MINIATURE FLEMISH
Part 1 of 2: The

by **John F**

Figure 1. Miniature Flemish lantern clock.

Figure 2. The Flemish miniature dwarfed by a London clock of about 1650.

Lantern clocks were made in all sorts of sizes, ranging from miniatures to giants, though most English ones are of a 'standard' size of about 15in (381mm) tall including a finial at the top. The one discussed here is a very small example only 8¼in (210mm) tall and 3in (89mm) wide, made in French Flanders in a late Renaissance style, **figure 1**. Its very small size can be appreciated when sitting alongside a regular London clock of about 1650, **figure 2**. It is very attractive, even pretty, with many special, unusual and unique features, especially the construction of the frame. Part 1 deals with the dial and the frame, while Part 2 describes the movement, which is also very interesting Throughout this article comparisons are made between this clock and its English counterpart.

It is very attractive, with many special features.

The dial is painted on a brass sheet rather than the more usual iron, and

H LANTERN CLOCK
dial and frame

Robey, UK

Figure 3. Swivelling latches on the rear of the dial.

Figure 4. Digitally enhanced image of the dial.

done at a time when an engraved dial might have been expected. It is only $2\frac{3}{4}$in (68mm) wide and $3\frac{3}{4}$in (98mm) tall, making it one of the smallest recorded painted clock dials.

At first I could not see how the dial was fixed to the frame until eventually, using a torch and a magnifier, two swivelling latches could be seen on the rear near the top edge, **figure 3**. They could be pushed inwards to release them from behind the edge of the top frame casting. There are also tabs fitting into the bottom frame casting. This is a very neat method which I have never seen before.

Enquiries were made which confirmed its uniqueness.

Enquires were made with collectors in England, the Netherlands and Germany, who confirmed its uniqueness. Apparently the dials of Renaissance clocks are held by either a lug on the dial rear passing through a square hole in the front movement bar (as used on a few early English

Figure 5. The tiny hand, only $1^{1}/_{2}$in long overall.

Figure 7 (below). Components of the frame.

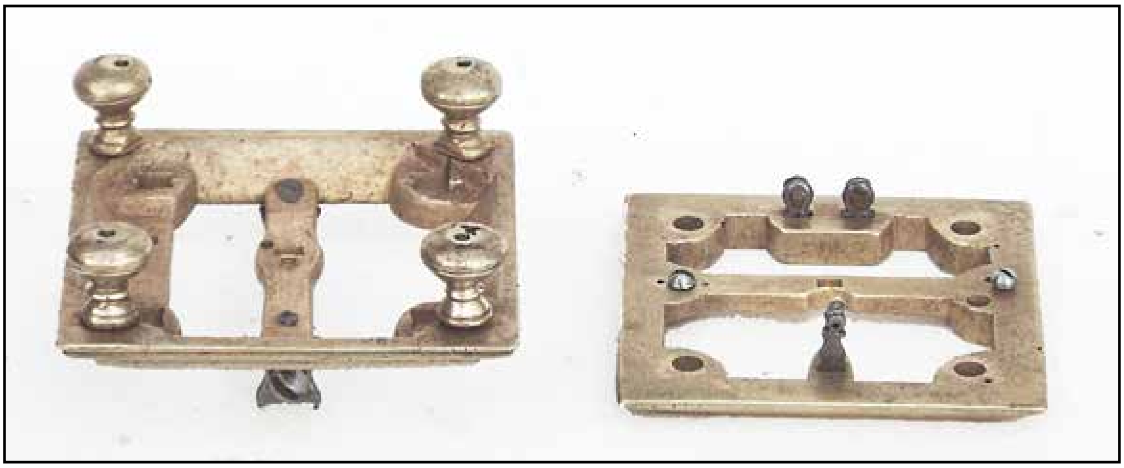

Figure 8. Undersides of the frame castings: lower (left) and upper (right).

clocks), or more usually tabs fitting into slots in the top and bottom plates. This entails lifting the top plate slightly, which is very inconvenient compared to the easy method on this clock

Though the dial is dark and distressed, a star can be discerned at the upper left and a rather odd white semicircle at the top, **figure 4**. In a scroll below the chapter ring is ‘NINE— * A * LISL[E]’, but unfortunately paint has flaked off the final letter of the name and the last letter of the place is indistinct, **figure 5**. A miniscule date 1686 appears at the very bottom, without this the clock might have been estimated to have been made much earlier. The nicely shaped arrow-head hand is very small, having an overall length of only $1^{1}/_{2}$in (39mm), **figure 6**.

By contrast with an English lantern clock, the frame of this Flemish clock is more complex

English lantern clocks have a very simple frame construction that was a major contribution to their success. This is comprised of two square plates of identical size and four corner pillars, held together by screw-on finials and feet, with a bellstrap held on the finials. By contrast the frame of this miniature Flemish clock is more complex, and just about the only similarity they share is that both are mainly made from brass castings.

The components that make up the frame of the Flemish clock are shown in **figure 7**. Instead of simple flat plates there are two chunky castings with a protruding moulded cornice on the top one and a moulded plinth on the larger base. Each frame casting has an integral cross bar: on the base it goes

Figure 10 (left). The bell strap.

Figure 12. Bun foot with a tapered spigot.

Figure 9. The top of each pillar has a tiny ball fitted to a spigot.

Figure 11. Half-lap joint on the bell strap.

from front to back, and on the upper one from side to side. While **figure 7** shows the top of these castings, **figure 8** shows the undersides, with the feet in place.

The pillars are of a round cross-section, apart from short square sections near the centre, where the strikework arbor passes through the left-hand pillars, while on the right-hand side the square sections are purely decorative. Instead of finials there are two tiny balls, the top ones being separate and fitted on to small spigots. The right-hand rear pillar had lost its top ball, so a replacement was turned on the end of a bar of cast brass, and a hole drilled before parting it off. It is now difficult to tell which is the replacement.

Figure 9 shows the tops of two pillars, one with its top ball intact, the other with just the spigot. This photograph also shows a large slot in the rear right-hand pillar, the function of which will be explained in Part 2. The lower ends of the pillars pass through square holes in the base casting and are held in place by taper pins, a method that may be unique. Since these spigots are positioned in recesses in the casting the taper pins have to be tightened by using a punch and a hammer.

The delicate and relatively tall bell strap with chamfered edges is made in two parts.

The delicate and relatively tall bellstrap with chamfered edges and decorative filing, **figure 10**, is made in two parts held together by a riveted half-lap joint, **figure 11**. This is another feature that I have never seen before (though it may have been used

Figure 13, The assembled clock frame.

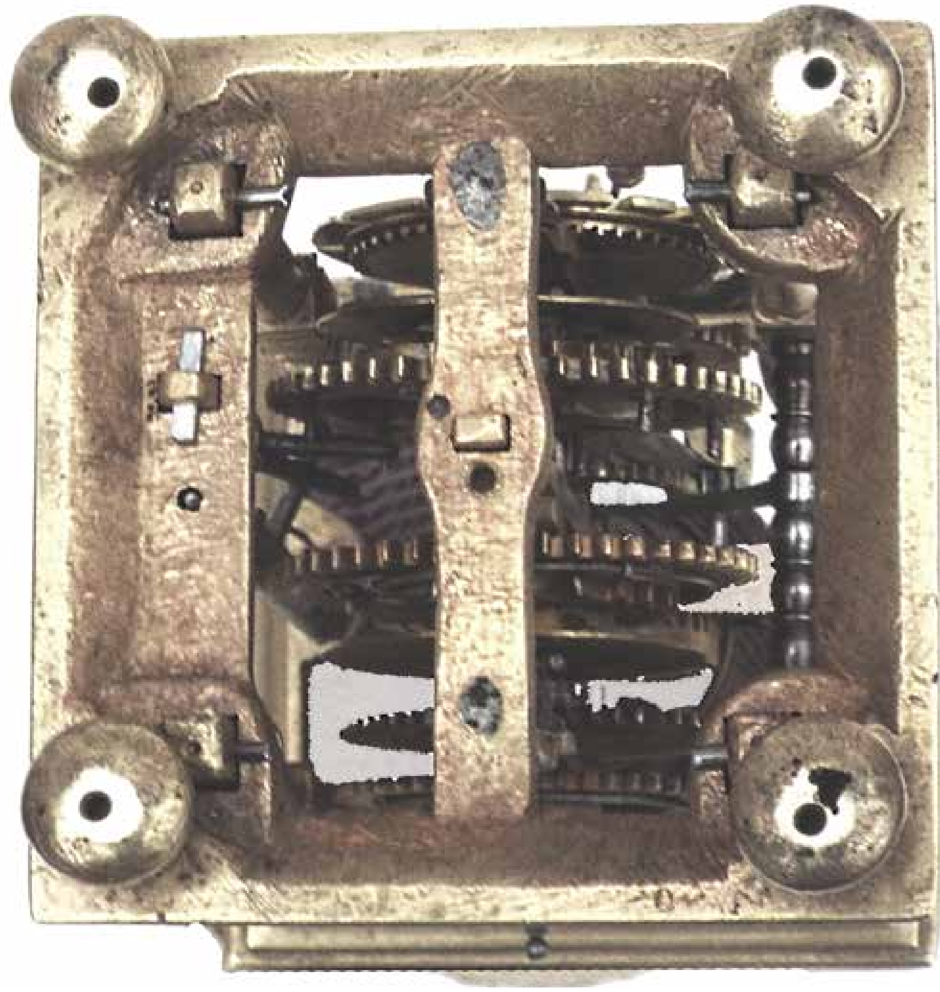

Figure 14. Bottom of the movement showing pillars held by taper pins.

on much earlier Renaissance clocks). This construction was probably used to avoid potential problems when getting the molten metal to run along four narrow arms during the casting process. Once the two parts were riveted together and neatly finished by filing, the arms would have been bent round a former using a wooden mallet. The ends of the arms have relatively large supporting 'feet' that would have been cast in place, not simple bent over, which would have cracked the brass.

The top extensions of the pillars pass through round holes in the top frame casting; the feet of the bell strap then sit over the pillar extensions, and both the frame casting and bell strap are held firmly by taper pins. A disadvantage of this system is that the bell strap tends to get in the way while assembling the wheels and escapement, especially if the bell is first attached to it. The simple solution was to use temporary spacing washers until the bell and its strap were ready for final assembly. The good quality bell, which is relatively thick and deep, is held by a square brass nut, that is probably original, and there was never a top finial.

The clock sits on relatively large bun feet, **figure 11**, but instead of the English system of attaching them to the ends of the pillars by screw threads, they have large tapered spigots that fit into corresponding holes in the base casting and do not hold the frame together. Since these feet are further apart than the pillars and the base is larger than the upper part of the frame, it provides a very stable structure and a compact 'chunky appearance, typical of the late Renaissance style.

The assembled frame and bell strap is shown in **figure 13**, with **figure 14** showing the taper pins holding the pillars on the underside of the complete clock. There never were any side doors or removable latched panels, nor a rear cover, possibly to display the decoratively turned hammer shaft and

Figure 15. The movement bars showing the side arms.

Figure 16. Side view showing the thicker sections on the central bar.

strikework arbor (see Part 2).

The remaining parts that make up the frame are the three movement bars, and these are also very special, having unusual shapes and fixed in the frame by a completely different method to that used on conventional English or French lantern clocks. The central and rear bars have side extensions in which the fly pivots, and are in the shape of birds' heads, probably meant to represent peacocks, **figure 15**.

On most posted-frame clocks with end-to-end trains, the first three arbors of each train are offset by a small distance so that each pair of pivot holes in the central bar are far enough apart to provide strength and to allow for rebushing. Here the pivots are in-line and fit in three thicker sections of the central bar, **figure 16**. While this is very unusual it is not entirely unknown, as it is found on a very heavy all-iron Italian clock of about the same period, that was discussed in *Clocks* December 2020, pages 26-34. This feature is also known on two very early small Flemish Renaissance clocks.

To hold the central bar in place tenons at each end fit into mortices in the cross bars of the upper and lower frame castings, and it has to be inserted before the top casting is in place. Once the frame is fully assembled the central movement bar cannot be removed. Spigots at the top of the front and rear bars fit into holes the top frame casting, while the lower ends are held by screws to iron brackets riveted to the base casting. This is the opposite to the conventional method where lugs at the bottom of the bars fit into the bottom plate and wedges at the top hold the bars in place. The use of screws and iron brackets is something else I have never seen before.

Having dealt with the dial and frame, Part 2 will discuss the movement, including the verge escapement and especially the strikework.