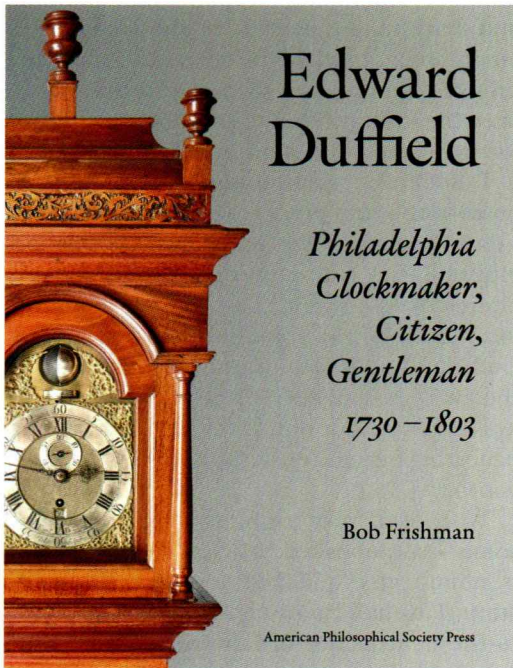


Book reviews



Bob Frishman, Edward Duffield: Philadelphia Clockmaker, Citizen, Gentleman, 1730–1803. Philadelphia: American Philosophical Society Press, 2024, 256 pages, 227 illustrations, distributed by University of Pennsylvania Press, \$60.00.

The most coveted horological position in eighteenth-century Philadelphia was keeper of the clock mounted on the Pennsylvania State House, today known as Independence Hall. The clock had been completed and installed in 1753 by its first keeper, Thomas Stretch (1697–1765). It is significant that the clock was made locally and was not a British import like many of the turret clock movements in colonial steeples.

In 1762, the local assembly appointed Edward Duffield (1730–1803) to succeed Stretch. And in 1775 when Duffield indicated his desire to retire to the country, David Rittenhouse (1732–1796) applied for, and got, the position. Of these three prominent clockmakers, Duffield is the least known. Magisterial biographies of Rittenhouse and the Stretch family have appeared in recent years.¹ Now, Duffield gets his due.

Thomas Stretch learned the trade from his father, Peter Stretch (1670–1746), who

had trained in England before immigrating to Philadelphia. Rittenhouse's and Duffield's paths to horology are unknown. The book's author, Bob Frishman found no record of clockmakers in Duffield's wealthy family nor any evidence that he had served an apprenticeship. Frishman speculates that, after being drawn to the trade as a young man, Duffield may have developed his proficiency with the help of other established clockmakers in his community.

In 1767, the Commissioners of Longitude published *The Principles of Mr. Harrison's Time-Keeper, With Plates of the Same*. Benjamin Franklin, who had visited Harrison's shop, wasted no time in forwarding a copy from London to the person in Philadelphia whom he no doubt felt would most appreciate it. In his June 21st letter from London to his wife Deborah in Philadelphia, Franklin wrote:

I send a Book on Mr. Harrison's Watch. Present it from me to our ingenious Friend Mr. Duffield, with my love to them and their Children.

Franklin so esteemed his friend's ability and generosity that he appointed him a co-executor of his estate. Franklin and his family had enjoyed hospitality at Duffield's country seat, Benfield, during some of the American Revolution's bleakest days. It was there, in June 1776, that Franklin attended the first meeting of the Committee of Five appointed by Congress to compose the Declaration of Independence. Franklin's family would later shelter at Benfield during the British occupation of Philadelphia.

Duffield's horological talents were recognized by Philadelphia's broader scientific community. In 1769, a year after being elected a member, the American Philosophical Society hired him to construct a highly accurate timepiece needed for the observation of the November 9 transit of Mercury. Duffield supplied the single train movement with deadbeat escapement in under three weeks! This regulator is Cat. No. 3 in Frishman's sixty-one-page catalogue section that illustrates and describes all of Duffield's currently known signed output: sixty-one clocks, two uncased movements with dials, seven surveying compasses, and a

single sundial made for Philadelphia's latitude with a circular day-by-day equation-of-time scale engraved under the hour markers.

Two other clocks by Duffield also are preserved in the Society's collection. One, in a diminutive walnut long case, descended in the Franklin/Bache family (Cat. No. 4). Its time-only, eight-day movement has a spherical moon in its dial arch. This is a rare feature, which Frishman uniquely associates with Duffield in America, finding it in three of his other clocks. Although a spherical moon is present in a small number of earlier English clocks, Frishman has not seen this feature in clocks of any other eighteenth-century colonial clockmaker.

Several Duffield clocks are on public display in other American museums, historical societies, and libraries. At the Library Company of Philadelphia – where Duffield was a shareholder – the book's Cat. No. 2 was previously described in an *Antiquarian Horology* article on the library's extensive collection of clocks and horological books.² Other clocks are illustrated here for the first time. None are known to be outside of the United States.

All but one of Duffield's surviving clocks are housed in floor-standing cases. The tallest could perch on stairwell landings, enabling simultaneous viewing of their dials from floors above and beneath. If the stairwell was centrally located, the sonorous tones of their hourly-striking bell could be heard throughout the house. One such example, the nearly ten-foot tall 'Wright Family Clock', in its elegant rococo-carved walnut case, was photographed nearly a century ago on the landing of the center hall stairs at Merino Hill House, the Wrights' country mansion in Monmouth County, New Jersey (Cat. No. 17). The smallest of Duffield's standing clocks descended in the Duffield family and is one of his most remarkable. Its compact eight-day, single-train, non-striking movement with deadbeat escapement is housed in a dwarf bombé case (Cat. No. 60).

The present volume closely examines extant movements and dials by Duffield and his clockmaking contemporaries. It also documents three Duffield-signed watches – almost certainly English imports – that once existed but are unaccounted for today.

As one was numbered '12', more may yet be identified. Other chapters place his life and work in the context of the competitive environment in which he operated. Public and private records, newspaper advertisements, even the ledger of Duffield's tailor, were mined for any scrap of relevant information.

Duffield's substantial inheritance, possessions, and property income established him as one of Philadelphia's most prosperous citizens. He had key roles on civic and church bodies, and generously supported local charities. At Franklin's request in 1768, Duffield became one of two administrators of the Bray School in Philadelphia, funded by a London-based philanthropist focused on educating free and enslaved African-American youth.³

With over forty years as a horologist and some 140 published articles, Bob Frishman is abundantly qualified to relate Duffield's story. This handsome volume is also a tribute to the beneficence of Edward W. Kane, who has funded several other major horological projects, as well. Also to be commended is the publisher, the American Philosophical Society Press, which continues APS's long tradition of preserving and disseminating American history and material culture.⁴

Jay Robert Stiefel, Philadelphia

1. Donald L. Fennimore and Frank L. Hohmann, III, *David Rittenhouse: Philosopher-Mechanic of Colonial Philadelphia and His Famous Clocks* (Winterthur, Delaware: Winterthur Museum, Garden and Library, 2023); Donald L. Fennimore and Frank L. Hohmann, III, *Stretch: America's First Family of Clockmakers* (Winterthur, Delaware: Winterthur Museum, Garden and Library, 2013).

2. Jay R[obert] Stiefel, 'A Clock for the Rooms: The Horological Legacy of the Library Company of Philadelphia', *Antiquarian Horology* 29 (6) (2006).

3. Grant Stanton and John C. Van Horne, 'The Philadelphia Bray Schools: A Story of Black Education in Early America, 1758–1845', *The Pennsylvania Magazine of History and Biography*, Vol. CXLVII, October 2023, No. 3, 75–104.

4. E.g., Jay Robert Stiefel, *The Cabinetmaker's Account: John Head's Record of Craft and Commerce in Colonial Philadelphia, 1718–1753* (Philadelphia: American Philosophical Society Press, 2019).

Letters

Letters offered for inclusion in the September 2024 issue of *Antiquarian Horology* should reach the editor before 10 August. They can be sent to peterdeclercq@btinternet.com, or c/o the Editor to the AHS, 4 Lovat Lane, London EC3R 8DT.

Opinions expressed in the letters are those of the contributors and do not necessarily reflect the views of the Editor or the AHS. The Editor reserves the right to refuse publication.

John Ellicott

Paul Tuck's fine article (*AH* March 2024, pp. 19–44) reminded me of a reference to John Ellicott, Jr., in my forthcoming biography of colonial Philadelphia clockmaker Edward Duffield (1730–1803) [see the book review in this issue, Ed.]. Despite Ellicott's fame, not all of his customers were satisfied. In 1763, shortly after Benjamin Franklin returned home to Philadelphia following a long stay in London, he wrote a letter of complaint to the watchmaker:

I am sorry I cannot give you an agreeable Account of the Performance of the Watch. The new Spring unfortunately broke soon after I left England. Since my coming here, the old one is put in again; but I have not yet accurately adjusted the Watch so as to bring it to keep time as well as it us'd to do in London.

Duffield, a lifelong friend of Franklin and an executor of the great man's will, appears to have refitted the old mainspring. When this letter was shared with Paul Tuck, he kindly suggested a possible cause for the watch's poor performance:

The accuracy of any verge escapement watch depends on the accurate match of the mainspring strength and the shape of the fusee. So if Franklin's watch had previously kept time with a new spring, replacement by the old one would indeed have caused him problems with the timekeeping, particularly if the

spring had become 'dead' i.e. not springy enough. Perhaps this is the reason why it was changed in the first place?'

Bob Frishman

John Houghton's *Collection*

In her March 2023 article on Daniel Quare, Ann McBroom writes, on p. 67, that Daniel Quare, along with John Marshall and Thomas Tompion, were among the 'undertakers' assuming responsibility for organising a lottery to fund 'Royal Academies' in London in 1695, and citing John Houghton's weekly *Collection for the Improvement of Husbandry and Industry*.

This is not the case, however. Having read through the entire *Collection* recently, I know that Houghton would put all of the various advertisements on the same sheet, often without any structure, and not putting headings in when he is starting new sections. The list photographed on p. 67 – of Samuel Smith and Benjamin Walford, Thomas Tompion, Daniel Quare, John Marshall, Mr Marshall, and Mr Neale – is actually a recurring advertisement for all of their shops, simply alerting readers to their addresses, that he would put in from time to time.

It just so happens that in the 1 March 1695 edition he pasted this advertisement directly after the ad for the lottery, which makes it appear as though they are the list of undertakers, but in preceding and succeeding editions, one can see this exact same list placed in various other contexts – most frequently after lists of other professions, including gardeners, physicians, lawyers, etc, but without a separate heading for the list. I believe the first time the list appears is on 10 August 1694, long before the lottery was first advertised on 22 February 1695.

As for the bit of the ad for the lottery that reads 'Some of the undertakers will meet on Thursdays ... at Garraway's Coffee House near the Royal Exchange in Cornhill', this is always and everywhere the concluding paragraph of the recurring ad – most clearly so the first time it was advertised, on 22 February 1695.

Tompion, Quare and Marshall are thus listed together in this ad for reasons unknown