

The Harlows of Ashbourne — from small-town clockmakers to major movement manufacturers

John A. Robey*

This article describes the rise of Samuel Harlow from a typical small-town clockmaker, watchmaker and jeweller in Ashbourne, Derbyshire, from about 1772. He became one of the most important manufacturers of longcase clock movements and clock castings in Britain, with a warehouse in Birmingham. His son Robert continued the business, followed by his widow Amelia, then her sons Benjamin and, for a short time, William, until it was sold to the Davenport family who continued into the twentieth century.

Samuel Harlow was the single-most important manufacturer of longcase clock movements for the trade, which were discussed in an article published more than two decades ago.¹ This has stood the passage of time remarkably well, the introductory pages dealing with the clock trade in the era of the painted longcase dial after 1772, are still valid today. Also included were examples of movements that can be safely attributed to the Harlow manufactory in Ashbourne, south-west Derbyshire, close to the Staffordshire border. Likewise, the identification of both eight-day and thirty-hour movements with the engravings in Harlow's booklet *The Clock Makers' Guide*, published in 1813, is still sound. However, with the increasing amount of digital genealogical and other sources now available on the internet,² much more is now known about Samuel Harlow's life, his business and his successors. In particular, newspaper advertisements and reports, together with legal documents relating to premises owned by Samuel Harlow and his son Robert, have enabled a fuller narrative to be given on this important manufacturer. Apart

from a small amount of repetition for the sake of continuity, this article presents information not previously published. The development of the instantly recognisable 'standard' eight-day Harlow movement and 'specials', will be discussed in a further article.

While Samuel Harlow began his career as a provincial clockmaker catering to local customers, he became a major manufacturer of longcase clock movements, the firm remained in Ashbourne, where the production of clocks became a major part of the town's economy. Firms such as Ellaby, Etches and Haycock, made turret clocks and especially fusee movements until the 1950s, with others making pinions, clock ironwork or clock brass castings.

Samuel Harlow's family

Samuel Boulton Harlow was baptised on 8 April 1751, at St Oswald's church, Ashbourne, the eldest son of Joseph Harlow and his second wife Mary Boulton. It is claimed that she was related to the renowned Birmingham industrialist Matthew Boulton, but this is most unlikely.³ The middle name of Boulton was dropped later.

*John Robey (john@mayfieldbooks.co.uk) is the author of *The Longcase Clock Reference Book* and *Gothic Clocks to Lantern Clocks*, as well as numerous articles in *Antiquarian Horology*, *Horological Journal* and *Clocks Magazine*.

1. John A. Robey, 'Samuel Harlow of Ashbourne and his Longcase Movements', *Antiquarian Horology*, March 2002, 527–45. The only significant revision of this earlier article is the origin of John Masgreave, who was not a Birmingham brass founder who married Elizabeth, one of Samuel Harlow's daughters (p. 531), but was a farmer from Alton, Staffordshire. A free download of this article is available at www.mayfieldbooks.co.uk.

2. Especially useful is the searchable British Newspaper Archive, www.britishnewspaperarchive.co.uk.

3. Mary Boulton was born in nearby Ellastone in 1720, but no connection can be found to Matthew Boulton.

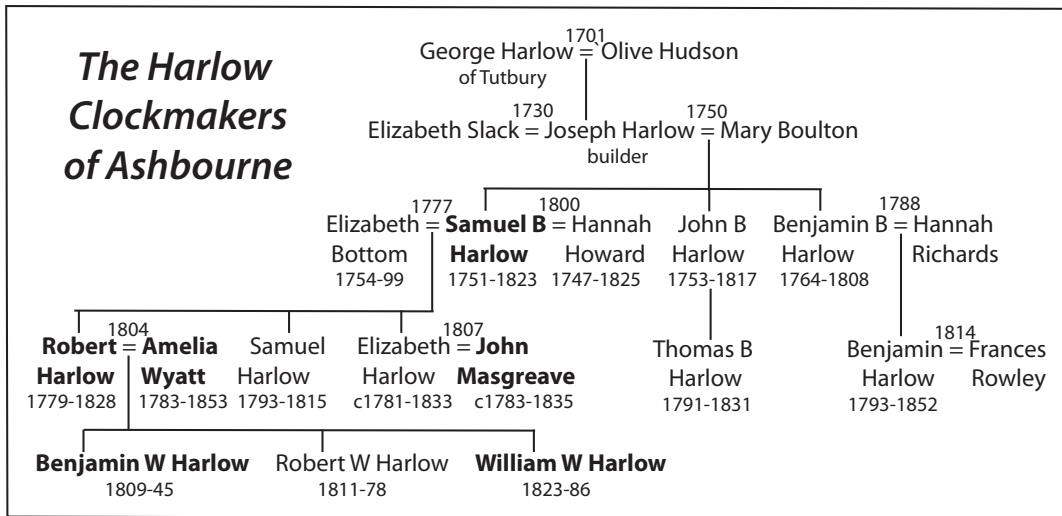


Fig. 1. The Harlow family tree, with those directly involved in the Ashbourne manufactory shown in bold. The middle name B = Boulton (dropped later), and W = Wyatt.

Joseph was a builder responsible for many of the fashionable Georgian houses in the town, *not* a clockmaker as claimed.⁴ Two of Samuel's brothers followed him into the clock trade: John (1753–1817) and his son Thomas (1791–1831) both worked in Ashbourne as specialist makers of pinions and clock ironwork. The youngest brother, Benjamin (1764–1808), was 13 years younger than Samuel, and after marrying in Mayfield, decided not to compete with his brothers, and moved to the North Staffordshire Potteries. With his son Benjamin junior, they became prominent clock- and watchmakers with retail shops in several of the towns that make up the Potteries, as well as in Macclesfield, Cheshire, where they became iron founders.⁵

In 1777 Samuel Harlow married the unfortunately named Elizabeth Bottom of Derby. They had several daughters, but only two sons: Robert, who succeeded to the business, and Samuel junior, who was apprenticed as a lawyer, but died in 1815 aged only 22.⁶ One of the daughters, Elizabeth,⁷ married John

Masgreave, who was recruited into the business (see later).

A year after the death of his wife in 1799, Samuel Harlow agreed to marry Hannah Howard, the widow of John Howard, an Ashbourne tinman and brazier, who had died four years earlier. He was part of a complex family that made and sold cooking pots and containers of tinplate, copper and brass. One of several men named Jervais Howard, born in Ashbourne about 1809, had moved to Birmingham by 1831 where he was a clock-brass caster in 1851.

Before the 1882 Married Women's Property Act, a woman's wealth was owned jointly with her husband, who effectively had complete control over both his and her finances. This was especially concerning for a widow, who might have inherited money, property and household effects from her late husband.⁸ To ensure her financial security a marriage settlement was often made, and the agreement by Hannah Howard and Samuel Harlow reveals the extent

4. This and other, often inaccurate, anecdotal information from a family historian, was included in W. Smethurst, *The Old Clockmakers of Ashbourne* (Ashbourne, 1940), and in a booklet *The House of Harlow Celebrates the 125th Anniversary of Robert Harlow and Son Limited, Stockport Cheshire* (anon, no date, but by Sylvia Harlow, c 1958). Information now known to be incorrect is not repeated here.

5. Information from Vic Harlow, a direct descendant.

6. His death has often been confused with that of Samuel senior.

7. Like Samuel junior, her baptism is not recorded, but she is certainly one of Samuel Harlow's daughters.

8. https://www.familysearch.org/en/wiki/Marriage_Settlements_in_England_and_Wales.

of her finances.

An indenture was drawn up on 14 May 1800 between Samuel Harlow, Hannah Howard, and two trustees to look after her interests, while still allowing the use of her assets by Samuel Harlow.⁹ Hannah Howard had money totalling £345 (worth £20,200 in 2024) secured by four promissory notes owing to her for goods supplied, presumably by her late husband. She owned a sizeable amount of mahogany furniture and other household goods, as well as two shops (one occupied by her son Benjamin Howard, who was probably continuing the family business), and four houses. If Hannah Harlow failed to make a will or if it was not executed, her estate was to go to her son Benjamin, rather than to her new husband. An agreement was also drawn up to protect the rights of Samuel Harlow.¹⁰

Samuel Harlow and Hannah Howard were duly married by licence a week later. Both gave their ages as a nominal 40 years, which was significantly younger than their actual ages, he being 49 years, and she was 53. They had no further children.

It seems that cracks soon appeared in their marriage, possibly as early as 1808 when Samuel was living in Birmingham. With her husband not at hand to control her spending habits, on 20 October 1819 Hannah Harlow was summoned to attend the Staffordshire Quarter Sessions as an insolvent debtor, with sums owed to eight creditors.¹¹ One of them was her husband's nephew Benjamin Harlow junior of Lane End (now Longton) in the Potteries; another was a Stafford auctioneer, but nothing is recorded of the value of the debts, or the verdict of the court.

This may have prompted her to make a will just six months after her insolvency and several years before her death. On 17 April 1820 Hannah Harlow left all her estate to

the daughters of her son Benjamin Howard, who had died in 1807.¹² Her estate at probate was less than £100, so it is likely that she had managed to settle her debts by selling her property, leaving a much smaller sum. She died in January 1825.¹³

Samuel Harlow lived in Birmingham during 1808–1818, after which he retired to Crumpwood Farm. This was the family home of his son-in-law John Masgreave, near Alton Abbey, later known as Alton Towers, Staffordshire, about 10 miles (16km) south-west of Ashbourne. He made a will on 30 December 1818, leaving £100 to John Harlow, probably a cousin, and the remainder of his estate to his daughter Elizabeth Masgreave.¹⁴ He was buried on 19 April 1823 at Alton, aged 72. It appears that Samuel Harlow had a close relationship with the Masgreaves, not only appointing his son-in-law to run the Birmingham warehouse, but repaying their kindness in his later years by leaving most of his estate to Elizabeth Masgreave.

Samuel Harlow's clockmaking, brass founding and other interests

Samuel Harlow was apprenticed to the local clockmaker John Litton in 1767 for seven years, and was working as a clockmaker by June 1777 when he advertised:

WANTED IMMEDIATELY,
A JOURNEYMAN CLOCK-MAKER; a
good Hand may have constant Employ,
and good Wages, by applying to SAMUEL
HARLOW, Clock and Watch Maker, in
Ashborne.¹⁵

He added that he could adjust standard weights and scales (or at least get them done by John Whitehust in Derby):

9. Derbyshire Record Office, D2059/21.

10. Mentioned briefly and with no details of the value of Samuel Harlow's estate, in the deeds of 12 St John Street, Ashbourne. This is a carbon-copy typescript by A. Slater, probably the owner of the property sometime after 1937, when buildings in the centre of Ashbourne were first numbered. The indentures include some information not available elsewhere.

11. Staffordshire Record Office Q/SB 1819 M/8/1. Most of the creditors were in Staffordshire.

12. Derbyshire Record Office D2059/28.

13. *Derby Mercury*, 12 January 1825; *Staffordshire Advertiser*, 15 January 1825.

14. See footnote 10.

15. *Derby Mercury*, 13 & 20 June 1777.



Fig. 2. Thirty-hour longcase clock with a typical North Midlands silvered brass round dial in an oak case. Signed 'Saml Harlow Ashburn', about 1775.

N.B. Those Persons who are desirous of having their Standard Weights for weighing Gold Coin, and Scales properly adjusted, by Mr. Whitehurst, they may be fitted with the same, by the said SAMUEL HARLOW, on reasonable terms.

His only known apprentice was David Smith in 1791, who is not recorded as an independent clockmaker, and may have continued as a Harlow journeyman. There may have been other un-recorded apprentices, but his advertisements indicate that he preferred to employ experienced journeymen. He started his career as a typical small-town clockmaker, selling clocks to local customers. The previous generation of Ashbourne clockmakers mainly



Fig. 3. Eight-day clock by Samuel Harlow with an early painted round dial by James Wilson of Birmingham, about 1780.

made thirty-hour clocks with square brass dials having separate chapter rings and cast-brass corner ornaments. Samuel Harlow only used the latest fashionable single-sheet round silvered brass dials (Fig. 2), introduced by John Whitehurst about 1760 that were popular in the Midlands until the 1790s. He later used round, square or arched painted iron dials (Figs 3–5).

He cast his own brass components, which became a large part of his business; and later he was described variously as a clockmaker, brass founder, watchmaker, or even, incorrectly, as a watch manufacturer. His successors were known as brass founders and clockmakers, then as just brass founders, even though large numbers of clock movements were being made.

In November 1788 he advertised for two more journeymen clockmakers, using similar wording as before.¹⁶ On 6 November 1789 Samuel Boulton Harlow registered patent 1708 for 'Making watch-keys, with a spring to

16. *Derby Mercury*, 20 November 1788.



Fig. 4. Samuel Harlow clock with an early square painted dial, about 1780.

preserve the watch from injury when the key is turned the wrong way.¹⁷ About the same time Abraham-Louis Breguet, the Swiss/French watchmaker invented his own ‘tipsy key’ with a ratchet to prevent damage when winding a watch under the influence of drink. While Breguet tipsy keys are known, none of Harlow’s has been identified.

In August 1787 the finder of a lost watch would be rewarded if it were returned to Mr Harlow, watchmaker.¹⁸ And in December 1791 he had been offered several items of gold jewellery he suspected had been stolen.¹⁹ These reports confirm that despite having moved to new premises in October 1787, he still had



Fig. 5. Eight-day clock by Samuel Harlow, about 1790, with a painted arched moon dial, in a mahogany case made in Uttoxeter.

a clock, watch and jewellery shop. However, there were indications in the latter report that changes in the direction of his business were about to take place. It concluded with:

The said Samuel Harlow takes the Opportunity of informing all Cotton Manufacturers, Clockmakers, and others, that he has lately erected a complete

17. Bennet Woodcroft, *Alphabetical Index of Patentees of Inventions* (1854, facsimile reprint 1969). The full specification is included in a reprint of *The Clock Makers’ Guide*, by Charles K. Aked (1978), pp. 22–23.

18. *Derby Mercury*, 16 August 1787.

19. *Derby Mercury*, 15 December 1791.

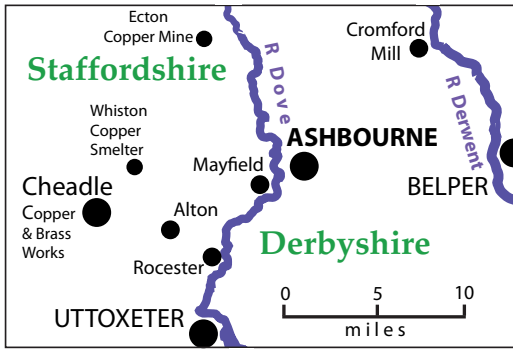


Fig. 6. The area around Ashbourne. Uttoxeter was an important centre for the manufacture of clock cases.

Foundry [*sic*], for the Purpose of casting Brass, &c. Such who please to favour him with their Commands may depend on having the same well executed, and with Dispatch.

This was at the height of the boom in building water-powered mills for spinning cotton, after the first one had been erected in 1771 at Cromford, about 10 miles (16km) north-east of Ashbourne. Similar Arkwright-style mills sprang up along the River Derwent at Masson (Matlock Bath), Belper, Milford, and Darley Abbey (Derby), as well as more locally on the River Dove at Mayfield and Rocester (Fig. 6). There was a great demand for brass castings for both mill machinery and the ‘water frames’ they powered. But this was a double-edged sword for Samuel Harlow, as while he had a potentially lucrative market for his brass castings, mill owners were recruiting the same skilled workers he needed for his foundry and clock movement manufactory. In 1771 Richard Arkwright had published a well-known advertisement (Fig. 7), seeking not only men, women and children to work in his new mill at Cromford, he was also seeking

two Journeymen Clock Makers or others that understand Tooth and Pinion well: Also a Smith that can forge and file. — Likewise two Wood Turners that have

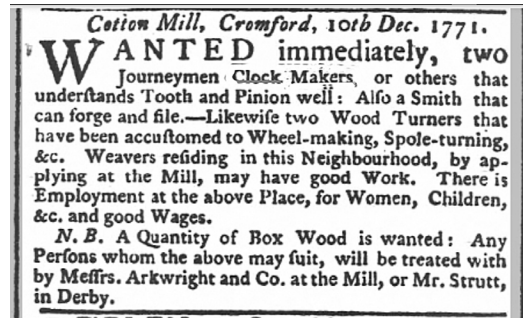


Fig. 7. Richard Arkwright’s advertisement in the *Derby Mercury*, 13 December 1771, for men, women and children to work in his new cotton mill at Cromford, and clockmakers to build the spinning machines.

been accustomed to Wheel-making, Spole-[spool] turning, &c.²⁰

Nor should it be overlooked that there was an established copper-smelting and brass-making industry in the Staffordshire town of Cheadle, 15 miles (24km) west of Ashbourne. Copper ore from North Wales was smelted to produce metallic copper which was then converted into brass using the zinc ore calamine from mines in Wales, Yorkshire and Derbyshire. In addition ore from the fabulously rich Ecton Copper Mine was smelted at Whiston, not far from Cheadle.²¹ The Cheadle Copper & Brass Company produced some of the best quality calamine brass, ideal for Samuel Harlow to cast into parts for clocks, cotton mills and spinning machines.

As well as making clock movements and casting brass, Samuel Harlow solicited orders for related items he did not make himself. In 1794 ‘Mr Harlow, clock-maker and brass-founder’, along with John Whitehurst of Derby and two provincial architects, was an agent for the well-known Edward Arnold, church-bell founder of Leicester.²² How long Samuel Harlow continued this arrangement is not known, but in 1804 a partnership between James Cort, Benjamin Cort, William Watts and Samuel Harlow, brass founders of Leicester, was dissolved. All debts were to be settled by the first three named.²³ Samuel Harlow had clearly decided to leave the

20. *Derby Mercury*, 13 December 1771.

21. J. A. Robey & C. L. M. Porter, *The Copper and Lead Mines of Ecton Hill, Staffordshire* (1972, Moorland Publishing, Ashbourne).

22. *Derby Mercury*, 19 November 1794.

23. *London Gazette*, 10 November 1804



Fig. 8. Typical characteristic Harlow rack-striking eight-day longcase movement, supplied to a Bedfordshire retailer in 1802. It is identical to the engravings in Samuel Harlow's *The Clock Makers' Guide*.

partnership, which was probably just a sales arrangement for castings made in Ashbourne.

Samuel Harlow is said to have had a financial interest in the Ashbourne windmill,²⁴ situated on a ridge to the north of the town, and as a prominent citizen in 1790 he was one of twenty-six subscribers to the Ashbourne Association for the Prosecution of Felons.²⁵ His connections with the Derbyshire establishment were reinforced in 1794, when he was initiated in the Tyrian Freemason's Lodge, Derby. There he rubbed shoulders with local gentry and nobility — the future 6th Duke of Devonshire was a member — politicians, businessmen such as the mill-owning Strutt family of Belper, other clockmakers such as John Whitehurst II and III and Francis Tantum of Heanor, Joseph Frith another Ashbourne brass founder, as well

TO CLOCK-MAKERS AND BRASS FOUNDERS.
WANTED several steady Workmen in the above
 Buſineſſes, who can have good Recommendations
 from their laſt Employers, to whom liberal Wages will be
 given. For Particulars apply 'at the Printers', or by Letters
 (Poſt paid) to Mr. SAMUEL HARLOW, Aſhbourne.

Fig. 9. Samuel Harlow's advertisement in both Derby and Birmingham newspapers in February 1805, for clockmakers and brass founders

as the proprietor of the *Derby Mercury*.²⁶ No doubt this was with the prospect of widening his commercial contacts.

Having abandoned his agency with a bell founder and a brass-founding partnership, both in Leicester, and with his distinctive design of longcase movements finalised (Fig. 8),²⁹ he switched from retailing clocks to become a major supplier of movements and castings to the clock trade.

To expand his manufacturing he needed even more employees, so in February 1797 he advertised for a journeyman clockmaker, with 'constant employ and good wages for a sober steady man of good character'.²⁷ Then in 1802 Messrs Harlow and Son advertised for a brass caster,²⁸ and again in 1805. This time it appeared in both the Derby and Birmingham newspapers for several steady clockmakers and brass founders 'who can have good Recommendations from their last Employers, to whom liberal Wages will be given' (Fig. 9).²⁹ Not only was he increasing his workforce, but there were soon to be radical changes of premises and the running of the business.

Samuel Harlow's Ashbourne premises

The historic town of Ashbourne with many Georgian and earlier buildings, lies in the valley of the Henmore Brook, with the main thoroughfare running from Church Street at the west, becoming St John Street to the east. The road from Derby descends from the south and the road to Buxton climbs past the Market Place to the north. Samuel Harlow's earliest recorded

24. *Derby Daily Express*, 21 April 1931.

25. *Derby Mercury*, 24 June 1790.

26. anon, *The Centenary Celebration of the Tyrean Lodge No.253 ...*, Derby, ... (2nd edition, 1885). Extracts from pp. 40–53 courtesy of Maxwell Craven.

27. *Derby Mercury*, 23 February 1797.

28. *Derby Mercury*, 18 March 1802.

29. *Derby Mercury*, 4 February 1805; *Aris's Birmingham Gazette*, 4 February 1805.



Fig. 10. The Ashbourne Tithe Map 1849 with the locations of the Harlow business, and dates from Land Tax Assessments (known precise dates are in square brackets).

A = Samuel Harlow occupier 1785–6, owner Mr Marshall.

B = Samuel Harlow owner and occupier 1788 [1787]–1822. Late Mrs Harlow or Mrs Masgreave, John Masgreave owner with a tenant 1827–32, various tenants.

C = Samuel Harlow owner 1796–1806 [for sale 1800 and 1804, when occupied by Robert Harlow].

D = Robert Harlow owner and tenants 1806 [1807]–1828, B. Wyatt Harlow 1830–1, Mrs Harlow 1832.

GM = Green Man Inn.

location is in 1785–6 when he was the tenant of a shop on the north side of St John Street in the centre of the town (A on Fig. 10).³⁰ Shortly after, in October 1787, he bought premises across the road (B on Fig 10), now 12 St John Street.³¹ This was next to the Marquis of Granby tavern, which was adjacent to the Green Man Inn, the town's oldest, largest and most important coaching inn, with its iconic sign still spanning the road. A later deed described Samuel's new premises as 'an ancient dwelling house with shop', almost certainly timber framed, similar to others that survive nearby. Many of Ashbourne's buildings have a timber-framed interior with a later eighteenth-century brick façade.

There was a long yard at the rear leading down to the Henmore Brook, with various

outbuildings, including two stables. Samuel Harlow demolished the ancient dwelling, built a new house on the site and converted one of the stables into a workshop.

In 1807 the manufacturing side of the business passed to Samuel's son Robert, who bought two houses near the eastern end of St John Street and erected new workshops (D on Fig 10). Samuel Harlow then moved to Birmingham (see below) and there was now no need for this building and shop, so it was let out to other traders. Then in August 1818, having closed his Birmingham warehouse and retired to Crumpwood, Alton, he sold the building and shop fronting St John Street, but appears to have retained the land at the rear, which by then included another smaller dwelling, occupied by

30. Fig. 10 is based on the 1849 Tithe Map (DRO, D2360//3/66a) and information from Land Tax Assessments, courtesy of Adrian Henstock.

31. See footnote 10, with subsequent information on this location being from this source.

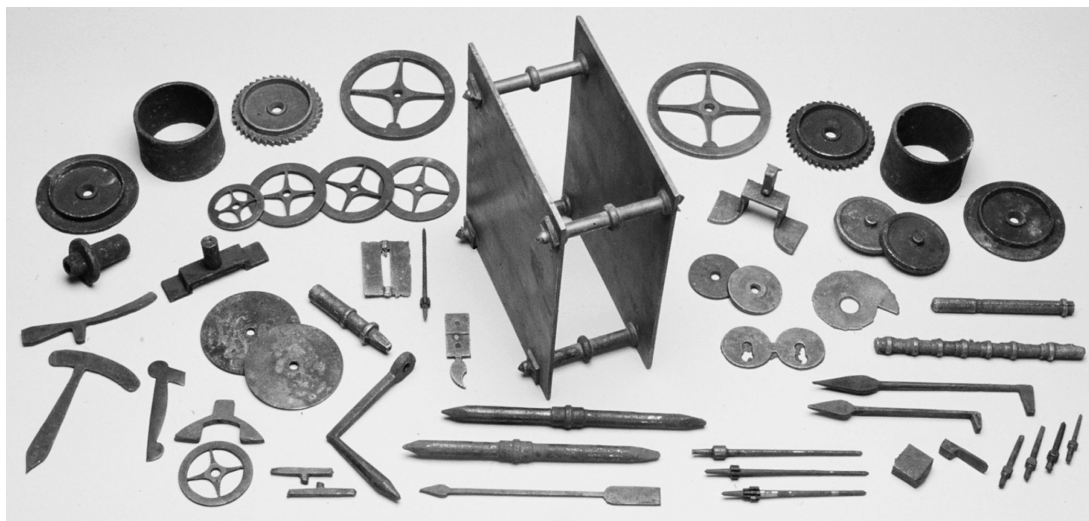


Fig. 11. Brass castings and iron forgings ('suite of clockwork') for an eight-day longcase clock. The plates and pillars have been partially finished, but the rest are as supplied about 1830 to an Ohio clockmaker, probably from England, but not Harlow. The teeth on the barrel click wheels and the steps on the snail are cast in place. The pinions are slit, but not rounded. (American Clock & Watch Museum Inc).

his estranged wife. This was inherited by his daughter Elizabeth, and after her death and then her husband's death in 1835, it was sold, becoming a draper's shop and then a men's outfitters for many years.

From 1796 until 1806 Samuel Harlow also owned two small buildings on the corner of St John Street and the Shambles, now Victoria Square (C on Fig 10). These 'Two shops in St John's Street, Ashbourne, nearly opposite the Green Man Inn, in the possession of Mr Samuel Harlow', were put up for sale in November 1800.³² Then in 1804 they were offered for sale again by Samuel Harlow, described as 'a small shop fronting St John Street, with a cellar, in the possession of Mr Robert Harlow', and another occupied by a tailor,³³ but they were not sold until about 1806–7.

John Masgreave and the Birmingham warehouse

1807–8 was a pivotal period for the Harlow business. Samuel had vacated his properties in Ashbourne, and in 1808 the partnership between Samuel Harlow and Robert Harlow, which had been trading as Harlow and Son six

years earlier, was dissolved by mutual consent, with Robert settling all debts.³⁴ This was not simply the break-up of a partnership, but the formal handing over of the business to the next generation. The manufacturing of clock movements and parts was transferred to Robert, who bought two houses at the eastern edge of the town, where he erected new workshops at the rear. Also Samuel's daughter Elizabeth was married in 1807, and her husband would become an important link in his new venture.

Up to this period movements would have been supplied directly to retailers who added a dial and fitted them into a case, while 'suites of clockwork', i.e. all the brass castings, pinions and forged ironwork needed to make a movement (Fig. 11), would be sold to those clockmakers who preferred to make their own movements. But the largest market was to merchants and factors, most of them in Birmingham, who supplied all manner of goods. While many of these middlemen are listed in trade directories, information on what they actually sold is very sparse. However, a number of them specialised in painted clock dials, complete with falseplates bearing the factor's name, rather than that of

32. *Derby Mercury*, 13 November 1800.

33. *Derby Mercury*, 20 December 1804.

34. *London Gazette*, 29 November 1808.

the actual dialmaker.³⁵ It is likely that they also supplied other horological items.

Samuel Harlow needed direct access to these factors and merchants, so about 1807 he set up his own warehouse in Summer Row, Birmingham, 46 miles (74km) south of Ashbourne. He was certainly there by September 1808 when he was described as 'late of Ashbourne, now of Birmingham, brass founder'.³⁶

Having left the manufacturing to Robert, Samuel recruited his son-in-law John Masgreave to help run the new venture. Samuel's daughter Elizabeth had married John Masgreave of Alton, by licence on 22 June 1807. Despite being from a family that had farmed at Crumpwood since at least 1753, he took the opportunity to work in Birmingham. He was probably in Ashbourne in 1809 when his only child, John junior, was born there,³⁷ but had moved to Birmingham by 1812, when he was corresponding with a major customer.

John Masgreave was recorded in Birmingham in January 1814, when he and W. Evans, clockmaker of Brearly Street, were assigned all the effects of a bankrupt Kidderminster clockmaker, to be used to pay his creditors.³⁸ John Masgreave is listed in the 1815 Birmingham trade directory as a 'clock brass and clock movement manufacturer, iron work, and caster in general', and similarly in 1818 including as a bell founder³⁹ — descriptions that could equally apply to the products of the Ashbourne manufactory. These appear under Masgreave's name, which indicate that he was managing the business, not Samuel Harlow, who does not appear in any Birmingham trade directories, or any other record there.

It is in the 1812–15 period that we get a brief and partial snapshot of the trade to and from Peter Stubs, the important Warrington wholesaler of clock movements, parts, bells, watches and tools. A handful of letters confirm that John Masgreave was managing the business,

though a couple of them are by Samuel Harlow 'for J. Masgreave'.⁴⁰ Appreciable numbers of sets of clock brass and bells were sold to Peter Stubs, and significant numbers of clock pinions were bought from Stubs, which give an indication of the output of movements from the Ashbourne works. Since there were several pinion makers in Ashbourne (including Samuel Harlow's brother John and nephew Thomas) who would also have supplied the Harlow works, the actual number of movements made is likely to be much larger than the figures below suggest.

On 31 July 1812 John Masgreave acknowledged an unspecified order from Stubs, and ordered 342 sets of clock pinions. On 10 October two dozen sets of 'brass parts for 8-day clocks' were sold to Stubs. As usual in the foundry trades they were sold by weight, 148lb at 17d per pound, averaging 6.17lb (8s 9d) per set. This would include the plates, pillars, backcock, wheels, barrels and bridge, needed to make a complete movement. Then on 25 November fourteen sets of brass parts for 30-hour clocks were sold to Stubs. The total weight of 67lb, or 4.8lb per set, indicates the smaller amount of brass used to make a 30-hour movement. Another two dozen sets of 8-day clock brass were sold on 4 May 1813, weighing 149lb, almost the same as the previous consignment. At the same time John Masgreave was chasing his overdue order for pinions, 'The pinions are very much wanted. I beg you will send a part if not the whole [of my order] immediately as I have not any by me to sell,' and presumably having to rely on locally-made pinions for their movements. A year later Samuel Harlow was pleading that an order for pinions to be sent immediately.

On 28 May 1815 John Masgreave writes to Peter Stubs at Warrington, 'The 3 Doz of Clock Bells shall send in a Few Days as the Parcel will be so small it would not be worth While to send by Canall [*sic*].' This indicates that the canal network was the usual mode of transport for

35. John A. Robey, 'Birmingham Dialmakers — Part V, Factors who Sold Clock Dials', unpublished article, available on the Research Resources section of the AHS website.

36. Indenture 23 September 1808. See footnote 10.

37. 1861 Census for Aldridge. His baptism has not been found.

38. *Aris's Birmingham Gazette*, 18 January 1814.

39. *Wrightson's Triennial Directory of Birmingham*, 1815, p. 83, and 1818, p. 87.

40. Manchester University Library, Stubs Papers.

Sales to Peter Stubs

1812 — 108 sets 8-day clock brass
 12 sets 30-hour clock brass
 1813 — 24 sets 8-day clock brass
 279 clock bells for Demilt
 [New York wholesaler]
 1815 — 72 sets 8-day clock brass
 12 sets 30-hour clock brass

Pinions bought from Peter Stubs

1812 — 264 sets 8-day	312 sets 30-hour
1813 — 432	576
1814 — 360	264
1815 — 288	192

Table. Sales of clock brass by Harlow to Stubs of Warrington, and purchases of pinions by Harlow from Stubs, 1812-15.

heavier orders, especially as Summer Row ran alongside the main waterway to the north. Stubs must have enquired about movement prices, which had not been supplied to Stubs by then, so in the same letter Masgreave quoted:

Plain 8 Day Movements	42s
Ditto with Month Wheel	43s
Ditto Month & Moon	44s

These prices would be for wholesale quantities, and more for single movements supplied directly to 'clockmakers' and retailers. It is worth noting that the brass castings comprised 20 per cent of the total price. The known sales and purchases during 1812-15 are summarised in the table. It includes a large order for clock bells which were destined to go to DeMilt, a New York horological wholesaler, via Peter Stubs. The purchase of over 1,000 sets of pinions in 1813 indicates, taking into account pinions bought locally, the very large output of movements from the Ashbourne works.

It was during this period that Samuel Harlow published *The Clock Makers' Guide* in 1813, when it could be obtained from him at Summer Row, and his house in Ashbourne, among other places (Fig. 12). Birmingham had skilled copper-plate engravers who would be able to work directly from movements and clock

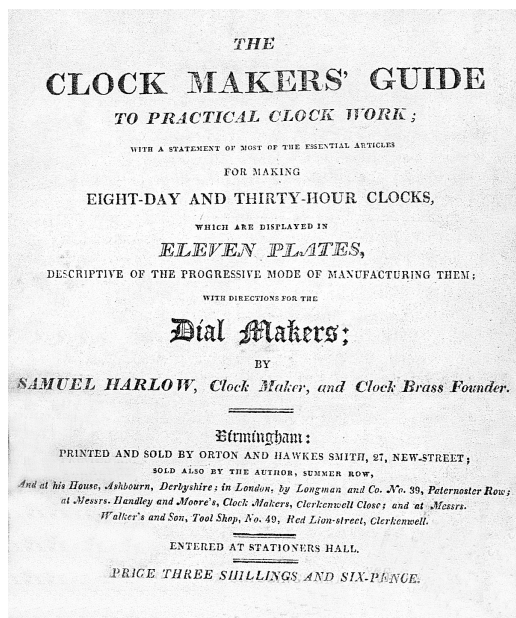


Fig. 12. The cover of Samuel Harlow's booklet, *The Clock Makers' Guide*.

parts to produce detailed illustrations, so it is not surprising that the booklet was printed and published there. It provided accurate half-scale drawings that could be used by those clockmakers who still preferred to construct their own movements. But its high price of 3s 6d⁴¹ (£8.50 at today's value) for only sixteen pages may have been a deterrent to it also acting as a sales catalogue. The introduction states that he also sold '[wheel-cutting] Engines, Lathes, Tools, Files, or Materials proper for the Business of Clock Making.' No doubt they would have been mainly obtained from Peter Stubs.

By 1818 it was decided that the Summer Row warehouse was no longer viable and sales could be managed more economically from Ashbourne than Birmingham. By August 1818 Samuel Harlow had left Birmingham and retired to live at Crumpwood Farm, Alton, owned by his son-in-law.⁴² Then in December 1818 Henry Knight announced that he was the successor to John Masgreave and had moved from Summer Row to 9 Ann Street (Fig. 13).⁴³ He was a witness to the administration of Samuel Harlow's

41. Printed pamphlets of plays sold in this period not only had many more pages, they were also much cheaper. However Harlow's booklet had high quality engraving, the copper plates being expensive to produce and print.

42. Indenture 28 & 29 August 1818. See footnote 10.

43. *Aris's Birmingham Gazette*, 28 December 1818.

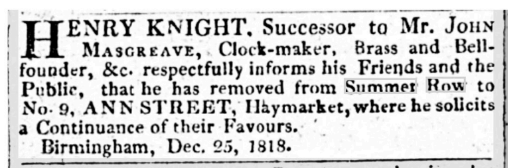


Fig. 13. Henry Knight's announcement in 1818 that he was the successor to John Masgreave and had left Summer Row.

son, Samuel junior, in 1815 and probably had been employed in the Harlow/Masgreave warehouse. Henry Knight was first listed in directories in 1823 as a 'clock maker, and brass and bell founder, manufacturer of clock and other pinions, clock forged work &c. the trade supplied with every article in the clock line'.⁴⁴ He was selling a very similar range of clock parts and movements as the Harlow/Masgreave warehouse. He later made turret and other clocks while continuing to supply the clock trade. Harlow movements are known stamped 'H Knight' on the bottom edge of the front plate.⁴⁵ The Harlow works would henceforth rely on merchants and factors supplied directly from Ashbourne. Henry Knight was the first of several such factors selling Harlow movements, sometimes stamped with the factor's name.⁴⁶

After Samuel Harlow relinquished the Summer Row warehouse, John Masgreave remained in Birmingham and continued to sell Harlow movements and clock castings as an independent factor based in the same Summer Row premises. At an unknown date he joined forces with a John Haines, until January 1826 when the partnership of 'Masgreave & Haines, clock brass founders, and carriage and bobbin manufacturers' was dissolved.⁴⁷ There was even

litigation in the Court of Chancery, but there are no details.⁴⁸ John Haines then advertised himself as a 'Clock-maker, Clock Brass and Bell-founder, forged Work, and Pinion-maker', at 24 Summer Row.⁴⁹ This description also bears a strong similarity to the items produced by Robert Harlow's manufactory in Ashbourne. But John Haines's business did not last long as he died in January 1828, aged only 34, still at Summer Row.⁵⁰ He is not included in Birmingham trade directories.

Despite having lived and worked in Birmingham for about fourteen years, John Masgreave had retained Crumpwood Farm at Alton, where Samuel Harlow latterly lived in retirement. Then in September 1824, seventeen months after Samuel's death there in 1823, the livestock and farm implements of 'Mr John Masgreave ... who is about to leave his farm,' were sold by auction.⁵¹

Though John Masgreave still owned premises in Ashbourne, inherited by his wife from her father, he moved to Hardwick Farm, Great Barr, near Aldridge, South Staffordshire, and about 5 miles north-west of Birmingham, where he resumed farming. He died there in 1835 aged 51,⁵² his wife Elizabeth (née Harlow) having died there two years earlier, aged 52.⁵³

Then, in an unexpected twist to the tale, in August 1850, John Masgreaves's son John junior of Coppice Hall, Aldridge, married Mrs Martha Haines, also of Aldridge,⁵⁴ the widow of his father's former business partner, he being a farmer of 30 acres, 41 years old and she 50.⁵⁵ Although born in Birmingham, she was the eldest daughter of Robert Perry, a New York merchant, presumably living with his wife in Birmingham for a time while on business there.

44. *Wrightson's Triennial Directory*, 1823, p. 83.

45. Robey, 'Samuel Harlow', p. 537. Figs 9–10.

46. John A. Robey, *The Longcase Clock Reference Book* (2nd edition, 2013, Mayfield Books), vol. 1, p. 401.

47. *London Gazette*, 30 May 1826; *Aris's Birmingham Gazette*, 29 May 1836.

48. National Archives, c/3/866/43, 1826.

49. *Birmingham Chronicle*, 15 June 1826.

50. *Aris's Birmingham Gazette*, 21 January 1828.

51. *Staffordshire Advertiser*, 18 September 1824.

52. *Aris's Birmingham Gazette*, 2 February 1835.

53. *Aris's Birmingham Gazette*, 4 February 1833.

54. *Staffordshire Advertiser*, 24 August 1850; *Birmingham Journal*, 24 August 1850.

55. 1851 Census. The Electoral Register records that he was still at Coppice Hall in 1861, but his death has not been found. Martha Masgreave was buried at Great Barr on 3 October 1879, aged 80.

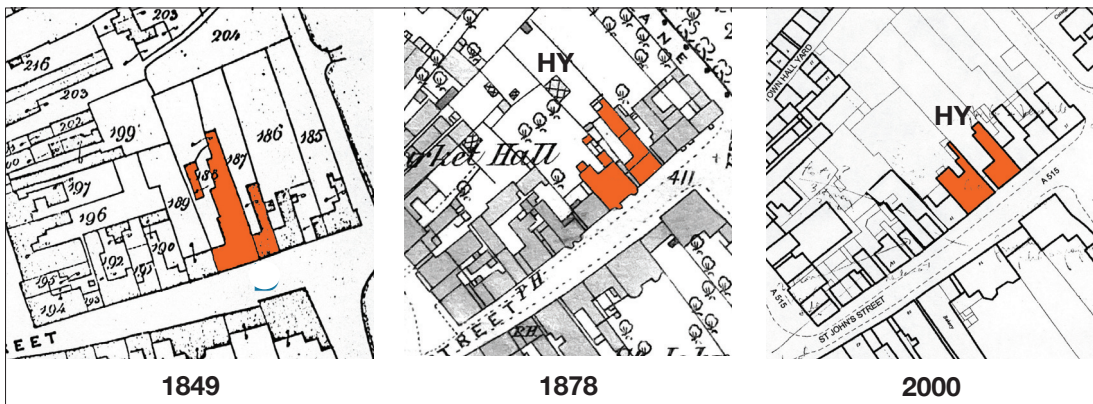


Fig. 14. The site of the Harlow manufactory in 1849, 1878 and 2000. 43 St John Street is incorrectly shown as larger than 45 on the 1849 Tithe Map. HY = Harlow's Yard.

Robert Harlow and his successors

Robert Harlow was born in 1779 and in June 1804 he married Amelia Wyatt of Sutton Coldfield, Warwickshire. She was born in 1783 in Weeford near Lichfield, Staffordshire, and was related to the renowned Wyatt family of architects. Their children included three sons: Benjamin (1809–45), Robert (1811–78) and William (1823–86), all of them having Wyatt as a middle name. At the age of 16 Robert Wyatt Harlow was apprenticed in 1827 as a grocer and druggist in Walsall, South Staffordshire. The year after the completion of his apprenticeship he moved to Stockport, Cheshire, and set up a brass foundry, initially in partnership with his older brother Benjamin, but this was dissolved in 1836.⁵⁶ The Stockport works became very successful, and by the end of the twentieth century it was a considerable concern.⁵⁷ He also built, or at least supplied and installed, a number of turret clocks in the area.

In 1807 Robert Harlow senior bought what are now 43 and 45 St John Street, Ashbourne, and built a new and larger brass foundry and clock-movement manufactory behind number 43.⁵⁸ He was the last known to have retailed complete longcase clocks and watches bearing the Harlow name.⁵⁹ He continued to produce

high quality movements that are frequently found on clocks from many regions of Britain, including Wales, Scotland and Ireland, as well as the USA. It was stated that Ashbourne had foundries where:

clock-brasses are manufactured by Mr. John Frith and by Mr. Robert Harlow, in so superior a manner that they are in request throughout the kingdom.⁶⁰

The new foundry and workshops were built on a sloping site at the rear of a Georgian town-house on the north side of St John Street, occupying a typical medieval burgess plot. The workshops ran along the eastern boundary, for about three-quarters of the plot. There appear to have been two extensions, the depth of each one being smaller as they extended up the slope (Fig. 14).

The main workshop is likely to have had more than one storey, perhaps with the brass-melting furnaces on the ground floor, with clockmaking taking place in upstairs rooms. Access to the workshops was by a passage between the two properties that led to what later became known as Harlow's Yard. The workshops were later demolished and the façades of numbers 43 and

56. *Stockport Advertiser and Guardian*, 27 April 1836.

57. [Sylvia Harlow], *House of Harlow*, p. 5.

58. Title deeds of 43 St John Street, Ashbourne, held by the current owner. All references to this property are from this source, unless specified otherwise.

59. Several eight-day longcase clocks are known, and a gold watch signed 'Robert Harlow Ashbourne' was reported stolen, National Archives. HO 64/8/69.

60. S. Glover, *The History, Gazetteer and Directory of the County of Derby* (1829), p. 234



Fig. 15. Upper St John Street, Ashbourne, looking west to the spire of St Oswald's Church in the distance (far left). Number 43 is the two storey house with bay windows flanking an arched doorway, with the door to Harlow's Yard to the right and the door way with a triangular pediment to the three-storey number 45. Photographed in 2009.

45 re-built with bay windows (Fig. 15). The boundary wall has been rebuilt, leaving no trace of where the workshops butted up to it.

Robert Harlow sold the larger 45 St John Street in 1815, possibly to raise capital for

the business.⁶¹ At the rear was a detached brewhouse and a stable, but no mention of workshops, which were behind the adjoining house. When both properties were advertised for sale in 1867 43 St John Street was described as having a hallway, parlour, kitchen, three bedrooms (on two floors) and a cellar, while number 45 had two sitting rooms, front parlour, kitchen, five bedrooms (on three floors) and two cellars. The foundry and various workshops were still in existence, but were demolished shortly after, certainly by 1878.⁶² Though the two buildings are shown as being of different widths on the 1849 Tithe Map, the later Ordnance Survey maps show their correct proportions.

Silhouettes of Robert Harlow and his wife probably date from the 1820s (Fig. 16), when the St John Street works became one of the most important producers of high-quality longcase movements and parts.

However, after running the firm for twenty-one years, he was not to see its full success. He died suddenly on 9 December 1828, 'after a



Fig. 16. Silhouettes of Robert and Amelia Harlow, probably dating from the early 1820s. (Courtesy of Nigel Aspdin)

61. Derbyshire Record Office, Ashbourne Land Tax Assessments, 1780–1832, Q/RE/6/W. *Derby Mercury*, 26 May 1815.

62. *Derbyshire Advertiser and Journal*, 15 & 18 March 1867, 29 November 1867; *Derby Mercury*, 4 December 1867.

63. *Derby Mercury*, 24 December 1828.

few hours illness, ... aged 49 years',⁶³ probably caused by a heart attack or a severe stroke. Almost immediately, in order to provide confidence to customers, suppliers and creditors, the following notice was published:

Mrs. Harlow,
The Widow and Administratrix of the late
Mr. Robt. Harlow, of Ashbourne, Brass
Founder,
BEGS to request that all persons who
stand indebted to the estate will forthwith
pay the amount of their respective debts to
her; and all persons who have any demand
upon the estate, are requested to send
particulars of their respective demands
to Mrs. Harlow immediately.

Mrs. Harlow takes this opportunity
of acquainting the friends of her late
Husband, and the public in general,
that with the Assistance of her SON,
she intends to carry on the Business of
BRASS FOUNDER &c and respectfully
solicits a continuance of their favours and
support.⁶⁴

Amelia Harlow then ran the business with her eldest son Benjamin for eighteen months before deciding to hand it over to Benjamin shortly after he turned 21 years of age. On 2 and 3 September 1830 it was agreed that

Amelia Harlow gives to Benjamin
Wyatt Harlow the brassfounding and
watchmaking trade carried on by
the deceased [Robert Harlow] to the
value of £500 in tools implements and
appurtenances and Benjamin Wyatt
Harlow gives up all further claim on the
estate of Robert Harlow.⁶⁵

The value of the tools etc at £500, equivalent to £40,000 today, though an estimate rather than a calculated figure, gives an indication of the extent of the business. Though Benjamin was the heir of his father it appears that Amelia initially assumed control of the business, before

Benjamin came of age. He then immediately sold the remaining property, possibly to raise further capital, and from then on the building was leased from its new owners.

It is said that during Benjamin's reign there were about thirty-six workmen and apprentices,⁶⁶ but though this cannot be confirmed, considering the number of Harlow movements seen dating to this period, and the size of the workshops, it would not be an unreasonable number. At least one of the workshops may have been enlarged during this period.

With Benjamin now in full control of the manufactory, in order to keep her occupied and provide additional income, in May 1833 Amelia Harlow opened a business selling fashionable London millinery and dresses from her house in St John Street.⁶⁷

Benjamin ran the clock manufactory successfully for fifteen years, until tragedy struck the family again. During a business trip in July 1845 he was involved in a fatal accident. A newspaper reported that he was driving a gig (a light two-wheeled open carriage) in the centre of Birmingham, drawn by a spirited half-breed mare. On reaching the top of Livery Street,

the horse took fright, and started
off with considerable violence down
Constitution Hill, accelerating her pace
with fearful rapidity ... Mr. Harlow ... in
vain endeavoured to pull up. He, however,
succeeded in keeping the animal on the
right side ... expecting that if he could
reach the bottom of the hill in safety,
he would be able to arrest her progress
before she ascended the top of the street.
In this, however, he was unfortunately
disappointed, for ... he had to pass a
waggon which was standing across the
street. Unfortunately, a labouring
man suddenly pushed a hand-cart from
the opposite side of the way. Mr. Harlow
made an effort to avoid the danger when,
unhappily, the gig-wheel came in contact
with the waggon: a dreadful concussion

64. *Derby Mercury*, 31 December 1828.

65. Formerly in the title deeds of 43 St John Street, Ashbourne. Copy dated 3 July 1895..

66. [Sylvia Harlow], *House of Harlow*, p. 4.

67. *Derby Mercury*, 8 May 1833.

took place, which broke the shafts, the foot-board and wheels of the gig to atoms, and threw the unfortunate gentleman with great violence upon his head It was found, however, that he was quite insensible, and he was conveyed... to the General Hospital.⁶⁸

A less melodramatic report, probably based on the inquest, gave more details that puts a different light on the accident. After colliding with an omnibus (not a waggon), Benjamin bounced several times on the ground and was dragged for a considerable distance, causing his skull to be dreadfully fractured. His death was the result of his own recklessness, since

He had been flapping the whip about his horse's ears, and that it had started off once before, but had been stopped, but at last, on a repetition of such conduct, began to canter, and then set off at full gallop. Mr. Harlow ... wrapped the reins round his arm, pulled with all his might, but of no avail. No blame was attached to the omnibus driver, who ... left plenty of room for the gig to pass, if the mare had been rightly driven.⁶⁹

After the unexpected death of Benjamin, who was unmarried and only 36 years old, Amelia had to take charge of the movement manufactory and brass foundry once again. This time it was in conjunction with her youngest son William, who was only 22 years old, trading as A. W. Harlow & Son. Amelia must have found that she could not run both the clock and brass works as well as a retail clothing business. So in 1847, after supplying the latest fashions to the genteel ladies of Ashbourne for twelve years, the Misses Barclay and Sutherland, from Berkeley Square, London, became the successors to Mrs Harlow's millinery and clothing outlet.⁷⁰ Isabella Sutherland traded from 43 St John Street until



Fig. 17. Heavily retouched photograph of Amelia Harlow. (Courtesy of Nigel Aspdin)

her death in 1867.

But William Harlow had little interest in manufacturing. In June 1850 he announced that he had

taken the shop next to the post office, with an entirely New Stock of Gold and Silver WATCHES, CLOCKS, Gold and Silver PLATE, JEWELLERY, &c. Repairs will be executed on the premises by experienced workmen.⁷¹

Since two similar retail clock- and watchmaking businesses in the town were for sale in the same edition, his prospects of success were not very promising. As expected this new venture did not last very long.

Relations between mother and son cannot have been very cordial, as less than two months later the partnership of Amelia Harlow and William Wyatt Harlow was dissolved on 5 August 1850.⁷² William had moved to Stoke-on-Trent

68. *Birmingham Journal*, 26 July 1845.

69. *Nottingham Review*, 1 August 1845. This report also appeared in Derbyshire, Leicestershire, Lincolnshire, Gloucestershire and London newspapers.

70. *Derby Mercury*, 3 February 1847.

71. *Derbyshire Advertiser and Journal*, 28 June 1850.

72. *London Gazette*, 13 August 1850.

73. *Staffordshire Advertiser*, 10 September 1853.

by 1853, where he became a wholesale grocer.⁷³ It is said that he continued to sell some clock movements until 1864.⁷⁴ He died in 1886, aged 63.

With no other members of her family to continue the business, and with advancing old age, Amelia Harlow sold it in 1851 to the Ashbourne brass founder William Robert Davenport, two years before her death on 11 July 1853, aged 70 years. A photograph of Amelia probably taken about 1850 was heavily retouched to show how she might have looked when much younger (Fig. 17).⁷⁵

The Davenport family

The new owner of the Harlow works, William Robert Davenport, had been a Harlow apprentice who set up his own business in 1837.⁷⁶ He was a brass founder, living in Harlow's Yard in 1861, probably in the rear part of 45 St John Street, with the owner of the property, an elderly retired tanner and two servants, living at the front. William Davenport died of an apoplectic seizure in 1863, aged 52 years.⁷⁷ The only mention of Harlow's Yard is in the 1861 Census and it was probably named by William Davenport to maintain a connection with the Harlow works.

His son George continued the business until the end of clockmaking and brass founding in St John Street in 1867, when both 43 and 45 St John Street were sold.⁷⁸ George Davenport then moved to Frith Court, Union Street, the former brass foundry of Joseph Frith and then his son John (both mentioned earlier), which George renamed the Harlow Works, again to establish a connection with the former Harlow business. In 1881 George Davenport was a brassfounder employing five men and a boy, with his brother also a brassfounder, giving a total of eight – a far cry from about thirty-six

workers in 1830–45. He continued to make and supply longcase movements, clock brass and other parts to the trade. George died in 1916, aged 78, and the firm continued until after 1940, by which time it mainly produced steam gauges. A ledger containing details of the wide range of clocks, parts and their customers, survived until it was willfully destroyed during a family feud sometime after the 1940s.⁷⁹

The Harlow legacy

Samuel Harlow started his career about 1772 as a clockmaker, watchmaker and jeweller in Ashbourne, but soon employed journeymen to manufacture longcase clock movements. He built a brass foundry to produce casting for both clockmakers and mill owners, and established a warehouse in Birmingham. In 1807 his son Robert built new workshops and expanded the business until his untimely death in 1829, when the third generation assumed control. Under Benjamin Wyatt Harlow high-quality movements and castings flowed out of the works until he was killed in an accident in 1845. With his younger brother not interested in manufacturing the business was sold in 1851 to the Davenport family, who continued the Harlow tradition well into the twentieth century. The Harlow legacy is their distinctive eight-day movements that continue to give reliable service throughout Britain and beyond.

Acknowledgements

This article has benefited considerably from information from Paul Thompson based on the title deeds of 12 and 43 St John Street, Ashbourne, with access to the latter courtesy of Robert Relton; Nigel Aspdin, a direct descendent of Samuel Harlow; Adrian Henstock and Hugh Cockwill for assistance with genealogy. Figs 1–6, 9 and 15 are by the author.

74. Smethurst, *The Old Clockmakers ...*, p4.

75. This probably originated about 1850 as a Daguerrotype on copper, it was then copied about 1890 by the Ashbourne photographer Robert Bull. This was then over-painted to make her look younger. Finally it was rephotographed to produce *cartes de visite*, which state on the rear 'This carte can be enlarged and finished in oil'. Two oil paintings based on this carte are with descendants in America (information from Nigel Aspdin).

76. Smethurst, *The Old Clockmakers ...*, pp. 11–12.

77. *Derbyshire Advertiser and Journal*, 24 December 1863.

78. See footnote 58.

79. Information from the late Charles Haycock.