

Tymperley's Clock Museum

Ian Coote takes us on a pictorial turret clock tour with the Ipswich Branch.

Every year, members and friends of Ipswich branch take a look at half a dozen or so turret clocks somewhere in East Anglia. This year it was the turn of Colchester and the Colne Valley.

Tymperleys Clock Museum

A tour of Colchester's turret clocks must include the clock museum at Tymperleys. The building is so called after the larger house which formerly stood between what is now the museum and Trinity Street. Old Tymperleys was the home of William Gilbert (1544-1603), Physician to Queen Elizabeth I, and a pioneer in Natural Philosophy.

Gilbert played a major role in the reintroduction of the experimental method into science. His 'De magnetie, magneticisque corporibus' of 1600 is generally regarded as the first great scientific book by an Englishman. Gilbert's theory was that the earth was a lodestone with north and south magnetic poles, influencing the solar system. He was also among the first to distinguish magnetism from static electricity and coined the word electricity.

The house was restored in the 1950s by Bernard Mason, a prominent Colchester businessman, alderman, philanthropist and horological collector. His collection of Colchester clocks is probably the largest concentration of clocks from a single town anywhere in Britain and he left the clocks and his house to the borough on his death. He also wrote one of the best regional horological treatises: 'Clock and Watchmaking in Colchester'¹. Tymperleys opened as a museum in 1987. Unfortunately only a small proportion of the collection is on display in the historic house that he left to the town for the purpose.

The nine turret clocks exhibited in an outhouse include some unusual items added since Mason's celebrated book was written, so this would seem to be a good opportunity to make them known to a wider audience. The other clocks on the tour will be described in a second article.

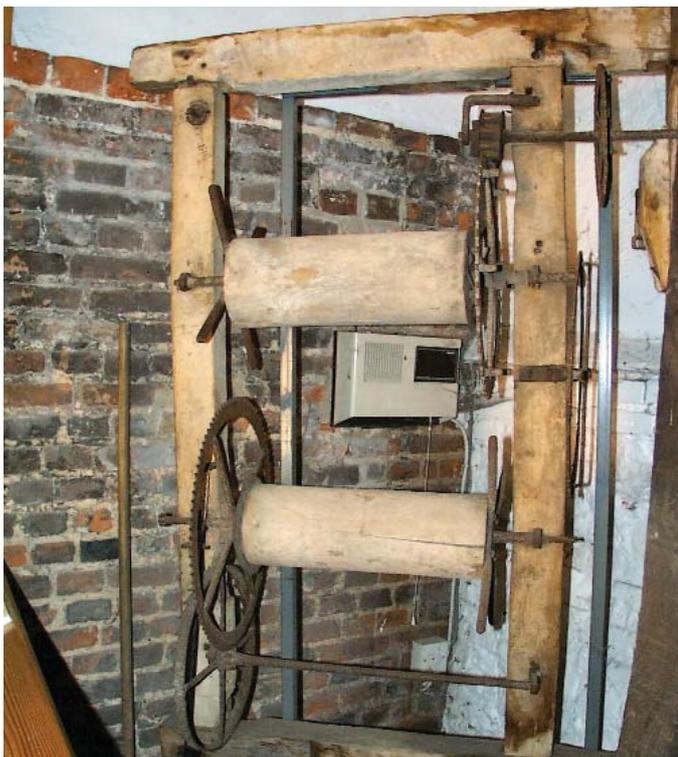


Figure 1: Wood framed movement from Ramsey.

1. St Michael, Ramsey, early 17C

This ancient movement (Figures 1, 2) is a rare survival with its verge and foliot escapement (the verge itself is a replacement, but most of the clock appears to be original). This is a clock stripped to its essentials – a wood frame has iron bars and brackets fixed to it to carry the pivots of the two-wheel trains. Wooden barrels are wound by a capstan and the great wheels work into lantern pinions. Much of the striking work is missing, but the countwheel with its internal teeth is intact. The verge hangs from a cord at the bottom of the movement.



Figure 2: Ramsey movement showing the restored verge.

2. St Michael, Manningtree, late 18C

The frame of this 2-train movement (Figure 3) is a good example of 18th century blacksmith's work. The arbors and pallets are also rather crudely forged but it is fitted with well-cut brass wheels.

There is often debate about who actually made these mechanisms, and there is no way to resolve it with certainty. It would seem likely that the frame and other iron pieces were made locally, but the wheels bought in from a specialist in London or other large centre. Were there perhaps itinerant clockmakers who travelled around the area, making clocks in



Figure 3: Manningtree movement.



Figure 4: Clock number 3 from Wivenhoe.

collaboration with the local blacksmith? The clock was removed from the church (now demolished) in 1887. It has a forged iron frame, brass wheels, anchor escapement and countwheel striking with hoop wheel locking.

3. St Mary, Wivenhoe, early 18C

Another iron framed movement with anchor escapement (Figure 4), this one has internal countwheel striking with peg and lever locking. Note the square cut teeth on the iron great wheels as compared with the brass train wheels. It is provided with a drive for two dials.

4. St Mary, East Bergholt - the earlier movement?, 18C

The interesting feature of this strange looking clock (Figure 5) by an unknown maker is the ingenious single-wheel striking system with worm-driven vertical fly. The pins on the front of the wheel act as the countwheel, while those on the rear operate the hammer (Figure 6). At the same time the teeth on the rim drive the worm to provide a large reduction ratio, allowing the main wheel to move slowly enough. (Figure 7) This set-up

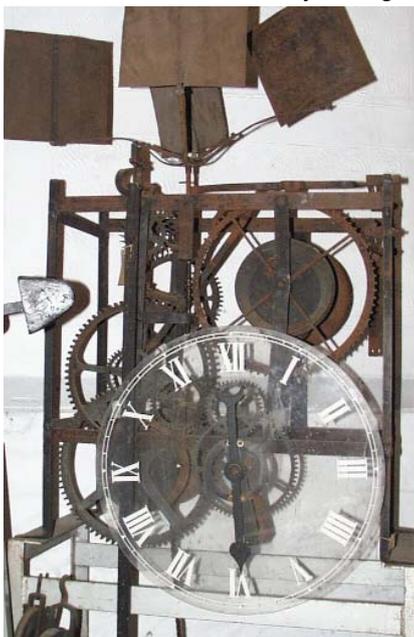


Figure 5: Clock 4 - the earlier East Bergholt clock.

would be liable to considerable wear, and the worm has been replaced. It may well be that this clock was not satisfactory, as it appears to have been replaced after a relatively short time by the Hedge movement below.

5. St. Mary, East Bergholt - the later clock by Nathaniel Hedge (4), 1764

These distinctively shaped movements (Figure 8) are common in East Anglian churches and are found with the names of both London and local makers on the setting



Figure 6: The unusual striking work of clock 4.

dials. A nearly identical movement was seen on this tour at St. Leonards, Lexden (to be described in part 2), and the one from Bures, below, has some similarity.

It has a wrought iron frame, brass wheels, anchor escapement and countwheel striking with hoop wheel locking.



Figure 7: The worm drive to the fly of clock 4.

The Hedges of Colchester

The Hedge family were pivotal in the story of clockmaking in Colchester. Nathaniel (3) (1710-1795), the first clockmaker of the family, was apprenticed to John Smorthwait, then went into partnership with William Cooper. He set up on his own account when he bought the business of his former master after his death. He continued working well into old age.

His son Nathaniel (4) (1735-1821) also lived into his 80s and was another skilled craftsman and shrewd businessman. From 1807 to 1813, already in his 70s, he formed a partnership with Joseph Banister (see clock 7), and they made clocks under the name of 'Hedge and Banister'. There are numerous examples in the museum of domestic clocks and watches by members of the family' in addition to the turret mechanisms.

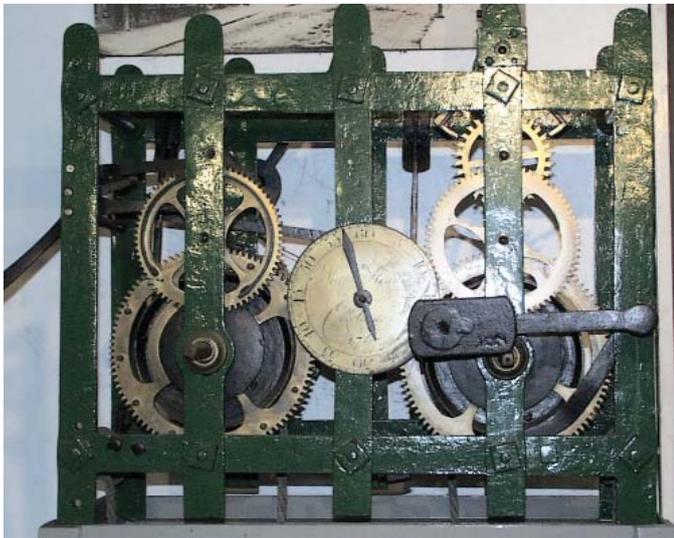


Figure 8: Clock 5 - the Hedge clock from East Bergholt.



Figure 9: St. Nicholas' Church.

**6. St. Mary, Bures,
Thomas Hedge (2),
1780**

Originally a conventional clock by Thomas Hedge (Figure 9), this was converted to Gillet and Bland's 14-legged gravity escapement in 1875. In this version of the gravity escapement⁴ the two symmetrical arms are only used for unlocking - impulse is given on alternate beats by a separate arm. (Figure 10)

The wheels are brass, and striking is controlled by a countwheel, with hoop wheel locking.

Thomas(2) was in business with his brother John until the latter's

death, when he continued alone. He was less successful in the clock trade than his other brother Nathaniel(4).



Figure 10: Thomas Hedge at Bures (clock 6).



Figure 11: 14-legged gravity escapement of clock 6.

7. St. Nicholas, Colchester, Nathaniel Hedge (4), 1767

This clock (Figure 12) used to drive the 'frying pan' dials of St Nicholas Church, restored by Sir George Gilbert Scott (Figure 11) and demolished in 1955 to make way for a new Co-op. It has a forged iron frame, dead-beat escapement and countwheel striking with hoop wheel locking.

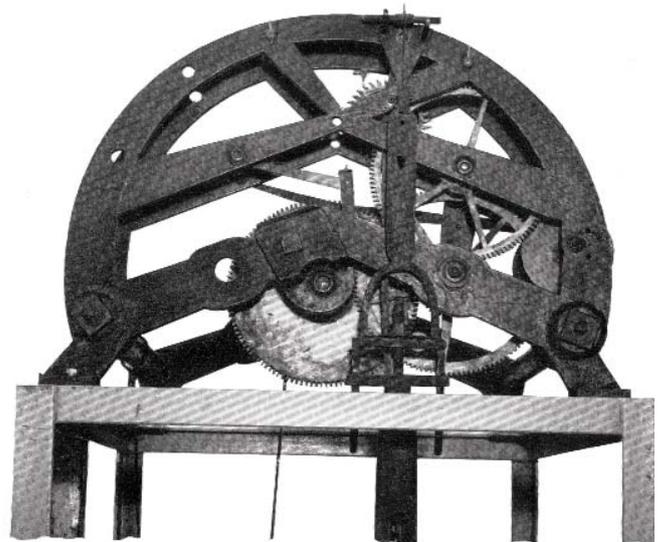


Figure 12: Hedge Movement from St Nicholas (clock 7).

8. Fire Office, Colchester, Joseph Banister, 1820

This oddly shaped timepiece with deadbeat escapement (Figure 13) was purpose built for the Essex Fire and Life Office in High Street. The single train was designed to run for eight days with a drop of only 10 feet for the weight. It has a deadbeat escapement.

Its present position makes photography difficult, but figure 14 shows the high-count wheel work and the sort of quality engineering to be expected from this maker. Joseph Banister (1778-1875) was an outstanding clockmaker with a wide reputation. He patented a variation of the dead beat escapement which can be seen on the fine regulator in the museum.

9. Wormingford, John Cooper, c.1820

At this later date, it is likely that the plates are of cast iron. I could not confirm this as the movement is mounted high in the building to drive the outside dial and close access is not possible. It has a deadbeat escapement and internal rack striking. (Figure 15)



Figure 13: Banister's clock from the 'Fire Office' (clock 8)

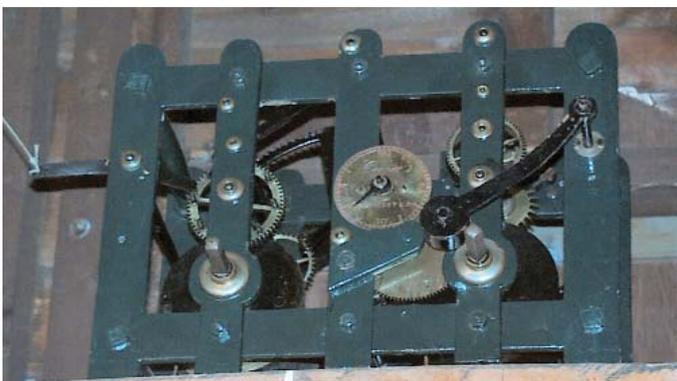


Figure 15: Woringford clock by John Cooper (clock 9).

John Cooper was in business in Colchester from 1818 to 1835, when he moved to Norwich.

The superb Bernard Mason collection is housed in a beautiful setting in the heart of Britain's oldest town. The reserve collection has now been rescued from the damp basement to a safe warehouse, but it would be good to see more of them on display, with an updated exhibition of the whole museum in order to attract the national and international visitors that it

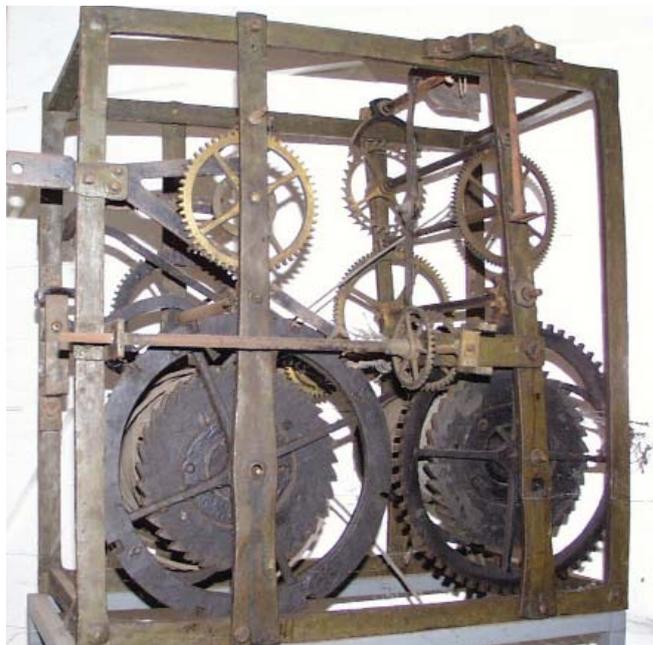


Figure 14: The Fire Office clock from below. (Clock 8).

deserves. East Anglia has recently lost the treasure that was the Manor House in Bury St. Edmunds. Let us hope that Colchester has the foresight to avoid a similar fate for this unique resource.

Ian Coote

Continue the tour in next month's Journal.

References

- 1 'Clock and Watchmaking in Colchester', Bernard Mason 1969, Country Life Books/Hamlyn.
- 2 There is confusion in the labelling of the two clocks from East Bergholt.
- 3 The numbered references to the Hedge family refer to the family tree in 'Clock and Watchmaking in Colchester' p.302-3)
- 4 The only reference I can find to this escapement is a letter from T R Robinson to the Horological Journal, August 1962 p 483. The late Peter Haward called it the 'odd-legged gravity escapement'.