (later Commercial Place and now the entrance to a large car park). In 1631 Bartlett left his house 'by the sign of the three bells', plus the 'back buildings thereto belonging' (including, presumably, the foundry) to his son Anthony, also a bell-founder.³

From 1701 Richard Phelps was in charge. He made the great (5.25 ton) clock bell for St Paul's Cathedral in 1716. When he died in August 1738 he was succeeded by Thomas Lester, aged about 35, who had been his foreman. It has been supposed that within the year Lester had moved the foundry into new buildings on the present site on Whitechapel Road, a belief which can be traced to Amherst Tyssen's account of the history of the foundry in 1923, where he related that 'according to the tradition preserved in the foundry and communicated to me by Mr John Mears more than sixty years ago, Thomas Lester built the present foundry in the year 1738 and moved his business to it. The site was said to have been previously occupied by the Artichoke Inn.⁴ That has never been corroborated. It is anyway implausible as such a move would take more than a few months.

Contemporary documentation suggests a slightly later date for the move. A notice in the *Daily Advertiser* of 31 August 1743 reads: 'To be let on a Building Lease, The Old Artichoke Alehouse, together with the House adjoining, in front fifty feet, and in Depth a hundred and six, situated in Whitechapel Street, the Corner turning into Stepney Fields.' Those measurements tally well with the foundry site. Stepney

Manor Court Rolls refer to 'the Artichoke Alehouse, late in the occupation of John Cowell now empty' on 8 April 1743 and to 'a new built messuage now in possession of Thomas Leicester, formerly two old houses' on 15 May 1747.⁵ A sewer rates listing of February 1744 does not mention Lester at the site.⁶ The advertised building lease was no doubt taken by or sold on to Lester, who undertook redevelopment of the site in 1744–6, clearing the Artichoke, which was most likely a timber building with a yard to the rear. The motive for the move was probably the opportunity for a larger foundry and superior accommodation on this more easterly and therefore open site.

The early buildings

The seven-bay brick range that is 32 and 34 Whitechapel Road is a single room deep with three rooms in line on each storey, all heated from the back wall. It was built to be Lester's house and has probably always incorporated an office. The Doric doorcase appears to be an original feature, while the shopfront at the east end is of the early nineteenth century, whether an insertion or a replacement. Internally the house retains much original fielded panelling, a good original staircase, chimneypieces of several eighteenth- and nineteenth-century dates, including one in the first-floor west room that probably survives from the 1740s, and, in the central room on the first floor, a fine early if not original apsidal niche cupboard.

Behind the eastern bays is 2 Fieldgate Street, a separately built house of just one room per storey, perhaps for a foreman. Its door surround, which derives directly or otherwise from James Gibbs's pattern book of 1732, *The Rules For Drawing the Several Parts of Architecture*, is of timber, as are its back walls, which are clapboarded. Brickwork at the front appears to antedate that of the main range, but as both builds are on the former Artichoke site, the Fieldgate Street house is most probably also a part of the 1740s building campaign.

Outbuildings of eighteenth-century origin to the south are single storeyed, what was a stables, coach-house and smithery range along Fieldgate Street. The foundry itself, which originally contained four crucible furnaces, was across a yard behind the west part of the house. Inner walls facing the internal yard and other parts of the east range were rebuilt in 1964–6.⁷ Facing the street on the former stabling range is a tablet inscribed: 'This is Baynes Street' with a worn date, perhaps 1766, a reference to what later became Fieldgate Street, the western parts of which were first built up in the 1760s when the Rev. Edward Baynes (d.1766) owned the adjoining lands. What is now Plumbers Row bisected the Baynes property and was then called Baynes Passage. It had been a footpath (Church Path) alongside a

ropewalk by the 1730s. The ropery was run by Paul Johnson, who married Catherine Lester, Thomas's sister.⁸

Changing proprietorship

Thomas Lester took Thomas Pack into partnership in 1752 and acquired copyhold ownership of the foundry from a younger Edward Baynes in 1767.⁹ Lester's nephew William Chapman was a foundry foreman who, working at Canterbury Cathedral in 1762, it is reported, met William Mears, a young man he brought back to London to learn the bell-founding trade. Lester died in 1769 and left the foundry to John Exeter of Hornchurch (of a Whitechapel family related by marriage, members of which were in succeeding decades making coaches a few doors to the west, and partnering the Johnson family in ropemaking across Whitechapel Road). Lester instructed Exeter to give a lease to Pack and Chapman as partners, thus keeping the property in the control of relatives, while ensuring the business continued.¹⁰

Thomas Pack died in early 1781 and Chapman was pushed out by Robert Patrick, a cheesemonger who lived at 10 Fieldgate Street (close by on the north side), to whom ownership of the foundry had descended through his wife Sarah, Lester's grand-daughter. Chapman moved into partnership with Mears at Gold Square, Crutched Friars, where Mears had set himself up in 1777, and fallen bankrupt by March 1781. Chapman died in 1784.¹¹ Patrick installed Thomas Osborn, a Norfolk bell-founder, to run the foundry, but their enterprise failed in 1785. William Mears returned in partnership with his brother Thomas, who came to Whitechapel from Canterbury where he owned maltings. They were bankrupted in 1789, and Thomas Mears was left as sole proprietor from 1790, a year before William died. Ownership of the property remained divided among various descendants of Lester.¹² Shortly before his death in 1810 Thomas Mears was still trading as 'late Lester, Pack and Chapman'. On a promotional sheet he listed all the bells cast at the foundry since 1738, 1,858 in total, around 25 per year – including some for St Mary le Bow in 1738, Petersburg in Russia in 1747 and Christ Church, Philadelphia, in 1754.¹³

A son, also Thomas Mears, acquired full control of the foundry in October 1818 when seven parties of Lester descendants sold up. The younger Mears took over the businesses of four rival bell-founders and undertook works of improvement at the foundry. He also diversified in interesting directions. Mears supplied all the cast-iron work for the great staircase of 1817–18 at Burlington House, Piccadilly, innovatively designed by Samuel Ware, architect. By 1840 the firm had only one major bell-founding competitor in Britain (W. & J. Taylor of Oxford and Loughborough). The next generation, Charles and George Mears, ran the foundry from 1844 to 1859, the highlight of this period being



2 Fieldgate Street in 1958 (London Metropolitan Archives)

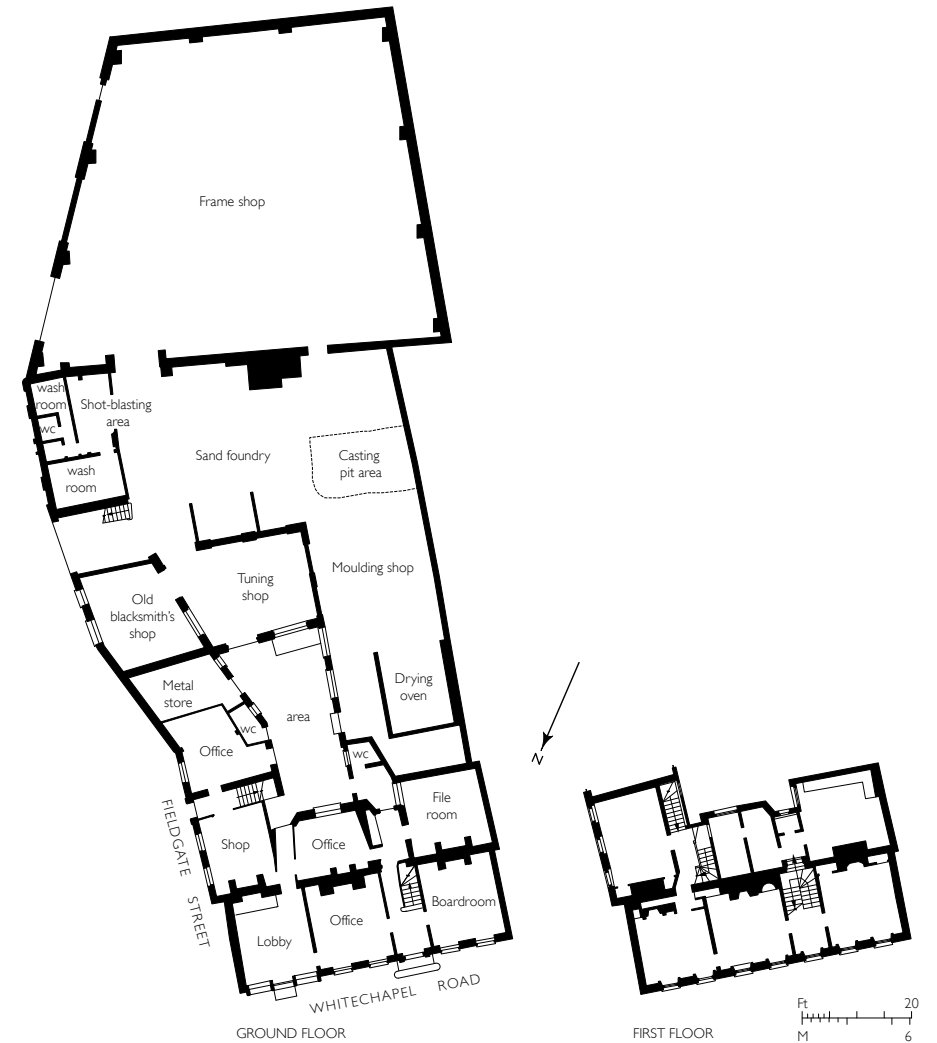
the casting in 1858 of Big Ben (13.7 tons), then and ever after the foundry's largest bell. From 1865 George Mears was partnered by Robert Stainbank. Thereafter the business traded as Mears & Stainbank up to 1968. Arthur Hughes became the foundry manager in 1884 and took charge of operations in 1904.¹⁴

Alterations to 1900

Given the ownership history, significant investment in new buildings seems unlikely before 1818. However, the smithery end of the eastern outbuilding appears to have been altered if not rebuilt between 1794 and 1813. Around 1820 a small pair of three-storey houses was added beyond a gateway that gave access to the foundry yard. There are also two-storey single-room early nineteenth-century additions behind the centre and west bays of the main house, the last room incorporating a chimneypiece bearing 'TM 1820', evidence of Thomas Mears's responsibility. Thereafter, possibly following a fire in 1837, the smithery site was redeveloped as a three-storey workshop-warehouse block extending across a retained gateway. The ground-floor openings north of the gateway, once perhaps doors, have been reduced in size. Demand for the casting of very heavy bells increased from the 1830s. In 1846 the foundry was enlarged with a new furnace by enclosing the south end of the yard, this for the making of an 11.5 ton bell for Montreal Cathedral. Another furnace was added two years later and in 1850 Benjamin Price built a 62ft-tall chimney up against the south wall. Rudhall's Gloucester foundry, taken over in 1835, closed in 1848 and its tuning machine was brought to Whitechapel and housed in a specially built room that ate further into the yard, the workshop to the east adapted to house a steam engine. The tuning room's largely glazed north-facing wall stands little altered, and the timber beam that housed the head of the tuning machine remains *in situ* below a lantern-lit roof, the machine itself having been replaced in 1922. A large additional workshop or back foundry had been added to the far south-west by the 1870s, by when the pair of houses to the south-east had been cleared for a carpenters' shop, the front wall retained with its doors and windows blocked. The upper parts of the more northerly part of the Plumbers Row range were latterly used for making handbells and timber bell wheels.¹⁵

Late twentieth-century repair and rebuilding

The back foundry and three houses on Plumbers Row in front of it were damaged during the Second World War, during which the establishment was diverted into the making of aluminium castings for submarine parts for the Admiralty. Proposals to rebuild entirely behind the Whitechapel Road houses emerged in 1958 by when the



32-34 Whitechapel Road, ground plan of the whole site with the first-floor plan of the two houses at 32-34 Whitechapel Road and 2 Fieldgate Street (drawing by Helen Jones)

foundry was already protected by listing. The workshops were considered expendable, but even then it was suggested that the timber jib crane on the east wall should be preserved. First plans were by G. Gordon Stanham & Partners, architects, but these were shelved when Mears & Stainbank acquired freehold possession of the property. A more modest scheme that followed in 1964–6 involved a rationalizing land swap with neighbours to the south, and made use of the newly available Plumbers Row frontage. This too was postponed for want of capital, though plant and furnaces were replaced and there were repairs including rebuilding of walls facing the inner courtyard, the former stable building to its east and parts of 2 Fieldgate Street. In 1972 Moss Sprawson, developers, tried to acquire the site for office redevelopment. For the foundry, Douglas Hughes (one of Arthur's grandsons) proposed a move east across Fieldgate Street to what was then a car park owned by the Greater London Council. A move entirely out of London was also considered. The GLC's Historic Buildings Division became involved in trying to maintain what it considered 'a unique and important living industry where crafts essentially unchanged for 400 years are practised by local craftsmen.'¹⁶ Help arresting movement in the front wall could be addressed, but plans came unstuck again in 1976 when the GLC realized it had no remit to help keep the business *in situ*. Even so, in the same year the UK gave the USA a Bicentennial Bell cast in Whitechapel. The foundry organized a further land exchange to its west with Buck & Hickman, the toolmakers who had long been based nearby, and new development plans were prepared in 1977, this time by James Strike, architect. A large new engineering workshop was at last built in 1979–81, with D. S. & R. James Ltd, builders. At the back of the site this single-storey steel-frame structure, to house metal workshops and a loading bay with a travelling crane, was faced with arcaded yellow stock brick on conservation grounds. A mezzanine floor was inserted into the workshop in 2001. In 1984–5 the GLC oversaw and helped pay for underpinning and refurbishment of the front buildings and the three-storey workshop range was reroofed, with Strike as architect, John Savage Associates as consulting engineers. The shopfront was grained and the external window shutters were renewed and painted dark green.¹⁷

Closure and beyond

In 1997 proprietorship passed to Douglas Hugheses nephew, Alan Hughes, and his wife, Kathryn. Manufacturing continued, though not without growing concerns and disagreements about its sustainability. In December 2016 the Hugheses announced the foundry's closure. In June 2017 the site was reportedly sold for £5.1 million to Vincent Goldstein, a London-based property developer, who is then



Pouring a bell in 2011 (photograph by Derek Kendall, © Historic England Archive)

said to have sold on the same day to Raycliff Capital, headed by Bippy M. Siegal, a New York financier, for £7.9 million. The foundry closed definitively and was emptied of personnel and most plant, in part for redeployment elsewhere through the Hugheses firm, Whitechapel Bell Foundry Ltd.

Negotiations opened as to the future use of the site and in June 2018 Raycliff Whitechapel LLP made public a scheme for the site that proposed adaptive reuse of the site's front buildings with a hotel to the south replacing the workshop of 1979–81. This scheme was prepared by 31/44 Architects, working with Malcolm Fryer Architects (conservation) and Alan Baxter Ltd. Raycliff had acquired additional land to the west and south of the expendable workshop for which there were existing hotel consents. At the same time, the Factum Foundation and the United Kingdom Historic Building Preservation Trust presented an alternative proposal seeking to perpetuate manufacturing in an art foundry.¹⁸

Notes

- 1 – D. L. Munby, *Industry and Planning in Stepney*, 1951, p. 254
- 2 – London Metropolitan Archives (hereafter LMA), GLC/AR/HB/01/1540: Amherst D. Tyssen, 'The History of the Whitechapel Bell-Foundry', *Transactions of the London and Middlesex Archaeological Society*, vol. 5, 1923, pp. 195–226; *Whitechapel Bell Foundry: A Short History*, 2011, p. 13
- 3 – Tower Hamlets Local History Library and Archives (hereafter THLHLA), TH/8770: LMA, DL/C/B/008/MS09172/040, no. 203
- 4 – Tyssen, p. 211
- 5 – LMA, M/93/030, p. 158; M/93/031, pp. 165–7 [
- 6 – LMA, THCS/159
- 7 – Information kindly supplied by Alan Hughes
- 8 – LMA, O/009/055
- 9 – LMA, M/93/037, pp. 263–4; Tyssen, p. 212
- 10 – The National Archives (hereafter TNA), PROB11/952/173: LMA, Land Tax returns: Tyssen, p. 216
- 11 – TNA, PROB11/1074/121; PROB11/1123/414: Tyssen: *Whitechapel Bell Foundry*, 2011, p. 16
- 12 – LMA, CLC/B/192/F/001/MS11936/339/523220; MS11936/348/536896: THLHLA, P/SLC/1/20/21: *London Gazette*, 13 March 1781; 12 Dec. 1789: Tyssen, pp. 217–20
- 13 – LMA, P69/STE1/B/039/MS09427; DRO/002/B/08/01/003: TNA, PROB11/1512/454
- 14 – LMA, M/93/057, pp. 1–3; LMA, M/93/098: Tyssen, pp. 221–2; *Whitechapel Bell Foundry*, 2011, pp. 17–18; Neil Bingham, 'The Regency Transformation of Burlington House, Piccadilly', in (eds) Susanna Avery-Quash and Kate Retford, *The Georgian London Town House: Building, Collecting and Display*, 2019, pp. 124–5 and 142–3
- 15 – Richard Horwood's maps of London, 1799 to 1819: Ordnance Survey maps: LMA, MBO/Plans/292; District Surveyors' Returns: information kindly supplied by Alan Hughes and his colleagues
- 16 – LMA, LMA/4441/01/0821
- 17 – LMA, LMA/4441/01/0821: THLHLA, Building Control files 41852, 42657: *Whitechapel Bell Foundry*, 2011, p. 21
- 18 – *The Guardian*, 2 Dec. 2017: Spitalfields Life, 21 June 2018: *The Observer*, 3 March 2019: Tower Hamlets planning applications online



The internal yard or area from the southeast in 2011 (photograph by Derek Kendall, © Historic England Archive)

Alan Hughes talks about the history of the Whitechapel Bell Foundry in his family's hands

I think the fascination for people who visit is that they are visiting a dirty workshop, where stuff is made, because they've never seen it before. And they'll probably never see it again.

My great grandfather came here as general manager [in 1884]. He was only twenty-two years old. He ran the company for Lawson. When Lawson died in 1904, great grandfather wrote to Lawson's widow, and I don't have a copy of the letter. It was a letter, apparently, in which he explained why he felt he was entitled to have first refusal to the purchase of the business, having run it for Lawson for twenty years. He made an offer, and I don't even know what the offer was. But it only took her three days to say, 'Yes, fine', because she didn't want it. That gave great grandfather ownership of the business, but not the property.

Albert Hughes [my grandfather] was the oldest of three brothers, Leonard and Robert. As far as I know, he was the only one of the three who was actually a bell-ringer. He was, like his father, a very, very keen bell-ringer – very good bell-ringer.

Douglas [my uncle] was about six or seven years younger than my father [William Hughes] when he came into the business. My grandfather was convinced that, just as my great grandfather was pretty much convinced that, the company wouldn't survive. When my father William, and my uncle Douglas left school, he ensured that they had good employment away from this company.

My father started work at the head office of the Thornycroft Company in Smith Square. They made trucks, diesel engines, that kind of stuff. [He then joined the Whitechapel Bell Foundry] in 1945, and of course we're talking war years when we weren't making bells, we were making aluminium castings for the Admiralty. Then after the war, of course, the demand for the bells hugely increased because, of course, war damage and bombing.

We had this huge amount of work to do immediately after the Second World War but with fewer people to do it because they had gone to war and not come back. I don't know the whole story but my uncle was either persuaded to join with his brother or he decided to join with his brother. I don't know which but they both came into the company.

Again, because we were so short of skilled trades, both of them worked in the foundry extensively and also went out doing bell hang-



Whitechapel Bell Foundry shopfront, 32–34 Whitechapel Road in 2017 (photograph by Derek Kendall, Survey of London)

ing work extensively because it was an all hands to the pump situation. Life was difficult. We had war damage, obviously, and yet a full order book and yet very little cash, and materials were rationed, so you had an order to build something but you couldn't buy the materials to build it anyway. These were very trying times and, of course, I joined them later on.

It was quite an exciting time because only from 1970 did we actually own the property, because it had been mortgaged from '60 to '70. We were paying rent on it prior to that. In a sense, it wasn't for us to throw fireplaces away because we didn't own them anyway. Also, we had decided to do some rebuilding once we owned the property. This was a great time of clearance, and let's clear the decks and start again.

The façade has had very little done with it over the years. If you look at photographs of the façade from the 1920s, there is the most enormous and ghastly enameled sign right way across the parapet that says 'Bell Foundry'. Even if you look at the brickwork today, you'll see that the brickwork across the parapet looks a lot newer. I suspect that the parapet was rebuilt. Not just because the bricks look newer, because also it's upright. The whole building leans but the parapet is upright which suggests to me that it was rebuilt. The rest of it has been patch repair.

Again, going back to the time when I joined the company, all of the timberwork right the way across the whole of the front was grained in the same way as our front entrance was grained. Now, I personally hate graining. It's just a thing. I don't like it, it pretends to be what it isn't, I would prefer if they just paint it. It took us something like two years to get permission from the local council to actually paint the house timberwork green as it now is. That was a real struggle but at least visually, there is now some separation between what was the bell foundry house with the green and the front entrance, the business, which is still grained.

The foundry during and after the Second World War

The panelling was very badly cracked, I understand, by the time we came out of the Second World War. We ourselves here, our own carpenters did huge repairs to this panelling. It was done very carefully. What you can't see is where the splits run down the centre of the panels, they took the panelling out and screwed into the back a series of brass strips which stitched the crack. They stitched the cracks together and then they filled the gaps and they painted over them. But the brass plates just stopped the splits moving.

The repairs to the panelling were done around about 1950. It was to try to make the place half decent after the Germans. I think

[the building] survived for two reasons. The first was there were no direct high explosives but there were loads of incendiaries. Most of the damage that was done in the East End of London was incendiaries, it wasn't high explosives and it was [true] that the East End burned rather than just being bombed.

Fire did as much damage as high explosives. The Germans were dropping incendiaries, loads of them. This place caught fire loads of times. But [it survived] because my grandparents and my parents lived here, and my father had a reserved occupation. Douglas went to war, had a great war actually because nobody shot at him. But my father was here on reserved occupation, so they would be up all night putting fires out.

That's why it survived. The following morning they would have to patch the roof again or there'd be glass broken in windows, all that kind of stuff. Providing there was electricity, and there wasn't always, providing there was electricity, you could run the machines and we could continue making aluminium castings. Some days, of course, there was no electricity. Other days, there was no water. Other days, there was no gas. You took each day as it came because that's what happens in war.

2 Fieldgate Street

What is now our shop is actually the downstairs room of No. 2 Fieldgate Street. That was his [a jeweller's] shop. Sclaire, was his name, Sclaire's Shop. He lived in the house above so we had no access to that. Yes, it's here. Sclaire died and one of his relatives, oh crummy, was it a nephew or something, tried to claim that he had the right to live there because he had always lived there, but he hadn't.

We turned the first-floor room into a workshop and subsequently it became a drawing office, which it still is, and the top rooms were just used as storage, which they still are.

No. 2 Fieldgate Street, we are told, is older than this building. So No. 2 Fieldgate Street was there anyway and then this was built up to it. The GLC dated No. 2 on the basis of the glass being flush with the front of the building, and apparently that puts it prior to 1690 or something.

[The first floor is what] we call the library, which is pretentious. It's just where we keep our old books. Here is where the piano sits. The rest of the room is largely unaltered. This room now, we call the red room because we've painted it red, it's the coldest room in the house. It's right on that east corner. It's bloody cold, we thought we'd paint it red then.



32 Whitechapel Road, the ground-floor Boardroom in 1946 (London Metropolitan Archives)

Derek Kendall photographs the building

The last interest that we had was from English Heritage who sent a photographer here [in 2010] to photograph the interiors.¹⁹

The thing that fascinated him, strangely, most about this building was the staircase. He got really really excited about that staircase and it's just a staircase, but he said the thing about it is that, obviously, it's 1738, but he said it is unaltered. He couldn't bring to mind another London property where he had seen a staircase unaltered since it was constructed. Dan Cruickshank, he did some filming here. It was a programme he was doing something to do with London sewers. It was quite unsavoury but he got excited about the door furniture on the front door here because although we've added to it we haven't taken anything away.

The original door furniture is still attached and he got quite excited about that. The Queen, when she came here was saying what wonderful buildings these were. I said poverty is a great way of preserving the past. If you can't afford anything you don't do anything which means you hang on to what you got.



The staircase in the house at 32 Whitechapel Road (2011 photograph by Derek Kendall, © Historic England Archive)

The workshops

The land that we had at the back, the bit in fact that has been rebuilt, was made up of two parts. Part was a huge wooden shed which was a workshop and it was the wooden shed that we were wanting to remove and replace, also a yard. Now the wooden shed projected into next door's property, but we owned it. But it was a nuisance to them because it was like a peninsula of land sticking into their land.

At the same time between that shed and Plumbers Row there was an open yard. The open yard belonged to them. So they had this little isolated plot of land that we were occupying that they owned.

We owned land effectively in their property. So prior to the rebuilding work we had an exchange of property and it was done on a square foot for square foot basis. I don't think either of us actually gained square footage. But we took ownership of the yard and we gave them the bit that stuck into their property. That gives us the footprint we have today. Having exchanged those boundaries we then set about clearing the whole site and then constructing new workshops. They don't look new anymore but they were new forty years ago.

Whitechapel and its future

But I can remember, when I started here, there were no shops. There were no banks. There was nothing. You wanted groceries, no grocery store. Hardly anybody in the street. A few drinkers, but that's about all. Loads of traffic, but people went through [Whitechapel], they didn't go to it. But that has so changed. And I don't think we have seen anything like the end of the change. I think it's the beginning of the change. But again, that is the tradition of the East End. The whole point about the East End of London, it has been constantly changing and reinventing itself through the centuries. It is an area, I should say, of historically continuing change all the time, the East End's changing. So what is happening now is actually a continuity of what has been happening for nearly 1,000 years.

I'm not complaining, and I'm not in any sense promoting. I'm just observing, a casual look at the history of the East End of London over the last five to 1,000 years tells you – I mean, look at the population. Look at the type of people, who live here, who move here, do things, then move out. And then another lot come in, and the development of the docks, and all of the industries around the docks. It's a period of continual change change change change change change.

We are part of the East End. But there are so many, many, many, many other things and other people that have passed through the East End. It is that great sort of lively melting pot, and not all of it's good. There's the good and the bad. But it's a sort of – it's a melting

pot of things and energy and goings on, as it were.

I mean, I love it. I prefer the East End to the West End because the West End is too much money and too much Disney, you know? And it's all too smart and too nice. The East End is just loads and loads of different ordinary people just trying to carve out a life. ... There's a sort of an energy in that, isn't there, really, that just keeps it alive?

Alan Hughes was interviewed by Shahed Saleem and Peter Guillery on 19 February 2016 at the Whitechapel Bell Foundry.

Notes

19 – Philip Davies and Derek Kendall, *London Hidden Interiors*, 2012, pp. 312–315

Nigel Taylor, the Whitechapel Bell Foundry's Manager at the time of its closure, recounts its working life

My name is Nigel Taylor. I was born in Hampstead. I'm from London originally. We moved out to Harrow Weald when I was fairly small, and we lived there until I was six. After that, we moved up to Oxfordshire, and that's where I think things started to happen. Because when I was a schoolboy, a friend of mine said, 'The bells are being taken out.' They hadn't been rung for some years at Chinnor in Oxfordshire, and they were rehung. As a result of that, we both went and learned to ring.

Because my interest went beyond bell ringing – I'd already become a well-established bell ringer, but because of my interest in the history of bells and the bell frames and bell fittings, I think it was quite natural that I would say to myself, 'I ought to try the bell industry.' Because I was especially interested in tuning, the tuning of bells, which is a scientific art, I opted for having a go at tuning bells. Eventually, that's exactly what I did. I spent some years when I joined the foundry in the moulding shop making bells. Then I started tuning, and then eventually, when the head moulder retired, I took over his job as well, and I did all the inscriptions.

I used to inscribe all the damp clay moulds with the inscriptions as required for clients and decorative friezes. Because I very much liked decorative borders, I used them far more extensively than they had been used before.

I started off as a moulding-shop labourer. I made up the loam bricks that are used for packing out the coats or the flasks. I made up the loam. I did all general duties, I suppose. Then I started building moulds as well. To start with, I think I was building cores, the inner moulds, then I started doing the outer moulds. Then, of course, at that point, I moved into the tuning shop and started learning how to tune. I spent a long time tuning, in fact from 1985 until the foundry closed.

Then when the head moulder retired in 2003, I started doing all the inscriptions as well. As a result, I became the tower bell production manager because I oversaw the entire production of tower bells from start to finish. Not the fittings, but the bells themselves. Making the moulds, making the moulding templates for making the moulds, casting the bells, and tuning them.

The process of bell making

Having produced the template and attached to it was a vertical post – a central post. We inverted that into an iron flask. The flask looked



Making hand-bell moulds in 2011 (photograph by Derek Kendall, © Historic England Archive)

rather like a bell, and it has lots of vent holes in it. You built the outer mould first and you used the loam bricks, which was simply dried. It's loam that's formed into moulds, just for flat brickwork effectively, dried in the drying oven, and then you lined the flask with that. Applied layers of loam until you struck up the mould, which is the effect you will get – that nice smooth finish. Then you dress it with graphite and sleeking tools to get a nice smooth finish. Stamped in all the lettering while the mould was still damp, and any decoration that you fancied putting in. Then you stoved that mould and used the inner profile of that template you made to make the core.

On both the outer and inner mould there was a step that corresponds to the outside and the inside step. When we lowered the outer mould over the inner mould, these two steps met, and you just rub the two moulds gently together. You used to just rub the outer mould from side to side a few times to form a seal, because you don't want the molten metal leaking out the bottom. Then you formed a pouring basin at the top of the mould, poured in the metal, and then the next day or two, you'd open it up from there. There was your bell.

We made bells in batches. We'd make six, seven, eight bells at a time. Generally for smaller bells, three weeks – a three-week cycle. You could just about do a bell in a week and a half. You could make the bell quickly enough. It's the drying time, because loam needs a lot of drying. You couldn't really make a small bell in under a week and a half. [Bells were cast in] high tin bronze. It's nominally 80% copper and 20% tin, but in practice, it tended to be more tin, which was 22/23% tin. Quite often on a Friday, we would do one melt at about midday and another one about half-past three in the afternoon. Each melt would be perhaps a ton each. You set the moulds in two rows on the floor. You cast one side in the morning, one side in the afternoon. We would invite visitors associated with the bells being cast. We had a maximum of twelve, donors and people interested in the project would come along and witness their bells being poured.

Famous bells

I joined Whitechapel several years after Westminster Abbey's bells were cast, but was involved in the making of St Martin-in-the-Fields and Canterbury Cathedral. We made fifty-eight bells for the Riverside carillon in New York. Quite a number of famous bells. Big Ben is the famous one. ... It's our epitome because the people say, 'You must be very proud of it.' I said, 'Well, no, actually. It's a typical product to me of its time, it's a Victorian bell. It's the wrong shape. It has errant partials. It doesn't sound very nice. It's just famous.'

Now, we have this enormous great gong that clangs away every hour but it's world famous. It's almost the voice of England.

Working conditions and production

I was in the front part of the building. There's a long but narrow shop, and that is the moulding shop and the drying oven at the front. That's, obviously, where I spent quite some time. Adjacent to that was the sound foundry where they made all the small bells, the handbells, the clock bells, the little bells that they sell within the shop. It was equipped with a 60kg-capacity oil-fired furnace.

The large tuning machine was situated in the sand foundry, which wasn't ideal because it meant that the large tuning machine was adjacent to the furnace, so when we were tuning bells if the furnace was running, you couldn't test them. You just have to wait for the furnace to be turned off or idled. That wasn't ideal. In an ideal world, you always put your tuning shop completely on one side of the building and in a fairly soundproofed environment.

Once you've made the bells, you just roll them up through the sound foundry. They'd either go straight around the corner to the tuning shop, for the larger bells had cord holes, so they already have a centre hole cast in the bell. The smaller bells went out to the back foundry and they'd drill a centre hole. We used to machine the heads flat for the belt, then turn them over and invert on the vertical boring machine to start tuning.

I spent most of my time either in the moulding shop or in the tuning shop and not very much time out in the back foundry except some measuring of bells and things like that.

[I managed the process of] the making of the bells themselves. Once you finish tuning the bells, they went to the back foundry where they made all the fittings and trial assembled all the frames, the fittings, and the bells. That wasn't my domain. I sent the tuned bell, together with all the dimensions required for making some of the fittings, such as the clappers and clapper staples.

In its day, certainly back in the '90s and early part of this decade we would make typically up to a hundred bells per year. I think by about ... certainly 2008 or 2009, was a very busy period because I think we produced seven completely new rings of bells in the space of just over a year, which was almost unheard of in the family's history since the nineteenth century. So that was a very busy period, and of course, that was the period where Taylors [John Taylor and Company of Loughborough] previous business closed, and they've reopened. By about 2013, there was a drop off in bell production, both for Tay-



View from 2 Fieldgate Street to Plumbers Row in 2011 (photograph by Derek Kendall, © Historic England Archive)

lors and for Whitechapel. I think the problem was this was misinterpreted by Whitechapel at the time as a permanent decline in bell founding.

Working in the building

Well, it was always a question of making do. Back in the nineteenth century, it was mainly a foundry, it didn't do much else. It was Thomas Mears who had the frame building or the erecting shop built in about 1810 or perhaps 1820. Because, prior to that, what the foundry tended to do was just make bells and sell them to bell hangers. It did make some of the fittings, but eventually it started to produce a complete product. It built its own frames, it provided all the fittings. Of course, by the twentieth century, it was becoming quite a struggle. They made quite some large bells, not just Big Ben, the big bell of Montreal, and the Great Peter of York has obviously been recast.

It had a large pit where they used to cast bells, but in those days, all they did was make the bell moulds underground in a pit, bury them in the ground, cast the bells, dig the bells out and take them out into the works. A crude tuning machine enabled the strike note to be tuned. Along came the twentieth century, harmonic tuning and the introduction of modern fittings, so we couldn't just make the bell, we had to tune the bell as well, so a new tuning machine was required.

There was always a lack of height. It wasn't so much a lack of lifting equipment, it was a lack of height. The moulding shop really was quite awkward, and as soon as you started making bells much over one and a half tonnes, you had to start using the pit. You had to put them down in the pit to cast them, and if you made anything much over two tonnes, the best thing to do was to build the core in the pit and to lower the cope down because it gave you a little bit more headroom.

There was a very dingy shop where they used to build the frames. Of course, that was rebuilt in 1980. It had more height. It had two decent cranes, and had good lighting, plenty of height and better heating as well. The heating was something that improved gradually over the years, and actually, in the last few years, it was quite a comfortable place to work. The roof leaked, but not badly, it was something that we sort of kept on top of.

The building did need work done to it, there's no doubt about it, but it was quite habitable. There was plenty of light, we had decent heating, so you didn't tend to boil too much in the summer, and you didn't tend to suffer too much in the winter, so it wasn't an unpleasant environment to work in. The other thing that improved was the dust

extraction. They installed a series of extractors in the late 1970s, and that immediately made the environment very much better.

The end of the foundry and the future of the site

[Alan Hughes] ran out of steam and he wanted to retire, so I think that he couldn't see a way forward. It was a declining market as far as Whitechapel were concerned, and I think he was worn out. He'd slogged away at the foundry, working long long hours day after day, since he was about eighteen, nineteen years old. I think he had done enough.

Well, of course at the moment we have Raycliff, that owns the building and is seeking a change of use, turning it into a boutique hotel and themed cafe and a small foundry. What I'm hoping for is something on a larger scale. I mean at this point, what I do need to say is that there is this campaign to save the bell foundry. The bell foundry is gone and most of the equipment has gone. What I'm hoping for is that we can reopen it as a bell and art foundry. 'Save the bell foundry' is just that: save the building for continued use as a bell and art foundry. We want to make it into a more diverse foundry. Art foundry work is very lucrative. The Westley Group do art castings and there's an awful lot of art commissions, some of them small scale, some of that repetitive work.

The plan is apprenticeships, because there aren't many opportunities for people to learn the art of moulding and casting, but a superb opportunity presents itself with a revitalised foundry. Upstairs where the shops were for assembling hand bells and the carpenters' shop, the plan was to let those out for artists. I think that the way that the foundry can continue into the future and also be profitable is now going to be art casting as well as bells. Bell founding will continue as an important feature of the revitalised foundry, but we will diversify. We've got Taylors at Loughborough making bells and the Westley Group at Newcastle-Under-Lyme are now casting bells, and I think now we cannot be especially profitable by just manufacturing bells, but combined with an art foundry, there is no reason why it can't be very successful.

Based on an interview on 25th April 2019 by Shahed Saleem, incorporating revisions by Nigel Taylor



Preparing a bell flask in 2011 (photograph by Derek Kendall, © Historic England Archive)



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