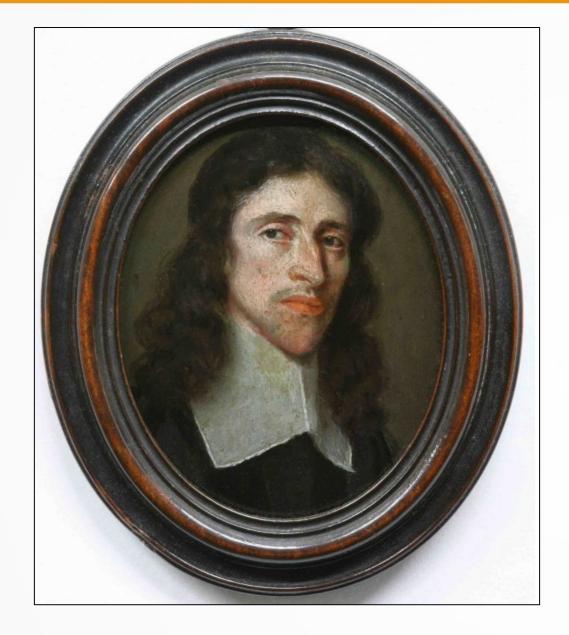
Edward East (1602 - 1695) A summary of his life, times and work

Written by Robert St-Louis (*www.timetales.ca*) Member of NAWCC Chapter 111 (Ottawa) Presented to Ottawa Chapter meeting on March 19, 2025



Miniature portrait reputed to represent Edward East (Clockmaker's Collection at Science Museum in London)



Author in 2019 in front of a clock by Edward East (Clockmaker's Collection at Science Museum in London)

Overview

Edward East (1602 - 1695)

- Family origins in Bedfordshire County
- Apprenticeship on Fleet Street in London
- Early member of Company of Clockmakers
- Career progression, prominent businessman
- Watchmaker to two English Kings
- Survived Great Plague and Great Fire (1665-66)
- Examples of his work in London Museums
- Examination of an East watch movement

Some historical context

Horology

- 1003: Verge escapement invented (monk Gerber)
- 1657: Huygens developed pendulum clock
- 1670-80: William Clement invented Anchor Escapement
- 1675: Huygens invented balance spring for watches
- 1685: Revocation of <u>Edict of Nantes</u> resulted in exodus of Huguenots from France (to <u>England</u>, Germany, Geneva, etc)
- Late 1600's: French domination declined, London ascended (East, Tompion, Quare, Graham -<u>Golden Age</u> in English horology)

Rulers of England

1558-1603 : Elizabeth I 1603-1625 : James I 1625-1649 : **Charles I** (beheaded) 1649-1660 : [Oliver & Richard Cromwell] 1660-1685 : Charles II 1685-1688 : James II 1689-1702 : William III and Mary 1702-1714 : Anne 1714-1727 : George I 1727-1760 : George II ...etc...

"We clock enthusiasts tend to become bogged down in the details of the clocks, their style, age, fine engraving, unusual escapements. We tend to forget that the maker was not a clock-making machine, but a real person often with far more of a burden in the form of the stresses and worries of life than we experience ourselves."

- Brian Loomes, writing about John Smorthwait (1675 - 1739)

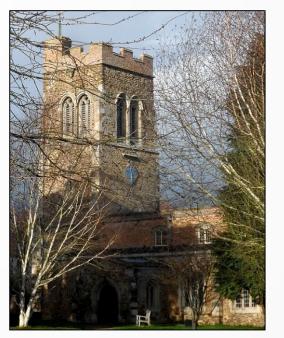
Family origins

- Edward East baptised on 22 August 1602
 - in ancient parish church of Southill, Bedfordshire, England
 - roughly 50 miles north of London (3 miles from Northill Tompion roots)
- Parents are John and Martha East (land owners and workers)
- Likely well educated, possibly private tuition at home
- Elder brother John apprenticed to a goldsmith in London 1612
- Edward also went to London in 1618 to apprentice with a goldsmith

Willyngton th Clapham Newncham BCuphul -En Cardington edtord WIXAM'TREE Norhill DEllow -totold worden CATTIEUCHILN Bi William Stead HUNDRED NJ. Wotton Bt Southhill Haunes 🔁 Shefford STOKE HUN. Be Houghton computer Chikland & B.Her/bon Claphill_#

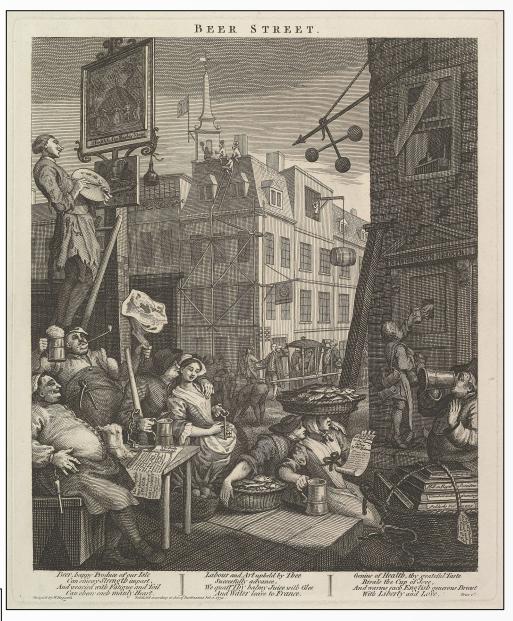
<u>Left</u>: portion of 1648 map of Bedfordshire County

<u>Right</u>: All Saints Church in SouthHill (originally built in 14th century)



Apprenticeship in London

- Edward was apprenticed to Richard Rogers, a London goldsmith on Fleet Street
 - from March 1618 (aged 15 ½) to 1626
- Goldsmiths, mercers, merchant tailors were the prestigious guilds
- Not uncommon for boys from counties to go to London
 - Greatest concentration of jobs in N. Europe
 - Edward's father wisely planned for the future of his boys
- Becoming Londoner from countryside
 - Initial feelings of bewilderment, isolation
 - Noisy, foul air, working animals, pickpockets, beggars, prostitutes, carts, coaches, foreigners
 - Homesick for friends, family, peaceful countryside "Beer Street" 1751 by

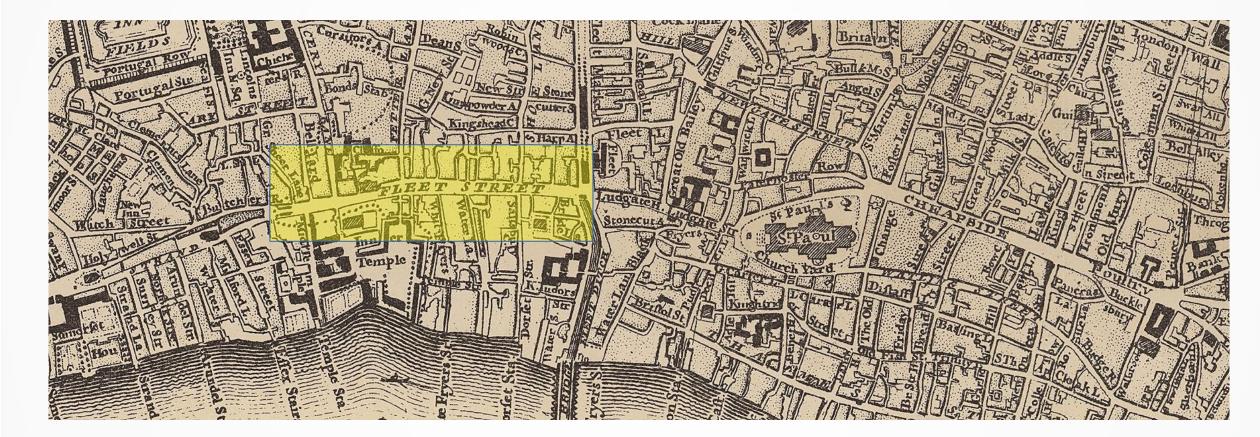


William Hogarth

Apprenticeship in London

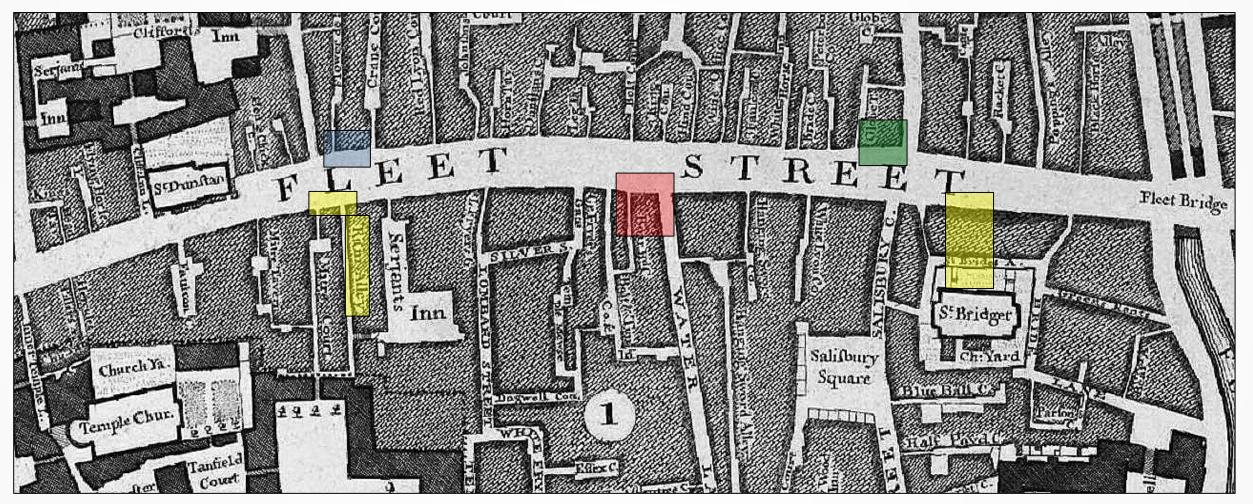
- Apprenticeship was long and thorough
 - Boy provided room and board, not allowed to marry until completion
 - Apprentice had a bed in the shop (protect goods, start morning fire in cold weather, make tea)
- Edward learned many skills directly applicable to clock/watchmaking
 - Filing, soldering, casting, sawing, cutting, polishing metal parts
 - Work with variety of metals and tools
 - Enclose mechanism within a case
 - Decorate and engrave final product
- Fleet Street was a bustling centre of clock/watchmaking in London
 - Newsam, Grinkin, Willow, Crayle, especially the Bull family
 - Later: Tompion, Knibb, Pinchbeck, Gretton, Jones, Graham, others ("The Golden Age")





Rocque Map of London ca. 1745

Fleet Street in London



<u>Portion of 1746 map of London</u>. Charles <u>Gretton</u>'s shop -*The Ship*- (CC 1672-1731) indicated in <u>blue</u>. Thomas <u>Tompion</u>'s shop – *The Dial and Three Crowns* - in red (CC 1671-1713).

George **<u>Graham</u>**'s shop (CC 1695-1751) in **green**.

Edward **East's** shops in **yellow** (1628-16??)



Portion of 1563 map of London

Bull / East business areas in yellow

Ram Alley not shown here

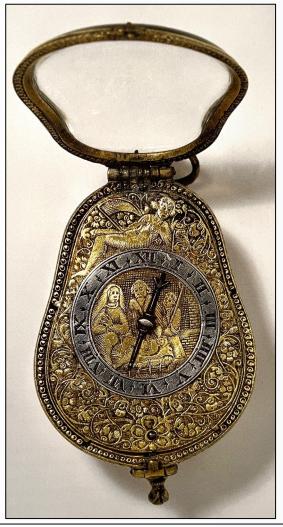
Area of White Friars Temple is at the bottom, with treed area adjacent to River Thames

Outside of London Guilds jurisdiction

Provided means to bring foreign workers and imported materials to East's shop

Career progression in London

- In 1624, East traveled to Holland with Edmond Bull
 - *Likely met him while providing goldsmith services*
 - Bull possibly saw him as a future husband to his daughter
- Bull's father John had been watchmaker to Elizabeth I
- In Aug. 1627, East married Bull's daughter Ann, with whom he had 13 children (a few died young)
 - He would later take over Bull's business
- East opened his first shop near St. Brides but quickly moved to Ram Alley, near Bull's shop on Fleet Street
- Clockmaker's Company was founded in 1631
 - East was made Assistant in 1632: one of earliest members
- East also retained membership in Goldsmith's Company
 - <u>Big advantage</u> for him to belong to both Companies
- *He became Warden to the CC in 1638, and Master in 1645 and 1652*
- Henry Jones (1632-1695) his most famous apprentice



Pear-shaped watch by Edward East Ca. 1635 V&A Museum

East led a prominent business

- Edward was a keen businessman and had a flair for good investments and profit strategies
 - He became a wealthy man by the age of 50-60
 - In addition to his business, he bought and sold properties and loaned money
- His shops produced and sold numerous watches and clocks for over 60 years
 - Wanted to retire at age 70 (~1670) but his son James's death compelled him to continue
- His brother, also a goldsmith, lost all his money while working for the Royal Mint
- In his 1688 will, East described himself as "Watchmaker, Citizen, and Goldsmith of London"
- East's will was proved in February 1696, making him 94 years old when he died
 - Until 1950s it was thought there had been two Edward Easts



Pear-shaped watch by Edward East Ca. 1635 V&A Museum

East survived two disasters

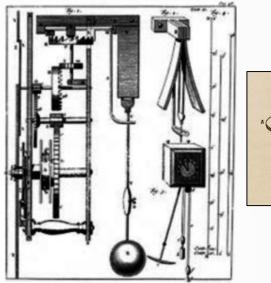
- Edward East and his family survived 2 major events
 - The Great Plague of 1665-6
 - Worst outbreak since Black Death of 1348
 - At peak in Summer, over 7,000 deaths a week
 - East and his family likely relocated to Southill during the worse of the outbreak
 - Deaths estimated over 100,000 (15% of city)
 - The Great Fire of 1666 (Sep. 2 to 6)
 - Over 13,000 houses, 87 churches, St-Paul's, etc.
 - East's shops and dwelling were destroyed
 - *He had sufficient warning to save his tools, stock and trade*
 - His shops were rebuilt after the fire, though Ram Alley was significantly changed
 - He relocated from Fleet Street after the fire
 - > Additionally, East and his business had to survive through the <u>Civil War</u> after the reign of King Charles I

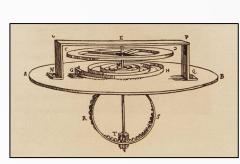


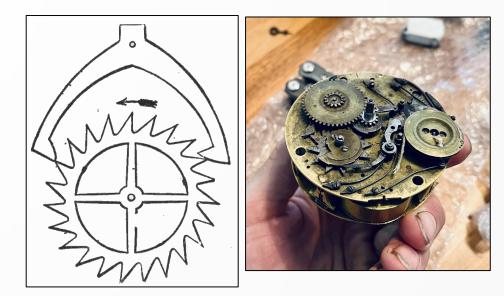


East led a prosperous business

- He was not an innovator and inventor as were some of his contemporaries
 - <u>Christian Huygens</u> pendulum clock (1657) and balance spring (1675)
 - <u>William Clement</u> anchor escapement (1670-80)
 - <u>Daniel Quare</u> watch minute repeater (1687)
- However East was quick to incorporate new methods and techniques into his own production
- *He employed displaced European craftsmen and imported materials into his manufacturing*
- A shop like his would assemble, sell and service various timepieces
 - Some of his clock movements were made by external makers (AH – June 2024)
 - Some of his watch movements (or at least several components) were likely also made outside his shop
 - Employed 15 to 30 people, directly or indirectly









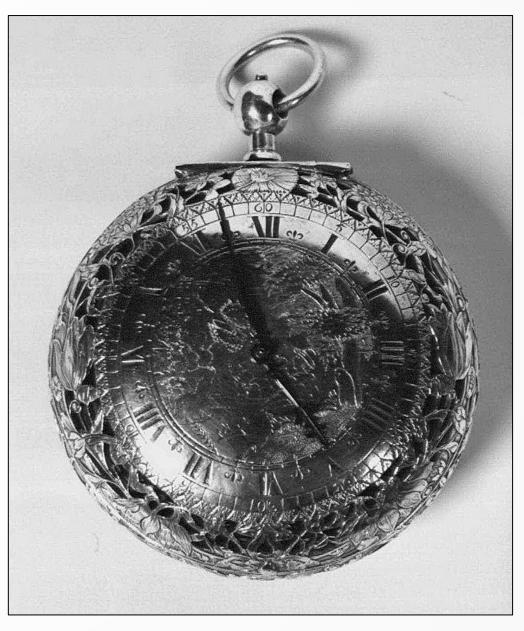
Silver-cased leather-covered watch by Edmond Bull Ca. 1635 – private collection

Watchmaker to two Kings

- East became watchmaker to King Charles I, then after the Civil Wars and Restoration, to King Charles II
- Early on, he would accompany young bonnie Prince Charles (II) at tennis tournaments in Pall Mall
 - The winner received an East watch as prize
- On his execution day in 1649 Charles I was awoken by his East alarm watch
 - On the gallows, he gave it to his companion Thomas Herbert

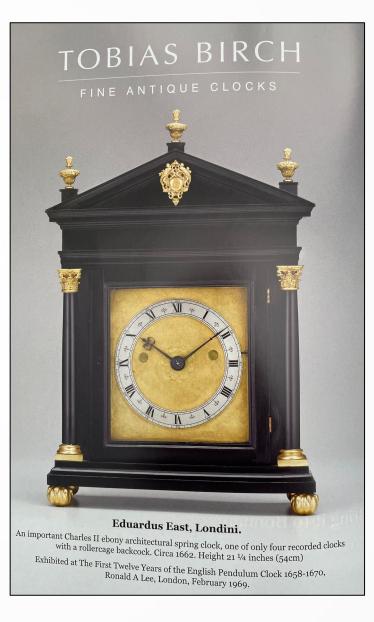
Charles I watch by Edward East

Royal Collection Trust



Works by Edward East

 Occasionally, a watch (££££) or clock (£££££) by East is sold at auction, or in an exclusive horological retail shop



Works by Edward East

- Watches and clocks from the shop of Edward East are found in many museums and private collections
- In London, fine examples can be seen at:
 - The British Museum
 - Horological Gallery in rooms 38-39
 - Horological Study room (through prior appointment)
 - The Victoria and Albert Museum
 - Numerous beautifully cased watches
 - The Clockmaker's Museum
 - Level 2 of Science Museum
 - All their collection is on display, unlike BM

British Museum



Longcase night clock (oil lamp) Edward East, London, ca. 1685



Horology curator Oliver Cooke digging out Edward East watches for viewing in the "Study Room" at the British Museum

Edward East watches handled in the "study <u>room"</u>









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Victoria and Albert Museum



Watch, London, 1640 Painted Enamel, Edward East



Clock-watch with alarm Edward East, London, ca. 1645

Clockmakers' Collection - Science Museum



Edward East 1675-1685 Oak case Veneered in Walnut, Floral Marquetry



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Edward East Watch



5

6

WATCH MOVEMENT BY THOMAS TOMPION

London, c.1671

This important watch movement is the only know Tompion watch of the pre-balance era. It is of high quality, with no pinion having less than six leaves. Signed 'Thomas Tompion, London'.

Museum No. 39

2

WATCH BY THOMAS TOMPION

London, pre 1680

Contained in an inner case of gilt metal, an outer covered in shagreen. The white enamel dial is a replacement. The movement has a train of four wheels and is signed 'Tho Tompion, London'

Museum No. 47. Presented by George Copeman, 1878

WATCH MOVEMENT **BY THOMAS TOMPION**

London, c.1680

3

4

The movement has a four wheel train and an unusual cock. It is signed 'Tho Tompion, London' and is unnumbered. The balance spring has probably been replaced. The inner and outer case and dial are later.

Museum No. 48. Presented by Charles E. Atkins

WATCH MOVEMENT **BY THOMAS TOMPION**

London, 1691-1692

The movement has a quarter repeating mechanism of early design, but no dial. Numbered 41 and signed 'Tho Tompion, London'.

Museum No. 52. Presented by Evan Roberts, 1904

WATCH MOVEMENT BY THOMAS TOMPION London, c.1692

The movement has a four wheel train and tulip pillars, and is signed 'T. Tompion London 0598'.

Museum No. 53. Presented by B.L. Vulliamy, 1849

WATCH MOVEMENT BY THOMAS **TOMPION AND EDWARD BANGER** London, early 18th century

The striking and repeating movement now has no dial. Signed 'T. Tompion, E. Banger, London 191' it was made during the brief period of Banger's partnership, which lasted from 1701-1708.

Museum No. 84

WATCH MOVEMENT BY THOMAS **TOMPION AND GEORGE GRAHAM** London, c.1711

The movement has a white enamel dial and steel beetle and poker hands. It is signed 'Tho Tompion, Geo, Graham London 4869' and is one of the earliest surviving made during the brief partnership between 1711 and Tompion's death in 1713.

Museum No. 130

7

8 **TOOL HANDLE**

Late 17th century

This beautifully made bone handle is signed 'Tho: Tompion fecit'. Its authenticity has been variously believed and disbelieved over many years. The present view is that it probably is Tompion's work and may have been intended to hold a watchmakers' broach.

Museum No. 1150



Description of an Edward East Watch Movement (ca. 1685)

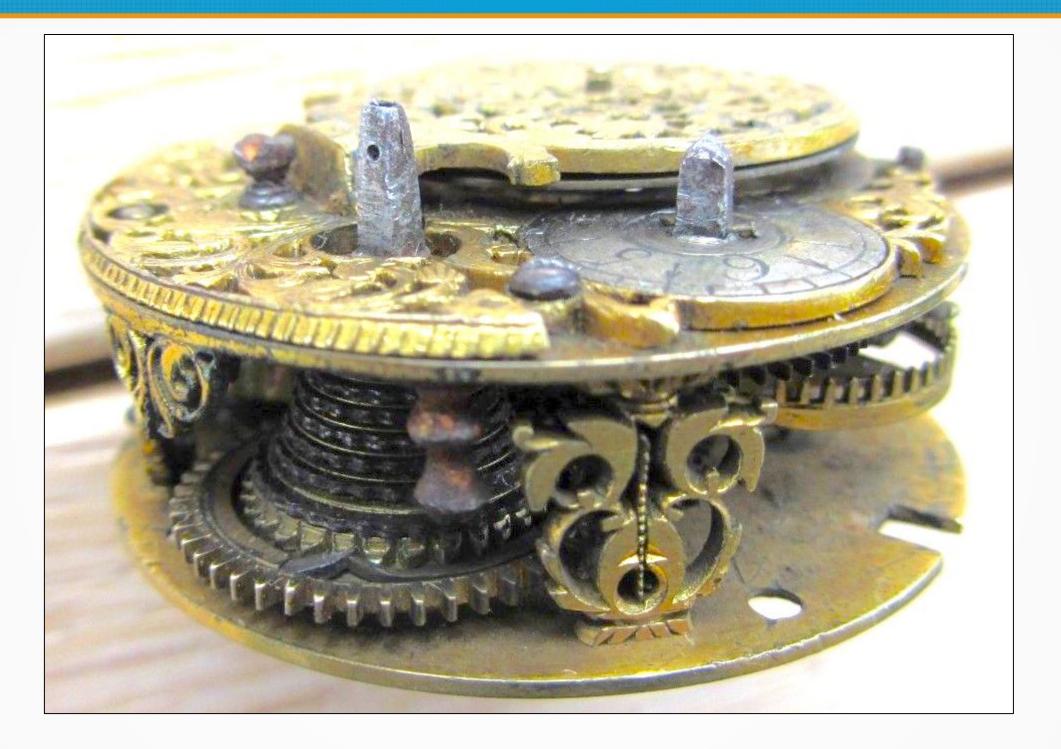


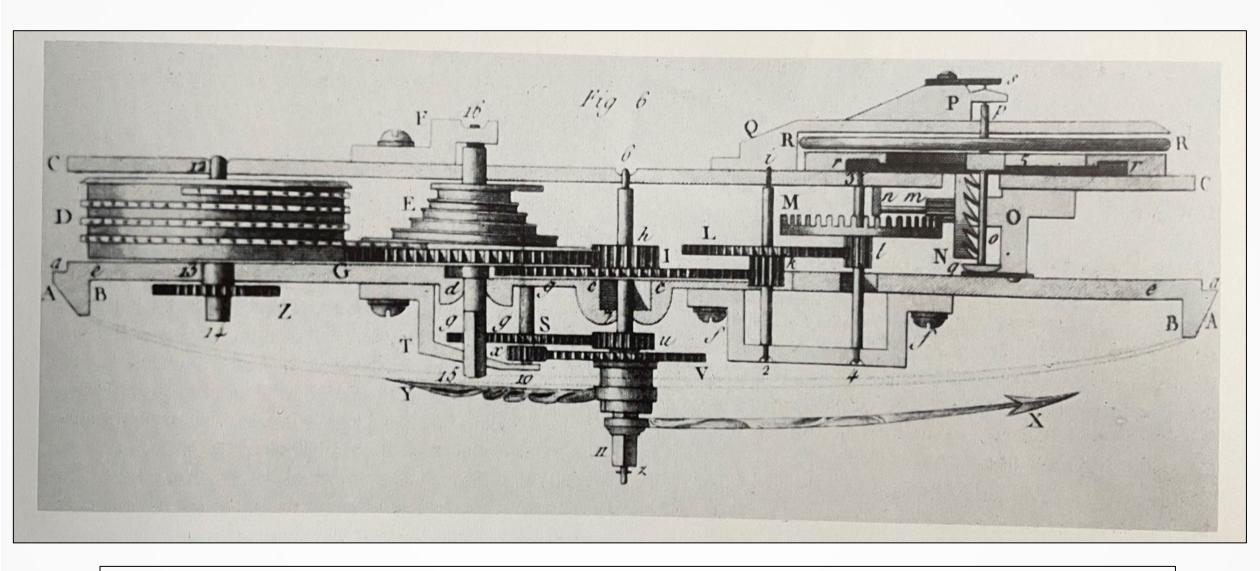
Item Description on Ebay France:

"Mouvement de montre anglaise signée Edward, de East London"

"English watch movement signed Edward, of East London"



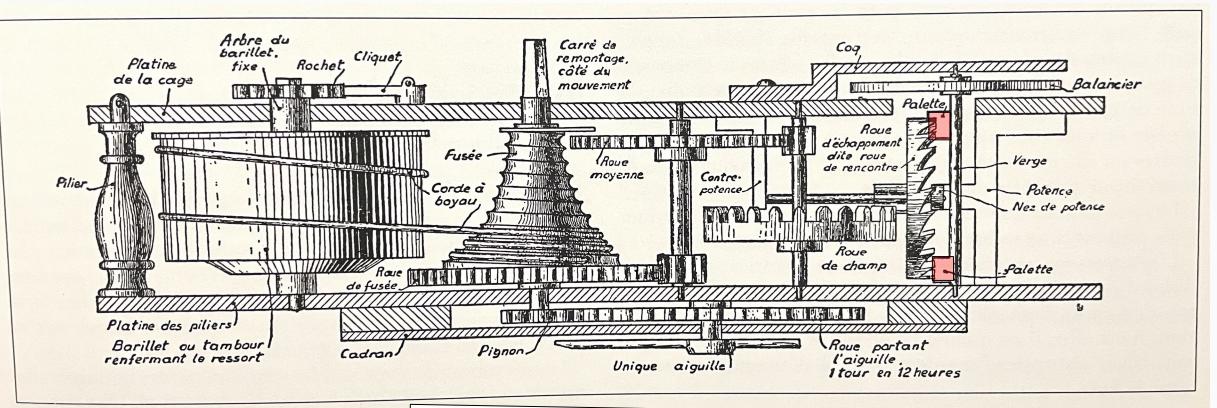


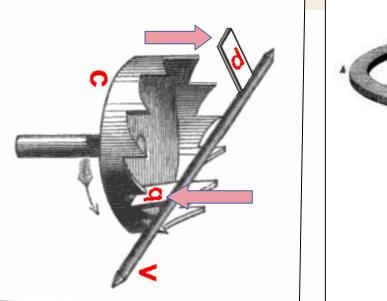


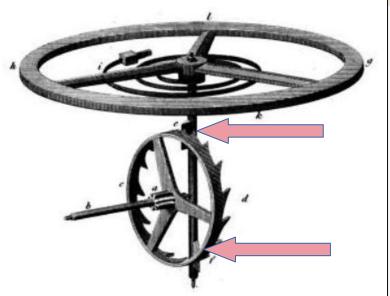
Parts of a typical verge/fusee watch (from Ferdinand Berthoud):

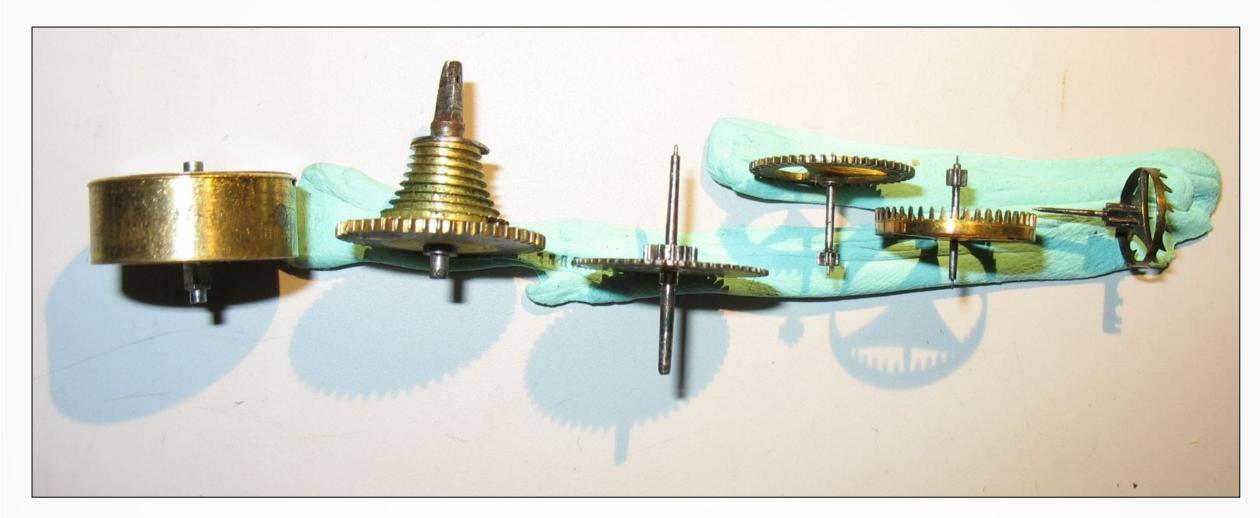
D spring barrel with chain; E fusee; o,p balance staff (verge); Q balance cock; R balance wheel;

I centre wheel; L third wheel; M contrate wheel; N escape (crown) wheel; O potence; X, Y hands









Drive train of my Edward East verge-fusee watch movement

<u>Left to Right</u>:

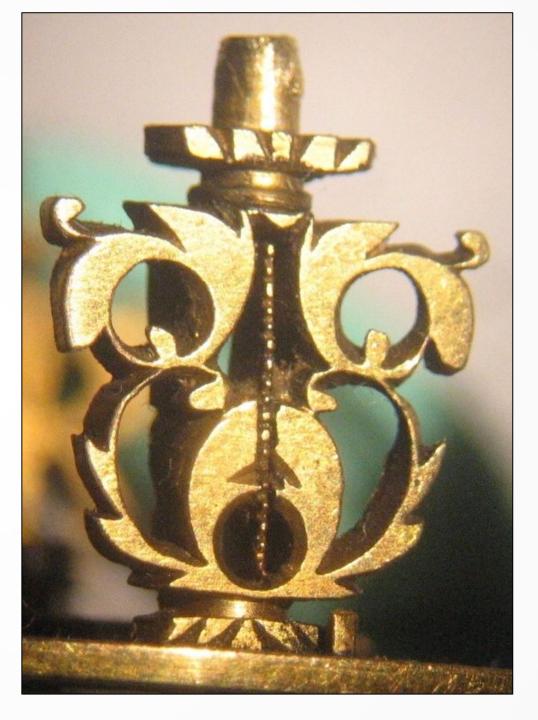
Spring barrel = Fusee = Centre wheel = Third wheel = Contrate wheel = Escape (Crown) wheel



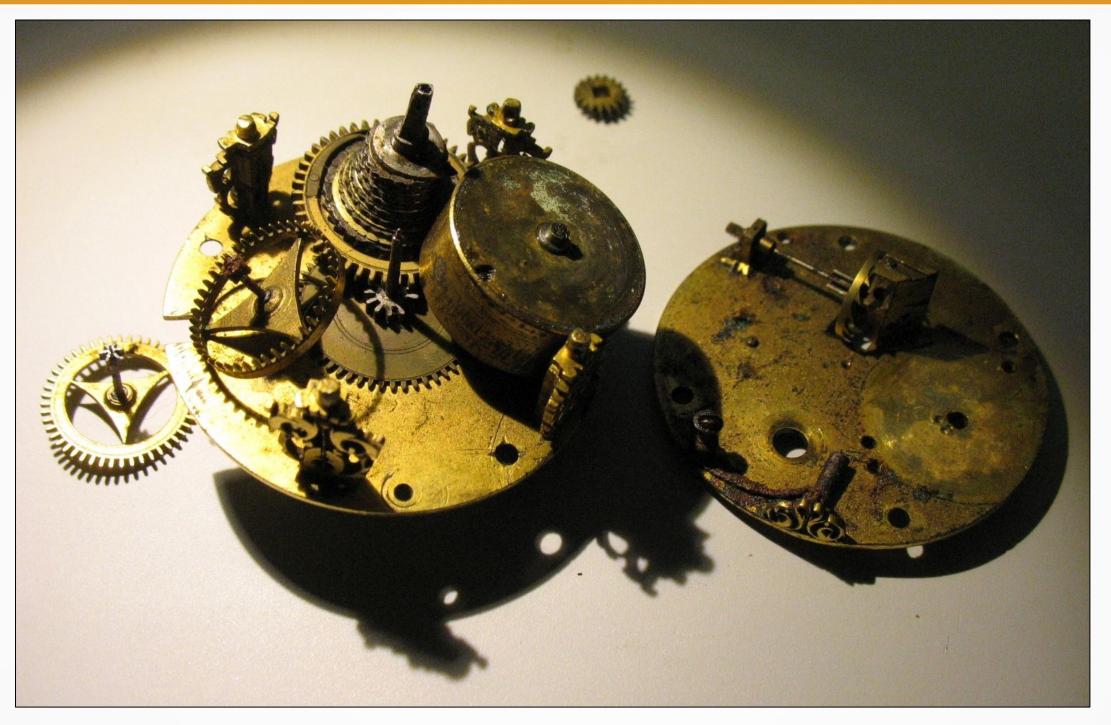


According to Oliver Cook (BM), one of the first representations of a face on an English balance cock





(Note on gilding...)

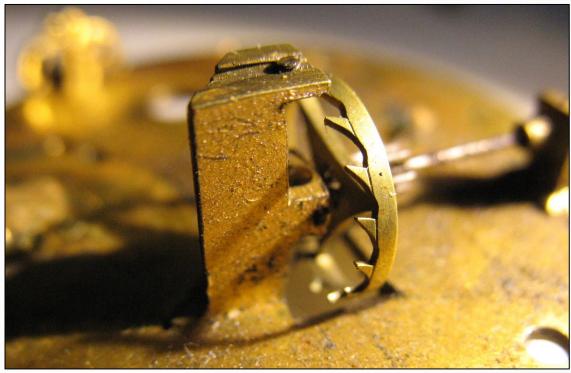


Apart after decades (centuries?)...



Balance spring 1.5 loops (.002" thick, .009" wide), Silver (Tompion) disc, potence

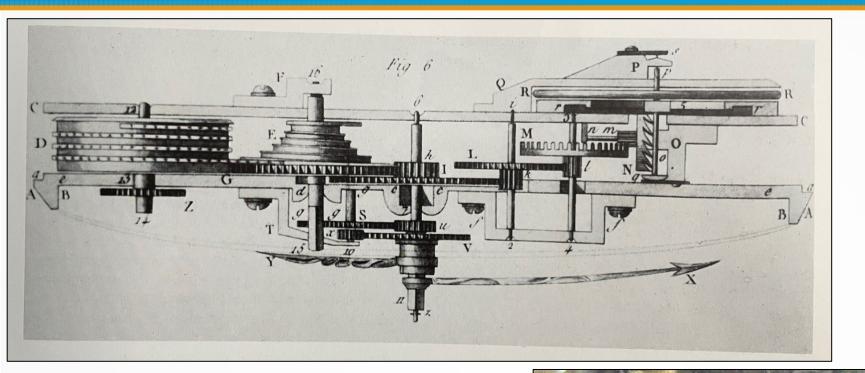








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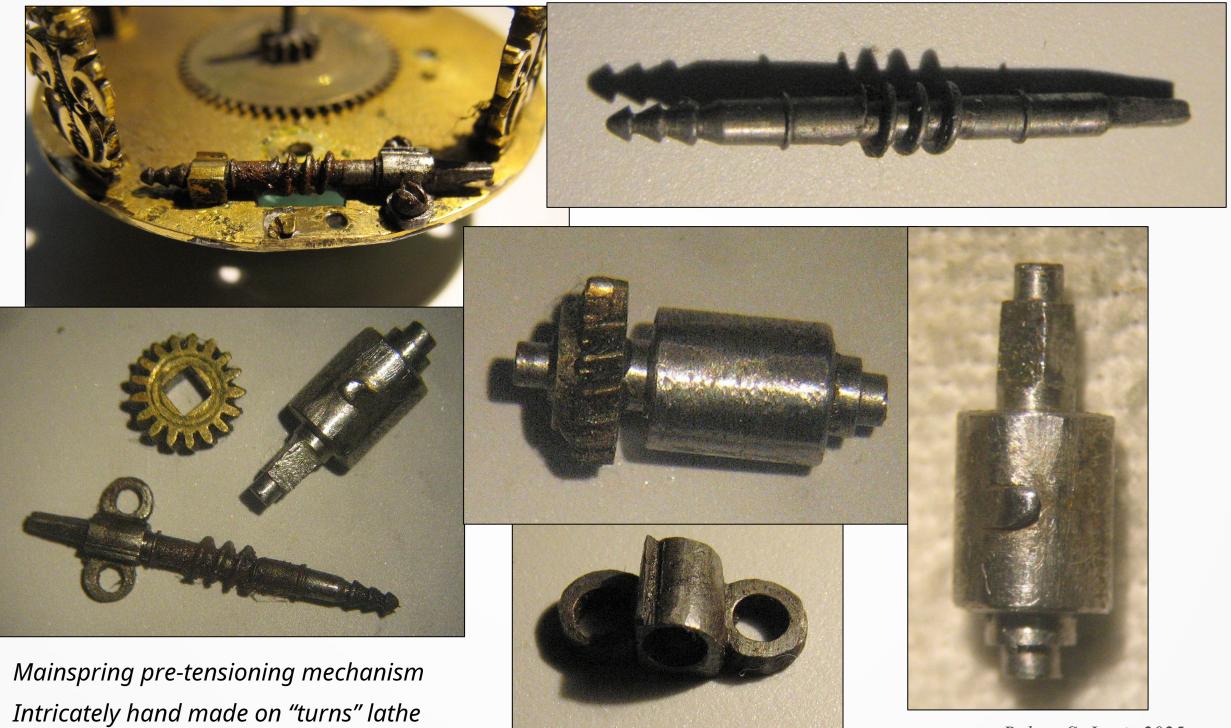


on...

Maintaining spring/chain tension...

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the second



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"Restoration vs Conservation"

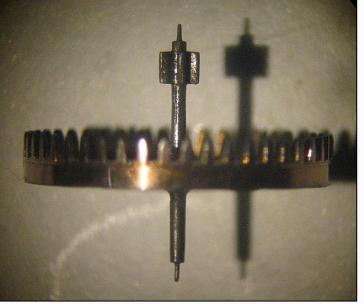


Very intricately turned decorative screw









Removing rust using electrolysis

Restoration vs Conservation – an example



Restoration (from high end horology shop in Paris)

Conservation (from my own personal collection)

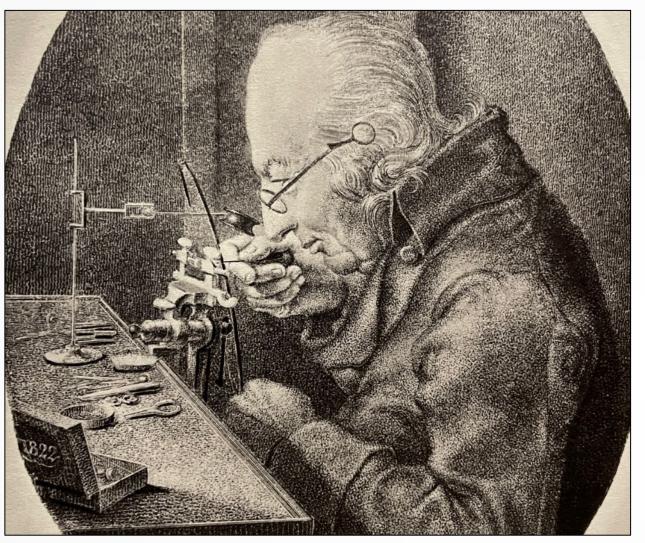
Restoration vs Conservation – an example

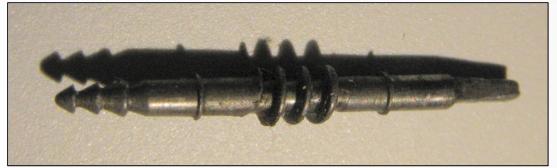


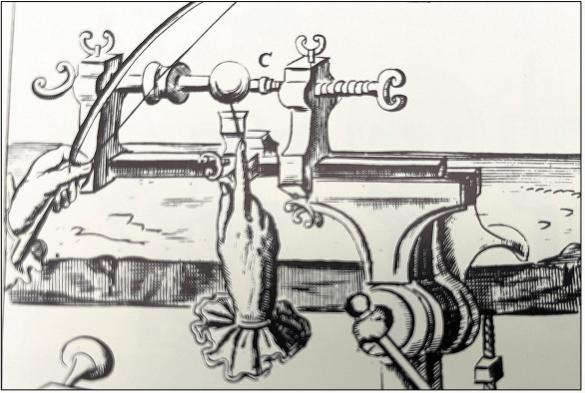
Restoration (from high end horology shop)



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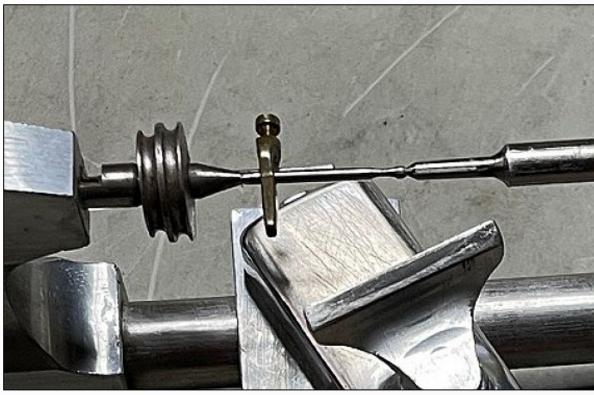


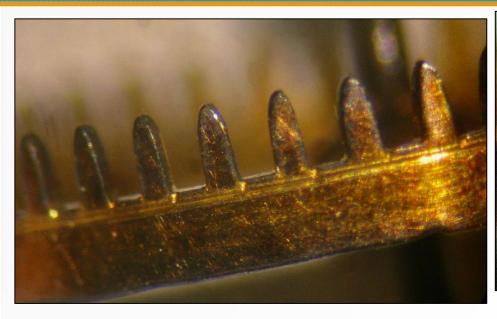


Abraham Louis Perrelet (1729-1826) Inventor of self-winding watch Working a piece on his lathe ("turns") Joseph Moxon 1678 book "Mechanick Exercises or The Doctrine of Handy-Works"



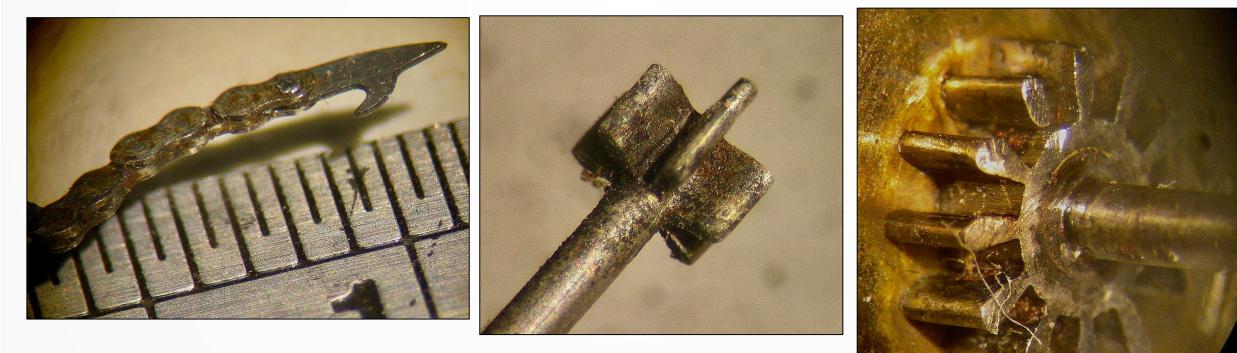
Modern swiss "turns" lathe







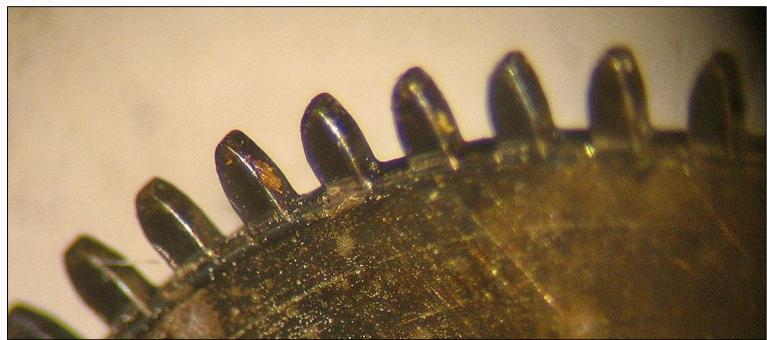
Outside diameter less than 1 cm (15 teeth)



Hand filed teeth, minuscule chain made by hand (women, children) Pinions filed out of the arbor shaft, clever repair of a pinion leaf

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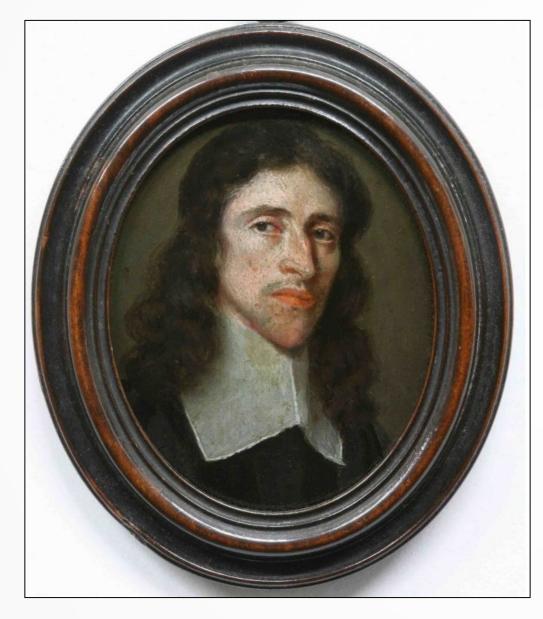


Edward East – Highlights of his life

- When Edward East passed away after a very long life, he could look back on his accomplishments
 - Trained & approved London goldsmith and <u>clockmaker</u>
 - One of the first members of the Clockmaker's Company
 - Warden and Master of the Clockmaker's Company
 - Supporting <u>father</u> of 13 children
 - Watchmaker to both Charles I and Charles II
 - Employed numerous specialists who helped him to produce outstanding watches and clocks for six decades

East played a large part in ushering in what is now called "The Golden Age of British Horology"

Edward East (1602-1695)





Thank you for your attention.

<u>Merci</u> de votre attention.

- Robert St-Louis www.timetales.ca