

A TIME-TELLING TELESCOPE

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In 1938, the National Maritime Museum, Greenwich acquired a highly decorated telescope with watch that has become one of its treasures. Some of the initial claims about its provenance have since been shown to be inaccurate, but the context in which such pieces found their way to China in the eighteenth and nineteenth centuries is worth exploring.



Fig. 1. Presentation telescope, by Fraser & Son, London, early 19th century (museum no. NAV1579) © National Maritime Museum, Greenwich

In a recent note in *Antiquarian Horology*, Neil Handley described some 'hybrid objects featuring the combination of an intricate working device with another instrument', specifically three lorgnettes containing small timepieces.¹ In this article we describe a slightly different hybrid: a telescope-watch combination (Fig. 1).

The telescope is of a standard configuration for the early nineteenth century: three draw tubes; an achromatic objective lens; four further

lenses in the smallest draw tube. It is just under 18cm long when closed and extends to about 50cm. The maker's name, 'Fraser & Son London', is engraved on the eyepiece end and helps to date the piece to no earlier than 1799.² What is more unusual is the quality of materials and decoration – comprising blue enamel, pearls and gold – and the addition of a watch (Fig. 2), which screws onto the end of the barrel to form a cover for the objective lens. The watch is numbered 4647.

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1. Neil Handley, 'Watch Lorgnettes', *Antiquarian Horology*, 33 no. 2 (December 2011), 227–231.
2. Gloria Clifton, *Directory of British Scientific Instrument Makers 1550–1851* (London, 1995), p. 105, notes the firm as active in the period 1805–12. Nicholas Goodison, *English Barometers 1680–1860* (London, 1969), p. 294, states that Fraser was in partnership with a son from 1799, as does A.D. Andrews, 'Cyclopaedia of Telescope Makers Part 1', *The Irish Astronomical Journal*, 20 (1992), 102–183, 176, who also notes Fraser as working from 1785. C.W. Dixey & Son state that William Fraser began his business in 1777 – <http://www.cwdixeyandson.com/history.php>, accessed 11 December 2011.

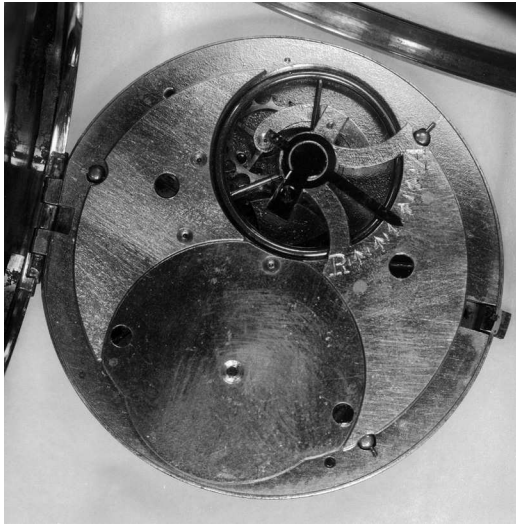


Fig. 2. The watch mechanism: gilt-brass going-barrel Lepine-calibre movement with cylinder escapement; gold three-arm balance and balance-spring with polished-steel, indexed regulator © National Maritime Museum, Greenwich

Although it was presumably engraved with the Fraser name in England prior to sale – and perhaps gilded there, since the engraving is under the gilding – both the watch and the telescope appear to have been imported from Switzerland.³ The enamelling is particularly characteristic of Swiss work of the period. Certain details of the watch, notably the style of the dial and hands, further confirm that it was made in the first quarter of the nineteenth century.


The telescope was presented to the National Maritime Museum (NMM) in 1938 by its most prominent benefactor, Sir James Caird.⁴ When Caird purchased it the same year (from Berry

of Piccadilly via Spink & Son), it was said to have been taken by General de Montauban from the Winter Palace in Peking (Beijing) during the Boxer Rebellion (1899–1901) and to have passed through the collection of Bernard Franck (see Fig. 3). Part of this provenance must be incorrect, however, since Montauban died in 1870, although he had been in command of French forces during the later part of the Second Opium War of 1856–60, when looting took place in what is now called the Old Summer Palace. It is also worth noting the number of objects with similar provenance claims.⁵

It was also believed in the 1930s that the telescope had been among the scientific instruments presented to the Qianlong Emperor (reigned 1736–96) by Lord Macartney in 1793, during his trade mission to China on behalf of the East India Company and the British Government. The mission aimed to open up new markets for English goods and obtain a lease for an English trading post in China. It failed on both counts.⁶

This supposition persisted for many years, with the telescope displayed in the NMM and elsewhere in connection with the Macartney embassy, perhaps helped by the fact that an orrery by Fraser was among the gifts.⁷ Given the likely date of manufacture and incorporation of the son's name in the inscription, however, the telescope must have entered China on a later occasion. In recent years, therefore, a more cautious approach has been adopted on the assumption that it was presented during one of the European embassies of the nineteenth century, although it is also possible that it entered China by purchase.⁸

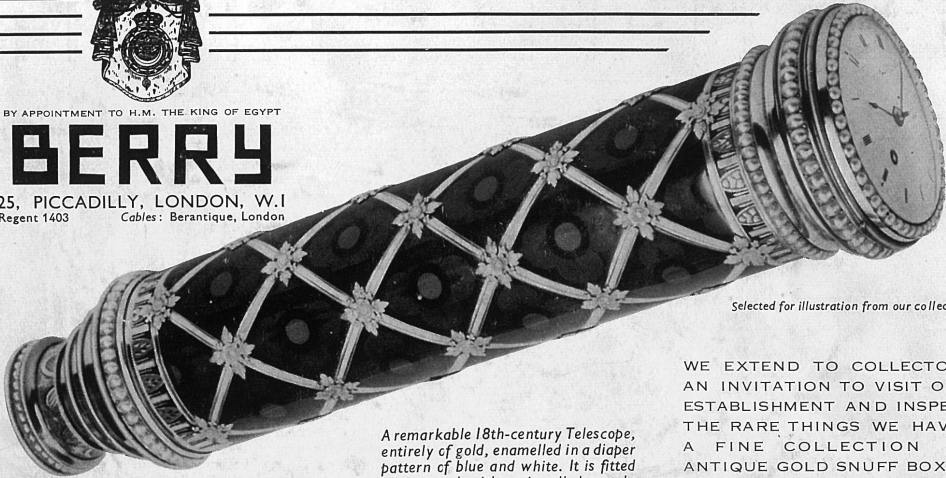
3. For more on the international export trade from Switzerland, see Roger Smith, 'The Swiss Connection', *Journal of Design History*, 17 (2004), 123–139.
4. Ursula Stuart Mason, 'Sir James Caird 1864–1954', *Mariner's Mirror*, LIX (1973), 223–225.
5. James L. Hevia, 'Loot's Fate: The Economy of Plunder and the Moral Life of Objects "From the Summer Palace of the Emperor of China"', *History and Anthropology*, 6 no. 4 (1994), 319–345.
6. J.L. Cranmer-Byng and T.H. Levere, 'A case study in cultural collision: scientific apparatus in the Macartney embassy to China, 1793', *Annals of Science*, 38 (1981), pp.503–525; Maxine Berg, 'Britain, industry and perceptions of China: Matthew Boulton, 'useful knowledge' and the Macartney Embassy to China 1792–94', *Journal of Global History*, 1 (2006), 269–288; Simon Schaffer, 'Instruments as Cargo in the China Trade', *History of Science*, 44 (2006), 217–246.
7. H. Budde, C. Müller-Hofstede & G. Sievernich, *Europa und die Kaiser von China* (Frankfurt am Main, 1985), p. 361 cat. no. 14/1 & fig. 354; A. Jackson & A. Jaffer (eds), *Encounters. The Meeting of Asia and Europe* (London, 2004), p. 95 & fig. 7.3, where it is dated to 1790; G. Clifton & N. Rigby (eds), *Treasures of the National Maritime Museum* (London, 2004), p. 89.
8. G. Clifton & N. Rigby (eds), *Treasures of the National Maritime Museum* (London, 2008 revised edition), p. 89; H.V. Bowen, J. McAleer & R.J. Blyth, *Monsoon Traders. The Maritime World of the East India Company* (London, 2011), p. 85 & fig. 38.



BY APPOINTMENT TO H.M. THE KING OF EGYPT

BERRY

25, PICCADILLY, LONDON, W.1
Regent 1403 Cables: Berantique, London



Selected for illustration from our collection.

A remarkable 18th-century Telescope, entirely of gold, enamelled in a diaper pattern of blue and white. It is fitted at one end with a jewelled watch, which unscrews to permit of the Telescope being extended and used. It is further embellished with rows of pearls.

This Telescope was formerly in the collection of the Chinese Emperor Chien-Loung, and was brought to Europe by General de Montauban after the Boxer Rebellion. It is in splendid condition, and altogether unique. The illustration is life-size.

WE DESIRE TO PURCHASE COLLECTIONS OR SINGLE SPECIMENS OF GOLD BOXES AND SIMILAR OBJETS D'ART.

Fig. 3. An advertisement by Berry of Piccadilly for the telescope.

Such an account of how the telescope might have arrived in China fits well with what we know about other pieces and the market for luxury goods in Asia in the eighteenth and nineteenth centuries. The telescope-watch certainly bears comparison to items found elsewhere, including the collections of the Palace Museum in Beijing, where there are at least three telescope-watches, a telescope containing a magnetic compass, a gilt-copper telescope with enamel decoration and a Swiss watch with similar split-pearl decoration. These are mostly dated by the Palace Museum to the eighteenth

century.⁹ The Sandberg Watch Collection, sold in 2001, contained another three-draw telescope with watch (no. 2243), by Fraser & Son, with later French import marks and a slightly different decoration.¹⁰ A closer match is in the Patek Philippe Museum: a telescope by Fraser & Son that appears almost identical in size, shape and decoration to the NMM example.¹¹ Sadly, it has no watch, but presumably did at one time. The same museum also has a number of other comparable items, including a telescope with watch made by James Cox in about 1775, presumably for the Chinese market.¹²

9. Palace Museum, Beijing, *Timepieces in the Imperial Museum. Classics of the Forbidden City* (Beijing, 2008), p. 201 cat. no. 125 (telescope-watch) and p. 260 no. 180 (watch); Palace Museum, Beijing, *Scientific and Technical Instruments of the Qing Dynasty* (Hong Kong, 1998), p. 171 cat. no. 152 (telescope) & p. 173 cat. no. 154 (telescope-compass). Two telescope-watches by Williamson of London are also in the collection but are not described in either of these publications.
10. <http://catalog.antiquorum.com/catalog.html?action=load&lotid=48&auccionid=14>, accessed 19 October 2011. The entry states that this is one of only four known 'long' telescopes with watches.
11. Patek Philippe Museum, Geneva, museum no. S-433.
12. Patek Philippe Museum, Geneva, museum no. S-499. This item can be seen on the Museum website at www.patekmuseum.com. See also <http://catalog.antiquorum.com/catalog.html?action=load&lotid=329&auccionid=60>, accessed 11 December 2011. For Cox, see Marcia Pointon, 'Dealer in Magic: James Cox's Jewelry Museum and the Economics of Luxurious Spectacle in Late-Eighteenth-Century London', *History of Political Economy*, 31 (supplement) (1999), 423–451; Catherine Pagani, 'The clocks of James Cox: Chinoiserie and the clock trade with China in the late eighteenth century', *Apollo*, 395 (1995), 15–22; Roger Smith, 'James Cox (c. 1723–1800): A Revised Biography', *The Burlington Magazine*, 142 no. 1167 (2000), 353–361.

Accounts of the Macartney embassy also provide interesting information about the reception of such items in China. Macartney recorded on 14 September 1793, for example, that

The emperor presented me with a *ju-eu-jou* of a greenish coloured stone [...] at the same time he very graciously received from me a pair of beautiful enamelled watches set with diamonds

and on 29 November that,

We stopped all last night at the village, about four miles from Nan-chou-fou, where the Fuyen, or Governor of the province, paid us a visit, and brought us presents of tea and tea-cups, some beads, pieces of silk and red Nankin. I returned his compliment with a pair of pearl watches, an assortment of hardware, knives, scissors, wine, and brandy.¹³

In terms of its enamel and pearl decorative scheme, then, the NMM telescope would not have been out of place among the sorts of gift Macartney and later visitors made to the Emperor and other Chinese officials or that the wealthy were purchasing by this time. Enthusiasm for European technological artefacts had been strong at the Chinese court since the seventeenth century and demand for European-style technologies expanded sufficiently in the

eighteenth century for manufacturing centres to be developed in China, notably at Canton (Guangzhou). Clocks, watches and instruments also became increasingly decorative and playful towards the end of the eighteenth century, in contrast, say, to those acquired during the reign of the Kangxi Emperor (1662–1722).¹⁴ The well-known clocks and automata of James Cox were a particularly exuberant expression of this. Unsurprisingly, the technological enthusiasm included telescopes. In 1773, for instance, the Jesuit missionary Michael Benoist described the Qianlong Emperor's reaction to a telescope presented the previous year. He never tired of witnessing its 'surprising effects', Benoist noted, and appointed two eunuchs to carry it around at all times.¹⁵

It seems unlikely that the exact story of how the NMM's telescopic timepiece made its way to China will ever be fully recovered. Nonetheless, we can plausibly place it within a culture of diplomatic exchange and the consumption of flamboyant technological pieces by the wealthy and as a particularly fine example of a hybrid instrument. For those who wish to see it, the telescope-watch is on display in the *Traders* gallery of the NMM.

ACKNOWLEDGMENTS

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13. Patrick J.N. Tuck (ed.), *Britain and the China Trade 1635–1842. Vol. VIII. An Embassy to China: Lord Macartney's Journal* (London, 2000), pp. 122–123 & 188. Split-pearl decoration seems to have been deployed on various objects by the 1780s.
14. Stephanie Braun, *'Strange Machines' from the West: European Curiosities at the Qing Imperial Court* (MPhil Dissertation, University of Hong Kong, 2011); see also Jackson and Jaffer, *Encounters*, pp. 296–309.
15. Budde et al., *Europa und die Kaiser von China*.