

RCEWA – Early Charles II ebony longcase clock

Applicant's statement

III Statement in relation to the Waverley criteria

The Committee's function is to consider whether an item referred to it is of national importance under any of the following criteria.

- a) Is it so closely connected with our history and national life that its departure would be a misfortune?*
- b) Is it of outstanding aesthetic importance?*
- c) Is it of outstanding significance for the study of some particular branch of art, learning or history?*

To assist the Committee, you may submit a written statement in support of your application, with particular reference to the three criteria set out above. You may use the space below (box 21) or attach a separate document for these purposes

Further information

The 'Expert Adviser's statement' and the 'Note of Case History' are available on the Arts Council Website: www.artscouncil.org.uk/reviewing-committee-case-hearings

Please note that images and appendices referenced are not reproduced.

Early Fromanteel longcase - Waverley criteria assessment

This Fromanteel clock is accepted as dating from c.1662, that is soon after Fromanteel's 1658 introduction of the pendulum clock in London.

The potential claims for the national importance of the clock rest on:

- A. It being traditionally regarded as the earliest-surviving longcase clock conceived as an integral whole, there being other, earlier, pendulum-regulated, weight-driven clocks that were initially housed in a hooded, wall-mounted case to which a trunk was shortly thereafter added, rendering them as effective longcase clocks [Waverley 3; & possibly Waverley 2];
- B. Its incorporation of a rare roller-cage suspension assembly for the escapement pivot [Waverley 3];
- C. Its deduced provenance that it was acquired from the maker by then Lord Henry Howard, later 6th Duke of Norfolk [Waverley 1];
- D. A comparison with other Fromanteel early pendulum clocks already in national collections [Waverley 3].

With regards to the consideration of the granting of an export licence under the Waverley criteria, it is submitted that the present clock must be examined as to:

1. Its innovative nature and features, or not, and rarity;
2. The degree of restoration as opposed to originality within the movement and case;
3. The veracity of its deduced provenance.

1. Innovative features [Waverley 3]

The first longcase clock? Candidates:

- Present clock
- BM early architectural long-duration Fromanteel longcase (no trunk door, whole trunk removes forward)
- Fogg Museum, USA, Fromanteel longcase clock (hood & added trunk form, but may be regarded as added integrally in workshop)
- Clifton Fromanteel longcase clock (lambrequin fronting trunk, below hood)
- Messer Fromanteel longcase (ditto lambrequin fronting trunk, below hood)
- Oxford Fromanteel longcase
- BM cocuswood Fromanteel longcase ('hood' base & mouldings attached to trunk)
- NMM, Greenwich Fromanteel longcase (frieze at top of trunk, below hood)

Hooded clocks with added trunks

- Fogg Museum Fromanteel longcase clock (although may be regarded as added integrally in workshop)
- Clifton Fromanteel longcase (lambrequin fronting trunk, below hood)
- Messer Fromanteel longcase clock
- V&A Fromanteel longcase clock

Roller cage suspension assembly. Candidates:

- Present Fromanteel longcase (restored by D Parkes 1970)
- Oxford Fromanteel longcase (only known original example)
- Fromanteel musical spring clock (never completed as such, abandoned by maker in course of production)
- East spring clock (restored by D Parkes 1969)

2. Rarity and originality [Waverley 3, & possibly 2]

Rarity:

Use of roller-cage assembly escapement pivot suspension, known to have been used in only three clock and proposed (but not completed) in one other:

- Present clock, c.1662
- Oxford Fromanteel longcase
- Fromanteel musical spring clock
- East spring clock

Originality: See attachment 3 - Restoration

Assessment – Innovative features, Rarity & Originality:

The case has claims as the earliest known to have been conceived as a complete longcase clock, but historically has been altered and then restored in its hood and plinth, the latter possibly inauthentically. Alternatively, the long-duration architectural longcase in the British Museum may have claims as an earlier-conceived longcase clock.

The present clock is considered the earliest known to have been fitted with a roller-cage suspension assembly, a very rare feature, but that was sometime removed and this feature is now restored, speculatively, on the basis of the original similar feature found in the Oxford clock, that may differ from that originally in the present clock, rendering the present clock as invalid as an academic study example of the feature.

3. Provenance [Waverley 1]

Provenance – see attachment 2 – clock only documented from 1935.

Claimed early provenance:

Possibly acquired from the maker, c. 1660-62, by Lord Henry Howard (1628-84), second son of Henry Howard, 3rd/15th/ 22nd (depending on reckoning) Earl of Arundel, 2nd/21st Earl of Surrey and 2nd Earl of Norfolk (d. 1652); created in 1669 Baron Howard of Castle Rising, and in 1672 Earl of Norwich; restored as hereditary Earl Marshall in 1672; and who from the 1677 death of his insane elder brother (4th/16th/23rd Earl of Arundel, etc., and restored in 1660 as 5th Duke of Norfolk) was hereditary 6th Duke of Norfolk, 5th/17th /24th Earl of Arundel, Earl of Surrey and 4th Earl of Norfolk; elected FRS on 28th Nov, 1666; presented the Arundel Marbles (collected by his grandfather, Thomas Howard, 2nd/14th/19th Earl of Arundel, d. 1646), to The Ashmolean Museum, Univ. of Oxford; and left his library to the Royal Society.

Provenance assessment:

The supposition of a c. 1662 Lord Henry Howard (later 6th Duke of Norfolk) provenance as acquired direct from the maker, is based on the presence of the Arundel crest of a prancing horse holding a sprig of oak in its mouth.

The Arundel crest is more commonly found with the horse standing all fours on the ground, but (Sir) Anthony Wagner, Richmond Herald, writing in 1957 from the College of Heralds to Claude Blair, Dept. of Metalwork, V&A Museum, says;

The search to identify the device on the Fromanteel clock has now been made and leaves me in no doubt that it is in fact the Horse and Oak Sprig Badge of the Fitzalan Earls of Arundel, which was inherited by the Howards with that Earldom in 1580. Nothing like it is recorded here (College of Arms) for any other family. It is true that in modern examples the horse is shown with all four feet on the ground, but I have found one of Henry VIII's reign in which he is shown springing just as in your example. During the latter years of his elder brother, Henry Duke of Norfolk (1628-1684) was, in fact the head of the family owing to his brother's incapacity, and no doubt in occupation of Arundel Castle and this in itself would have been a reason for using this device.

Wagner was there alluding to the insanity of the elder brother, titular 5th Duke of Norfolk, confined in an asylum in Italy, rendering the second son Henry as effective 'working' head of the family in England. The argument goes that while his brother was the duke, he Henry could not himself use the Norfolk ducal insignia, but as occupier and 'lord' of Arundel castle he could appropriately use the Fitzalan/Arundel insignia of the oak-sprigged horse, whose presence here on this clock thus indicates his ownership.

Although attractive, the academic problems with such an assumption are fourfold:

1. There is no inventory record of the Fromanteel within the Norfolk collections. Indeed as reported to Peter Gwynn, Claude Blair, when researching the Norfolk inventories (including for the 17th century) for the Furniture History Society, found no mention of a Fromanteel clock in any extant inventory;
2. There is no documented record, or tradition, of the clock's sale from the Norfolk collections;
3. There has to be an assumption that the mount bearing the engraved Fitzalan device is original to the clock;
4. There has to be an assumption, if the mount is considered original, that the engraving is contemporary with the clock and not added later. If later, this could either mean it was added during the tenure of a subsequent Duke of Norfolk, or was spuriously added to enhance the clock's historical and market appeal, either way nullifying the claim that the clock was owned by the 6th duke, acquired when he was still Lord Henry Howard.

Concluding, overall assessment

Undoubtedly important in its original conception, as possibly the first-conceived longcase clock and with rare roller-cage assembly. But, case hood and plinth both subject to historical alterations and restorations, and the roller cage is a reinstatement, conjecturally based on that in the (later) Oxford clock, from which it probably differed in detail as originally constructed (Fromanteel rarely repeated the exact detailing in his early clocks; they were all individually conceived and constructed, not batch produced).

Other early Fromanteels in national collections:

- BM long-duration architectural longcase – contender as first longcase
- Oxford (History of Science) roller-cage longcase - roller-cage original and unaltered

- V&A longcase (seconds ring and hand removed from dial)
- BM cocus-wood architectural longcase
- NMM engraved spandrels, date given as 1660(?)

Provenance is not academically secure, being deduced from the tympanum mount engraved insignia.

It is suggested that romantically appealing and market-fuelling as it is in its restored specification and deduced provenance, neither constitute qualification under the rigorous requirements of the Waverley criteria to warrant its retention in UK as a designated national treasure.

RCEWA – Early Charles II ebony longcase clock

Statement of the Expert Adviser to the Secretary of State that the clock meets Waverley criteria one, two and three.

Further Information

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This exquisite and rare Fromanteel longcase clock is from a small group made at the beginning of the golden age of English clockmaking in the seventeenth century. It is an eight-day duration ebony veneered architectural longcase clock signed "A. Fromanteel Londini Fecit", dated c. 1660-2.ⁱ Ahasuerus Fromanteel (1606/7-1693)ⁱⁱ was a Briton of Flemish descent, a pre-eminent maker of his time who had the support of the Lord Protector, Oliver Cromwell.

The clock is the earliest extant purpose-made longcase clock,ⁱⁱⁱ a type which was the bedrock of precise mechanical, scientific, and domestic timekeeping from the late 17th century well into the 20th century.

If this important longcase were to leave the country, it would be a great loss to the nation.

Background

The properties of the pendulum as a natural and precise timekeeper had been well studied, notably by both da Vinci and Galileo, but it was not until 1656 that it was first accommodated in its logical habitat, the mechanical clock,^{iv} by scientist and mathematician, Christian Huygens of the Hague.^v This was the most significant moment in the 800 years of the development of mechanical clocks, taking them from a precision of quarter of an hour a day to seconds a day, finally giving scientists and astronomers the timekeeping precision that they needed to solve a variety of practical problems that concerned the newly formed Royal Society. After the Restoration, the British economy also began to boom, and "By the end of the century London had become the most powerful mercantile city in the world. The clockmakers' art and industry rose along with it", the new precision in timekeeping catalysed that rise, enabling merchants to rally themselves as never before.^{vi}

By the time of Huygen's success with the pendulum, Ahasuerus Fromanteel was a well-established maker of instruments, supplying the burgeoning scientific community in London. His innovations reached far beyond clockmaking, including lens making^{vii} and "Engins made in a new way of his own invention for quenching of fire"^{viii}. In January 1655/6 he became a Freeman of the Worship Company of Clockmakers and a Freeman of the City of London "on the express written order of Oliver Cromwell, whose cause he had supported politically and financially."^{ix}

Fromanteel was, then, perfectly positioned to take advantage of the developments in the Hague. On 16th June 1657,^x Huygens had granted Salomon Coster, clockmaker in the Hague, the exclusive rights to produce pendulum clocks there for twenty-one years. Within weeks of this, Ahasuerus arranged to send his son, John Fromanteel, to work under Coster to learn the art of the pendulum, from September 1657 to May 1658,^{xi} thus giving Ahasuerus the knowledge to lay claim, later in 1658, to making the first pendulum clocks in this country:

"There is lately a way found out for making Clocks that go exact and keep equaller time than any now made without this regulator (examined and proved before his Highness the Lord Protector, by such doctors whose knowledge and learning is without exception) and are not subject to alter by change of weather, as others are, and may be made to go a week, or a month, or a year, with once winding up, as well as those that are wound up every day and keep time as well; and is very excellent for all House clocks that go either with springs or weights: and also Steeple clocks that are most subject to differ by change of weather. Made by Ahasuerus Fromanteel, who made the first that were in England: you may have them at his house on the bank side in Mosses Alley Southwark and at the sign of the Mermaid in Lothbury, near Bartholomew Lane end, London."^{xii xiii}

Connection to British history and national life

Within the cartouche of the gilt mount in tympanum of the clock is engraved “A Horse courant Argent in its mouth a Sprig of Oak proper.”^{xiv xv} This is a heraldic supporter belonging to the Earls of Arundel.^{xvi xvii} Since 1580 this title has been “held by the duke of Norfolk, and is used (along with the Earldom of Surrey) by his heir apparent as a courtesy title.”^{xviii} The Dukedom of Norfolk was restored in 1660 to Thomas Howard as 5th Duke of Norfolk (1627-1677) and his heir apparent was his brother, Henry Howard (1628-1684).^{xix}

The use of this emblem may suggest that the clock, which was made c. 1660-2, was first owned by Henry,^{xx} although direct evidence for this has not been found. However, Henry was on the committee of, and a benefactor of, the Royal Society,^{xxi} and was made FRS In November 1666,^{xxii} thus indicating that he had interests that might well motivate such an acquisition. This conjecture might be treated with some circumspection as it can also be noted that the engraving is crudely executed and, of course, a blank cartouche could be engraved at any time. Nevertheless, as noted above, this clock is an important element of the tastes and material culture relating to theoretical, navigational, and engineering innovations stimulated by the Royal Society and the Restoration.

Aesthetic importance

The classical architectural influence, specifically the use of columns supporting a triangular pediment to create a portico, was not new to clockmaking,^{xxiii} but here it is fully resolved for the first time in this, the earliest extant example longcase clock, which then was the standard in England for the next ten years.^{xxiv} The stark aesthetic perfectly reflected both the austerity of the inter-regnum period from which these clocks emerged and the authority of these new, precise and serious timekeepers or, as some might have it, “the tyranny of the minute hand”.^{xxv} The style was first developed for spring-driven table clocks, but it translated more than successfully to the longcase. Of this example, “one is immediately struck by its perfect proportions”.^{xxvi} Indeed, it has been argued that mere “influence” was not sufficient and that such perfection might only have been achieved with the direct design input of a top architect, possibly Wren, who had serious scientific interests and is known to have had designed clocks.^{xxvii}

The case style also incorporates cues from the interiors in which it might be placed, with its dark colouring and the fielded panels on the door, mimicking “contemporary doors wall panelling and window shutters”,^{xxviii} however no English furniture of the period came near to the quality seen in clocks,^{xxix} and in which the colour and finish were achieved using fine veneers, in this case ebony, clearly destined only for the affluent at this time.

Significance

In 1969 the late, great horologist, Michael Hurst wrote that this Fromanteel clock “is, as far as is known, the earliest complete English longcase clock extant”,^{xxx} an opinion echoed in many publications since.^{xxxi xxxii} This is exceptionally significant in the field of horology, in which the longcase clock forms the bedrock of serious timekeeping, as well as being a centrepiece of a colossal number British households over more than 300 years.

The vast improvement in timekeeping offered by the pendulum reduced the necessary frequency of setting the hands to the correct time.^{xxxiii} Since this might typically be done when the clock was being wound, there soon arose a desire to have clocks that could run for a longer duration than the typical one day, to eight days or more.^{xxxiv} For a weight-driven clock, this could be achieved by using heavier weights to store more energy,^{xxxv} which would need to be supported. Rather than rely on the unknown integrity of the customers' walls, it was safer to provide a case whose structure would bear the weight. Thus, the longcase clock was born. The earliest weight-driven pendulum clocks were, in fact, wall clocks, but these are rare, and some had bases added later.^{xxxvi} The clock in question shows no signs of such adaptation. Details that suggest it is the earliest of its type include:

- The case
 - The height of the case is 6 feet ½ inch, which is commensurate with the earliest longcase clocks which grew steadily in the following years.^{xxxvii}
- The dial
 - The clock has an earlier style of signature used by Fromanteel.^{xxxviii}
 - The size of the dials of longcase clocks started at 8½ - 9 inches,^{xxxix} and expanded in subsequent years (along with their cases). This dial is 8½".^{xl}
 - The clock incorporates the date using a comparatively heavy disc behind the dial, rather than ring which became commonplace. This supports the suggestion that this clock is the first London clock with date indication.^{xli}
- The movement
 - The escapement is set above the tops of the movement plates. In subsequent clocks, Fromanteel used taller plates to accommodate it, with the top corners distinctively scalloped, unlike other makers.
 - The present roller cage at the rear of the clock, used to bear the weight of the pendulum and reduce friction, was only used by Fromanteel in his earliest clocks. Here it is a modern reconstruction, but the evidence on which it was based seems to be clear.^{xlii xliii xliiv}
 - The bell is mounted unusually high and outside of the case, behind the pediment, which is rarely seen later.^{xlv}
 - Both the going and striking trains have five wheels, instead of four which became standard. This may derive from Fromanteel's recent construction of longer duration clocks (which he tells us of in his notice in the *Mercurius Politicus*, above) in which the extra gearing was very much a necessity.
 - The clock incorporates an early example of bolt and shutter maintaining power, which keeps the clock running as it is wound, to prevent damage to the escapement and maintain timekeeping.

This clock set the foundations for the longcase clock and, subsequently, the "decade that followed was filled with pioneering work, and all the typical features of the classic table and longcase clock had gradually taken shape by 1667".^{xlvi} It continued to evolve through the years, remaining popular well into the 20th century.^{xlvii}

Conclusion

This clock not only marks the beginning of the golden age of English horology, but it was made at a pivotal moment following the Restoration. It is the earliest extant example of a proper longcase

clock, that fully embraced the new application of the pendulum in its design, and it was there to meet and drive the needs of the burgeoning scientific community, economy, and demand for objects of status.

It is an instrument that links Huygens, Fromanteel, Wren and the Earl of Arundel, Henry Howard with the newly formed Royal Society, and indeed John Evelyn confirms that they had all either met or else were connected by just one degree of separation.^{xlviii} That there is no definitive proof that the Earl of Arundel first owned this clock, or that Wren designed its case, is all the more reason for keeping it to hand for future research.

The clock is also evidence in the oft discussed matter of the attribution of the invention of the pendulum clock, which presently rests with Huygens. On the matter of attribution, the invention of the longcase clock is, for all the reasons set out above, itself highly significant and, since this clock is thought to be the earliest extant example of a longcase clock proper, this honour might well fall to Fromanteel, thus making it even more valuable to the nation. This elevates it above the other 1660s longcase clocks that exist in national museum collections and, whilst the presence of a reconstructed escapement is disappointing, it does not detract from this claim.

Overall, it is my opinion that this hugely important clock should remain available for study in this country, and if it were to leave it would be a great loss to the nation.

Appendix - History of the Clock

Unless otherwise stated, the information in this section is reproduced from Garnier, Richard, and Leo Hollis, *Innovation & Collaboration: The Early Development of the Pendulum Clock in London, Exhibition at Bonhams, London, 3 - 14 September 2018*, 2018.

Literature

“Cescinsky, *Master Clockmakers*, 1938, fig. 33, 50 & 51; RWS, 'Dial Design: pt. 1', *CL*, 14 Feb. 1947, p. 372, fig. 10; Ulliyett, *Quest*, 1950, pl. XVI (dial); HAL, *Chats*, 1951, pl. s8; HAL, *Old Clocks* 1951, pl. 55, & 1958, pl. 37a; RAL, 'Masterpieces of British Art and Craftsmanship', AHJ, Sept. 1954; Britten, *OCW*, 7th ed., 1956, pl. 60 (dial); C Clutton, 'Threat to a Great Collection', *CL*, 28 Aug. 1958; F Davis, 'Page for Collectors', *Illustrated London News*, 28 Jan. 1961; 'Caroline Masterpieces', *Antique Collector*, Feb. 1961, p. 35 illus.; Basserman-Jordan, *Old Clocks and Watches*, 1961, pl. 189a- c; RAL, '12 Years', 1969, no. 4; M Hurst, '12 Years', AHJ, Jun. 1969, p. 148, fig. 4-75J T Fraser & N Laurence, *The Study of Time: II*, 1975: Atwood, *Pendulum Device*, p. 443, fig. 21; DDP, *EEC*, 1982, p. 88-81, pl. 112-3 & p. 163-165, pl. 216-7; Dawson, *Idea*, 1987, p. 34-5; HM, Oxon, 2003, p. 22-5; HL, Holland, 2004, p. 54-5”.

Exhibited

“Science Museum, *Clockmakers Heritage*, 1952, no. 85; Ham, Ormeley Lodge, *Masterpieces*, 1954, no. 136; Royal Academy, 1960, *Age of Charles II*, no. 402; V&A, *The Orange and the Rose*, 1964-5; RAL, *12 Years*, 1969, no. 4; BADA Fair, Mar. 2003, AHS 50th Anniv. stand; Oxon, HM, 2003, no. 9; Holland, Het Loo, *Opwindende Klokken*, 2004, no. 21”.

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- ⁱ Whilst the author has seen the clock on public exhibition in the past, a detailed inspection was not made for the purposes this report, which is based on the information supplied with the Export Licence application and published material. Garnier & Hollis provide an excellent description of the clock, including provenance, literature and exhibition history as well as detailed pictures which may be useful to read in alongside this report. (Richard Garnier and Leo Hollis, *Innovation & Collaboration: The Early Development of the Pendulum Clock in London, Exhibition at Bonhams, London, 3 - 14 September 2018*, 2018, pp. 172–75.)
- ⁱⁱ Brian Loomes and Granville H. Baillie, *Watchmakers and Clockmakers of the World*, Complete 21. century ed (London: N.A.G. Press, 2006), p. 284.
- ⁱⁱⁱ Since at least 1969 (Michael Hurst, 'The First Twelve Years of the English Pendulum Clock', *Antiquarian Horology*, 6.3 (1969), 146–56 (p. 148).)
- ^{iv} Which had already been in existence from the 12th century.
- ^v Hans van den Ende and others, *Huygen's Legacy: The Golden Age of the Pendulum Clock : [Paleis Het Loo Nationaal Museum, Apeldoorn, 12th September-28th November 2004]* (Castletown: Fromanteel, 2004), p. 19.
- ^{vi} Garnier and Hollis, p. 16.
- ^{vii} Richard Garnier, '2. Cornelius Drebbel (1572-1633) - the Man Who Launched Fromanteel?', in *Innovation & Collaboration: The Early Development of the Pendulum Clock in London, Exhibition at Bonhams, London, 3 - 14 September 2018*, 2018, pp. 33–54.
- ^{viii} From an advertisement placed by A. Fromanteel in *Mercurius Politicus* 27th October 3rd November 1658 and in the *Commonwealth Mercury*, 19th- 25th September 1658 (cited in numerous publication, first found by the author in Robinson, pp. 23–24.)
- ^{ix} Brian Loomes, *Clockmakers of Britain, 1286-1700*, 2014, p. 207.
- ^x Tom Robinson, *The Longcase Clock*, Rev. ed (Woodbridge, Suffolk: Antique Collector's Club, 1995), p. 24.
- ^{xi} Fritz van Kersen, 'The Coster-Fromanteel Contract Re-Examined', *Antiquarian Horology*, 28.5 (2005), 561–67 (p. 562).
- ^{xii} From the advertisement placed by A. Fromanteel in *Mercurius Politicus* 27th October 3rd November 1658 and in the *Commonwealth Mercury*, 19th- 25th September 1658 (Robinson, pp. 23–24.)
- ^{xiii} *The First Twelve Years of the English Pendulum Clock, or, the Fromanteel Family and Their Contemporaries, 1658-1670*, ed. by Ronald A. Lee Galleries (London), R. T. Gwynn, and Ronald A. Lee (Guildford: Seven corners, 1969). Fromanteel also includes a description of a fire engine that he invented and made, indicating a wide interest than horology.
- ^{xiv} *A Dictionary of Heraldry*, ed. by Stephen Friar, 1st ed (New York: Harmony Books, 1987), p. 30.
- ^{xv} Quotation also appears in Hubert B. Chesshyre and Adrian Ailes, *Heralds of Today: A Biographical List of the Officers of the College of Arms, London, 1987-2001* (London: Illuminata, 2001)., cited in 'Arundel Herald Extraordinary', *Wikipedia*, 2020
<https://en.wikipedia.org/w/index.php?title=Arundel_Herald_Extraordinary&oldid=995863845> [accessed 18 August 2021].
- ^{xvi} "NORFOLK" - "SUPPORTERS— Dexter, a lion argent. Sinister, a horse argent, with an acorn slip in his mouth, being one of the supporters of the Fitz-Alans , earls of Surrey." (*Debrett's Genealogical Peerage of Great Britain and Ireland* (William Pickering, 1847), sec. Norfolk, p. 561.)
- ^{xvii} The full arms can be seen on the See chimney in Arundel Castle ('Castle History - Arundel Castle & Gardens', <https://www.Arundelcastle.Org/> <<https://www.arundelcastle.org/castle-history/>> [accessed 18 August 2021].)
- ^{xviii} 'Earl of Arundel', *Wikipedia*, 2021
<https://en.wikipedia.org/w/index.php?title=Earl_of_Arundel&oldid=1037343978> [accessed 18 August 2021].
- ^{xix} Henry became the 6th Duke on his brother's death in 1677). 'Henry Howard, 6th Duke of Norfolk', *Wikipedia*, 2021
<https://en.wikipedia.org/w/index.php?title=Henry_Howard,_6th_Duke_of_Norfolk&oldid=1009865918> [accessed 18 August 2021].
- ^{xx} Hence this clock is widely known as the Norfolk Fromanteel.
- ^{xxi} 'Howard, Henry (1628-1684)', ed. by Sidney Lee, *Dictionary of National Biography, 1885-1900* (London: Elder Smith & Co., 1891), Wikisource.
- ^{xxii} Garnier and Hollis, p. 175.
- ^{xxiii} For example see: 'Carillon Clock; Chamber Clock; Musical Clock; Weight-Driven Clock; Clock-Case | British Museum' <https://www.britishmuseum.org/collection/object/H_1958-1006-2139> [accessed 30 August 2021].

^{xxiv} The style remained for the next ten years, until it began to give way to softer tones of walnut veneer, and subsequently (during the time of William & Mary) they soften entirely with the use of natural marquetry, with columns becoming barley twists.

^{xxv} Leo Hollis, '1. Time Is the Emperor of All Things - The Revolution in Clockmaking in Seventeenth-Century London', in *Innovation & Collaboration: The Early Development of the Pendulum Clock in London, Exhibition at Bonhams, London, 3 - 14 September 2018*, 2018, pp. 11–31 (p. 22).

^{xxvi} Ronald A. Lee Galleries (London), Gwynn, and Lee.

^{xxvii} Larry L Fabian, 'Could It Have Been Wren?', *Antiquarian Horology*, 10.5 (1977), 550–70.

^{xxviii} John A Robey, *The Longcase Clock Reference Book* (Ashbourne: Mayfield Books, 2013), p. 714.

^{xxix} Ronald A. Lee Galleries (London), Gwynn, and Lee.

^{xxx} Hurst, p. 148.

^{xxxi} "This is probably the first clock case ever designed solely to support the movement and hide away the weights as the short bob pendulum is above the seat board (the long pendulum had not yet been invented)." (Ende and others, p. 54.)

^{xxxii} Garnier and Hollis, p. 175.

^{xxxiii} The right time would typically be taken from a sundial, unless there happened to be a more precise clock to hand.

^{xxxiv} Eight days allows for a routine weekly wind, with a day in hand to accommodate any lapses.

^{xxxv} or by having the weights drop farther, but it is not convenient to have the dial too high up the wall.

^{xxxvi} For an example see V&A accession number W.10:1 to 6-1963 (Victoria and Albert Museum, 'Longcase Clock | Fromanteel, Ahasuerus | V&A Explore The Collections', *Victoria and Albert Museum: Explore the Collections* <<https://collections.vam.ac.uk/item/O78936/longcase-clock-fromanteel-ahasuerus/>> [accessed 30 August 2021].)

^{xxxvii} Ende and others, p. 54.

^{xxxviii} Ronald A. Lee Galleries (London), Gwynn, and Lee.

^{xxxix} Brian Loomes, *Grandfather Clocks and Their Cases* (London: Bracken Bks., 1989), p. 38.

^{xl} ██████████ papers

^{xli} Hurst, p. 148.

^{xlii} "Originally, it appears as if the back pivot of the verge, at present on a knife-edge, ran in anti-friction rollers and as such it may be the earliest known use of this device." (Hurst, p. 148.)

^{xliii} Dawson, Drover & Parkes also make a good case. Their date of publication shows that it was reinstated by 1982 (Percy G. Dawson, C. B. Drover, and D. W. Parkes, *Early English Clocks: A Discussion of Domestic Clocks up to the Beginning of the Eighteenth Century* (Woodbridge, Suffolk, England: Antique Collectors' Club, 1982), p. 90.)

^{xliiv} For another example see MoHS inventory number: 54420 (see Museum of the History of Science, 'Longcase Clock, by Ahasuerus Fromanteel, London, c. 1665 (MHS Record Details: IRN 5738, Inventory Number 54420)', *Museum of the History of Science* <<http://www.mhs.ox.ac.uk/object/inv/54420>> [accessed 19 August 2021].)

^{xlv} Ronald A. Lee Galleries (London), Gwynn, and Lee.

^{xlvi} H. M. Vehmeyer, *Clocks Their Origin and Development 1320-1880* (Gent: snoeck, 2004), p. 498.

^{xlvii} For mass-produced longcase clocks, see J. Glanville and William M. Wolmuth, *Clockmaking in England and Wales in the Twentieth Century: The Industrialized Manufacture of Domestic Mechanical Clocks* (Marlborough: The Crowood Press, 2015).

^{xlviii} For example, "1661. 1 April. I din'd with that great mathematician and virtuoso Monsieur Zulichem [Huygens], inventor of the pendule clock, and discoverer of the phænomenon of Saturn's annulus; he was elected into our Society." And "3 May. . . . I return'd by Fromantil's the famous clock-maker to see some pendules, Monsieur Zulichem being with us." (John Drummond Robertson, *The Evolution of Clockwork: With a Special Section on the Clocks of Japan; Together with a Comprehensive Bibliography of Horology* (Wakefield, Yorkshire: S. R. Publ, 1972), p. 128.)

Reviewing Committee on the Export of Works of Art and Objects of Cultural Interest, note of case hearing on Wednesday, 10 November: Early Charles II ebony longcase clock (Case 3, 2021-22)

Application

1. The Reviewing Committee on the Export of Works of Art and Objects of Cultural Interest (RCEWA) met on Wednesday 10 November to consider an application to export a Charles II ebony longcase clock. The value shown on the export licence application was £2,950,000 which represented an agreed sale price subject to the granting of an export licence. The expert adviser had objected to the export of the clock under the first, second and third Waverley criteria on the grounds that its departure from the UK would be a misfortune because (i) it was so closely connected with our history and national life (ii) it was of outstanding aesthetic importance and (iii) it was of outstanding significance for the study of the golden age of English clockmaking in the seventeenth century.

2. All of the regular eight RCEWA members were present and were joined by two independent assessors, acting as temporary members of the Reviewing Committee. The Chairman explained that the binding offers mechanism was applicable for this case.

3. The applicant was consulted about the digital process and confirmed they were content to proceed in this manner. The applicant confirmed that the value did not include VAT and that VAT would be payable in the event of a UK sale on the commission. The sale could possibly be structured so that an eligible UK institution could reclaim the VAT. The applicant also confirmed that the owner understood the circumstances under which an export licence might be refused.

Expert's submission

4. The expert adviser had provided a written submission stating that this exquisite and rare Fromanteel longcase clock was from a small group made at the beginning of the golden age of English clockmaking in the 17th century. It was an eight-day duration ebony veneered architectural longcase clock signed "A. Fromanteel Londini Fecit", dated c. 1660-2. Ahasuerus Fromanteel (1606/7-1693) was a Briton of Flemish descent, a pre-eminent maker of his time who had the support of the Lord Protector, Oliver Cromwell.

5. The clock was the earliest extant purpose-made longcase clock, a type which was the bedrock of precise mechanical, scientific, and domestic timekeeping from the late 17th century well into the 20th century. The expert adviser noted that this clock was an important element of the tastes and material culture relating to theoretical, navigational, and engineering innovations stimulated by the Royal Society and the Restoration. The case

style also incorporated cues from the interiors in which it might be placed, with its dark colouring and the fielded panels on the door, mimicking “contemporary doors wall panelling and window shutters”. However no English furniture of the period came near to the quality seen in clocks, especially in terms of the colour and finish that were achieved using fine veneers.

6. The expert adviser added that after seeing the clock and its restoration they were still of the view that the majority of the case remained original and that the intangible cultural heritage of the clock remained intact. The architectural form was particularly developed by this point and this clock was a good example of this.

7. The expert was questioned in detail about the movement of the clock, its construction and its features; in order to provide understanding about how those elements related to the chronology placed on the clock and how it compared to other Fromanteel clocks. The expert replied that there was still a lot more to learn about the clock and that it should be studied further in comparison to other clocks in the UK.

Applicant’s submission

8. The applicant had stated in a written submission that the clock was undoubtedly important in its original conception, as possibly the first-conceived longcase clock and with rare roller-cage assembly. However, the case hood and plinth were both subject to historical alterations and restorations, and the roller cage was a reinstatement, conjecturally based on that in the (later) Oxford clock, from which it probably differed in detail as originally constructed. The applicant noted examples of other early Fromanteels in national collections.

9. The applicant further stated that the provenance was not academically secure, having been deduced from the tympanum mount engraved insignia. They noted that the clock’s restored specification and deduced provenance should not constitute qualification under the rigorous requirements of the Waverley criteria to warrant its retention in UK as a designated national treasure.

10. The applicant added that the information that had been put forward was 40 to 60 years old and that the clock had been significantly altered. Although an example of an early clock and aesthetically pleasing it was quite an uncertain piece and difficult to reconstruct chronologically which made it an unsuitable clock for use in scholarship.

Discussion by the Committee

11. The expert adviser and applicant retired and the Committee discussed the case. The Committee noted that it was an extremely interesting object, and that the restoration work was not unusual for an object that was over 300 years old. It seemed that no one example stood as an unadulterated original and should

collectively be looked at as such. Although the provenance for the clock had not been completely established the Committee agreed that it was undoubtedly a founder clock and a typically English object.

12. The Committee agreed that there was still much to understand about the clock on every level and that there were few of these clocks that could serve as the basis for new research. The Committee felt the arguments about John Webb and its creation to fit a particular interior were quite interesting and were of the opinion that the clock had the potential to open further avenues for research.

Waverley Criteria

13. The Committee voted on whether the clock met the Waverley criteria. Of the ten members, one voted that it met the first Waverley criterion. Four members voted that it met the second Waverley criterion. Ten members voted that it met the third Waverley criterion. The clock was therefore found to meet the third Waverley criterion for its outstanding significance for the study of the golden age of English clockmaking in the 17th century.

Matching offer

14. The Committee recommended the sum of £3,009,000 (inclusive of VAT) as a fair matching price.

Deferral period

15. The Committee agreed to recommend to the Secretary of State that the decision on the export licence should be deferred for an initial period of three months. At the end of the first deferral period if the Arts Council received notification of a serious intention to raise funds with a view to making an offer to purchase the clock the owner will have a consideration period of 15 Business Days to consider any offer(s). The Committee recommended that there should be a further deferral period of four months that would commence following the signing of an Option Agreement.

Communication of findings

16. The expert adviser and the applicant returned. The Chairman notified them of the Committee's decision on its recommendations to the Secretary of State.

17. The expert adviser agreed to act as champion if a decision on the licence was deferred by the Secretary of State.

Reviewing Committee on the Export of Works of Art and Objects of Cultural Interest: Note of outcome: Early Charles II ebony longcase clock (Case 3, 2021-22)

At the end of the initial deferral period, no offer to purchase the clock had been made and we were not aware of any serious intention to raise funds. An export licence was therefore issued.