PONT-FARC

Part 1 of 3. A Norm

by **John R**

Figure 1 (left). Normandy lantern clock, signed 'Nativel A Guiberville'.

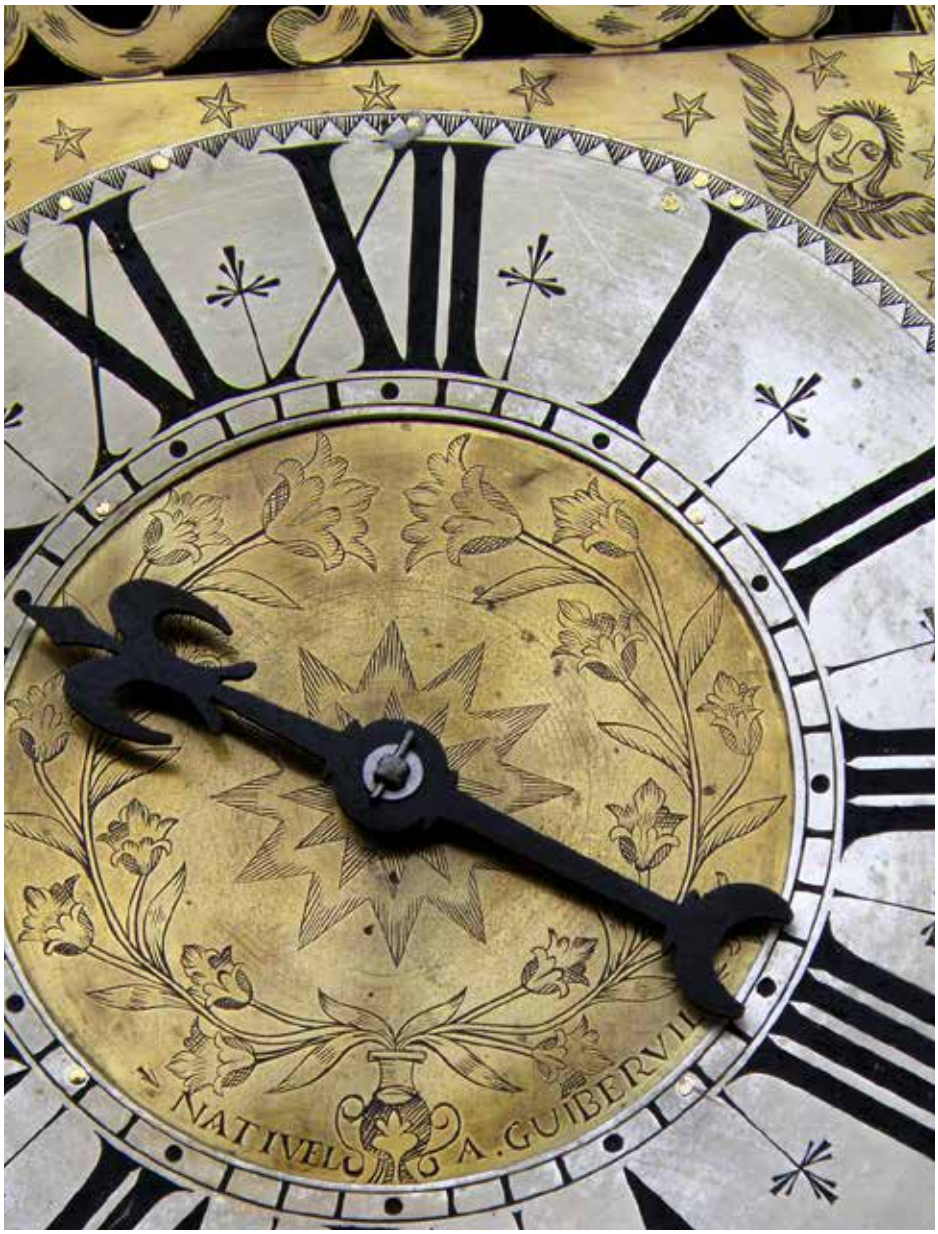
Figure 2 (centre). Components of the dial.

Figure 3 (right). The engraved dial centre.

Normandy in northwestern France has a long history of making clocks, especially the village of Pont-Farcy, which has always been an important crossing point of the River Vire. Iron ore from this area of Calvados has been smelted

CY CLOCKS
andy lantern clock

Robey, UK



using charcoal from the local forests since medieval times, and this gave rise to a tradition of ironworking in Port-Farcy.

By the eighteenth century the local iron industry began to specialise. Ironwork for clocks, including utilitarian iron frames having rectangular-section pillars, usually with tall legs, which were supplied to local clockmakers. They then made the brass wheels and completed the movements, either as lantern clocks or longcase clocks.

These movements are often 30-hour with a verge escapement and countwheel striking, or eight-day with rack striking, with an anchor escapement (see Part 2). Both types have pull winding with separate weights for each train. A Huygens' loop is unusual on French rural clocks, even though both weights may hang on the same side. In addition there are small timpiece alarms, though they are not

Figure 4. Female winged angel heads in the dial corners.

often found (see Part 3).

The clock shown in **figure 1** is a very early example of a single-handed lantern clock from this region, the dial being especially interesting. There are the usual brass wheels, a verge escapement and rear pendulum, warned hour striking, a passing half-hour strike, and an engraved brass dial and fret. The frame and movement bars are made of iron; the bell and bell frame are restorations. There is no hanging hoop or spikes, so it was probably housed in a long case, or a wall case, or sat on a bracket.

The dial has a very unusual construction, **figure 2**, being comprised of four thin brass sheets. The centre and recently silvered chapter ring are about 1-1.5mm thick, while the upper part with an integral fret, and the lower part are only 0.4-0.8mm thick. The centre, upper and lower parts are riveted to the chapter ring, which overlaps the sides of the movement. The dial is fixed to the frame by four small brass angle brackets.

Figure 7. Four-wheel going train a-nd motionwork.

The centre is engraved with two stems bearing leaves and flowers emanating from a small stylised vase and encompasses a double star of 12 points. Though this type of central star is often found on Normandy dials; this construction and style of decoration is not known on other clocks.

The most remarkable features of the dial are the spandrels, with each corner being engraved with a winged female angel's head, **figure 4**. They have punk-like spiky hair and staring eyes, and are surrounded by large five-pointed stars. These charmingly naïve engravings have an almost caricature quality. The scrolls on the fret, which is integral with the top part of the dial, have small stylised leaves between engraved lines, **figure 5**. Both the dial and the chapter ring are edged with small hatched triangles. The iron hand is a variant on the popular French fleur-de-lis pattern.

Turning now to the movement, the iron frame is typical of Pont-Farcy clocks, with plain rectangular-section feet and finials, **figure 6**, the latter having notches to hold the arms of the bell strap. The pillars are fitted into rectangular holes in the corners of the plates, and small tabs were cut in the feet and finials with a chisel, and then riveted to the plates to hold the frame together. The plates have apertures just

Figure 5. The engraved fret.

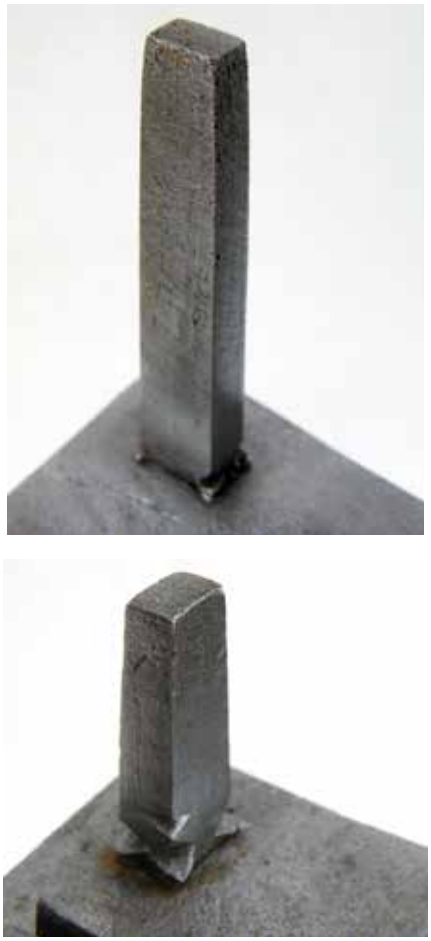


Figure 6. Foot (top) and finial (bottom).

large enough for the ropes, escapement and hammer to pass through.

Since there is a verge escapement, as found on early clocks with a short pendulum, the going train has four wheels, **figure 7**, while the striking train has the usual three wheels and a fly, **figure 8**. All the wheels are made of brass, with both greatwheels having four crossings, while all the other train wheels have three crossings. The wheels are fitted on to collets turned on the iron arbors, **figures 9 to 10**. The circular spring winding clicks act on the crossings of the greatwheels, in the usual English manner, and locking of the striking train is by the usual hoop wheel. The fly is not the usual casting, instead two brass strips have been riveted together to encompass the arbor.

Instead of both greatwheels being positioned close to the central movement bar, the striking greatwheel is at the rear of its arbor and the other wheels in the train are at the opposite ends to the normal arrangement, as can be seen in the side views of the movement, **figures 15** and **16**.

The hour wheel is supported by a bracket screwed to the front movement bar. This avoids the problems that would have undoubtedly occurred if the hour wheel arbor with the heavy iron hand had been supported by the thin dial centre.

Instead of the strikework and hammer arbors being pivoted in side arms on the

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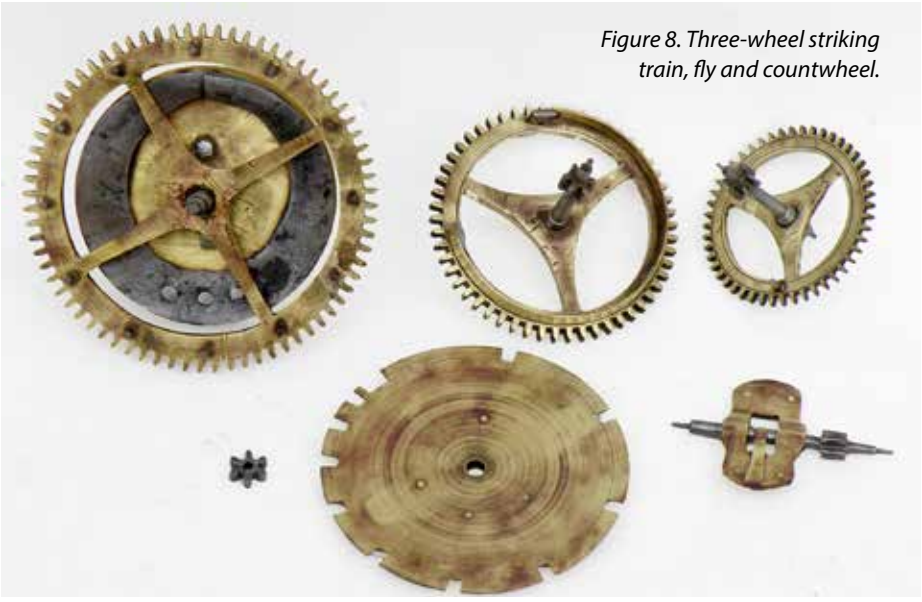


Figure 8. Three-wheel striking train, fly and countwheel.

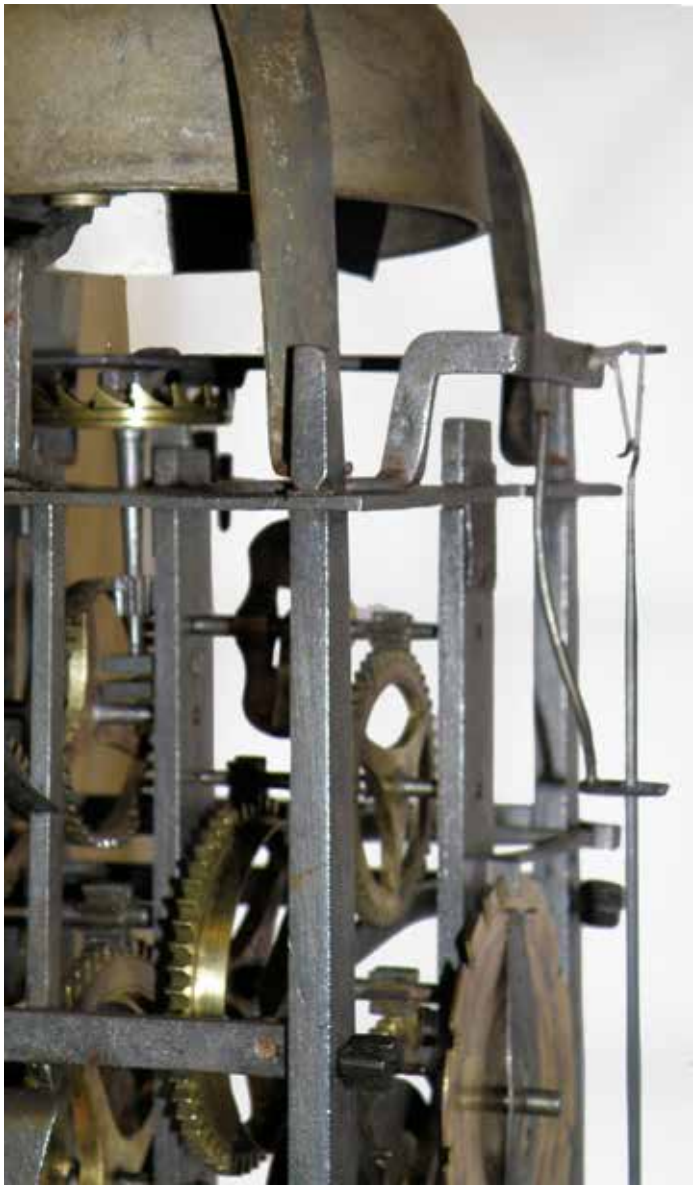
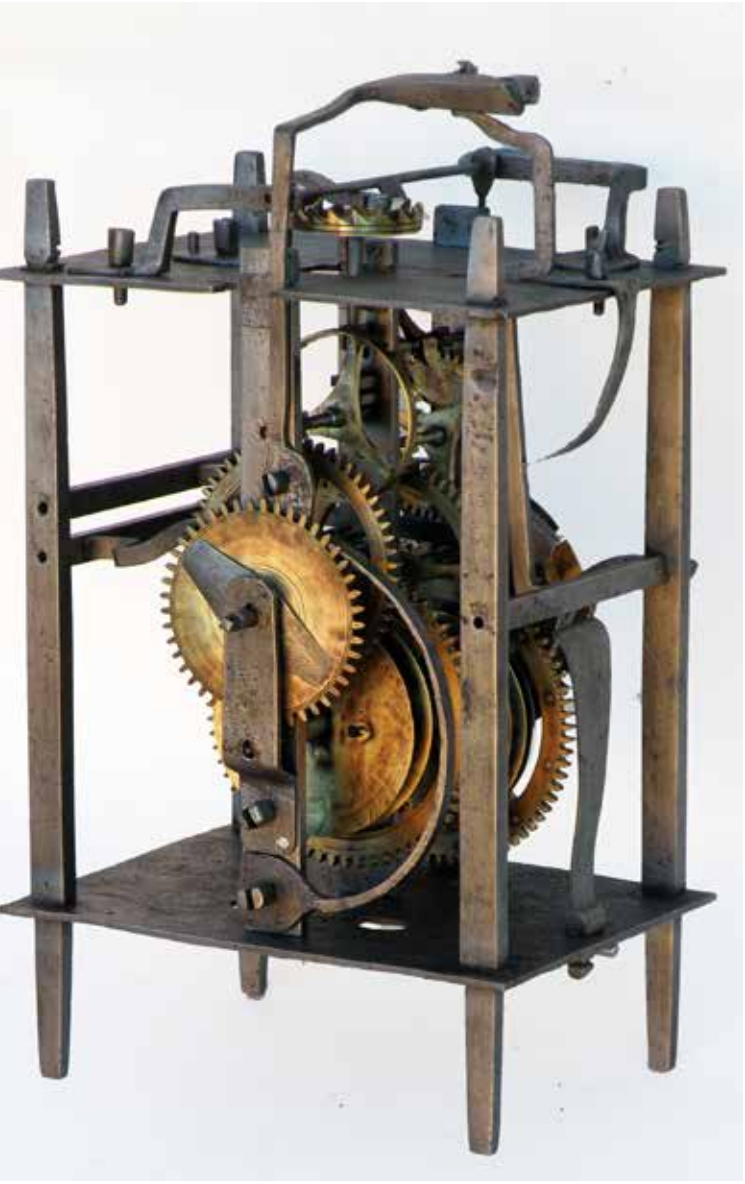


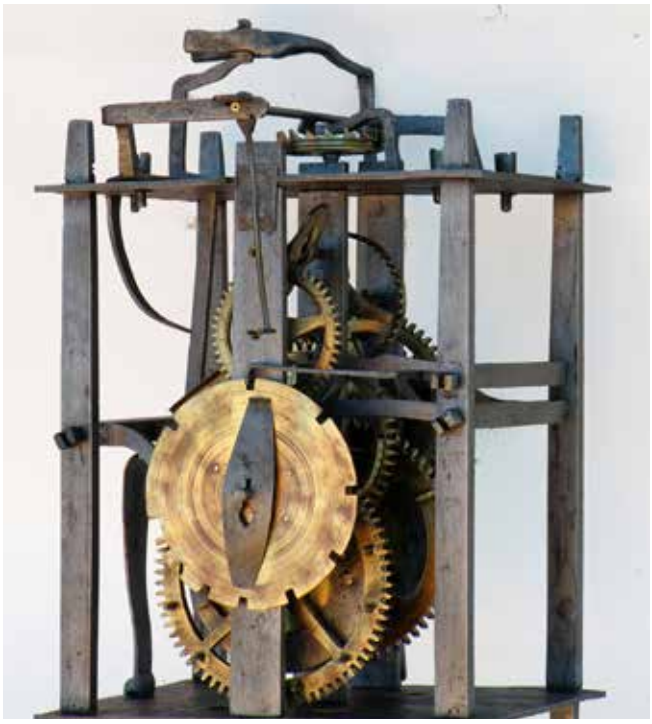
Figure 9 (left top). Contrate wheel fixed to a collet turned on the arbor.

Figure 10 (left centre). Hoop wheel fixed to a collet turned on the arbor.

Figure 11 (above). The pendulum suspended by a thread from the back cock.

Figure 12 (left). The strike-work, hammers, cocks, and other iron components.





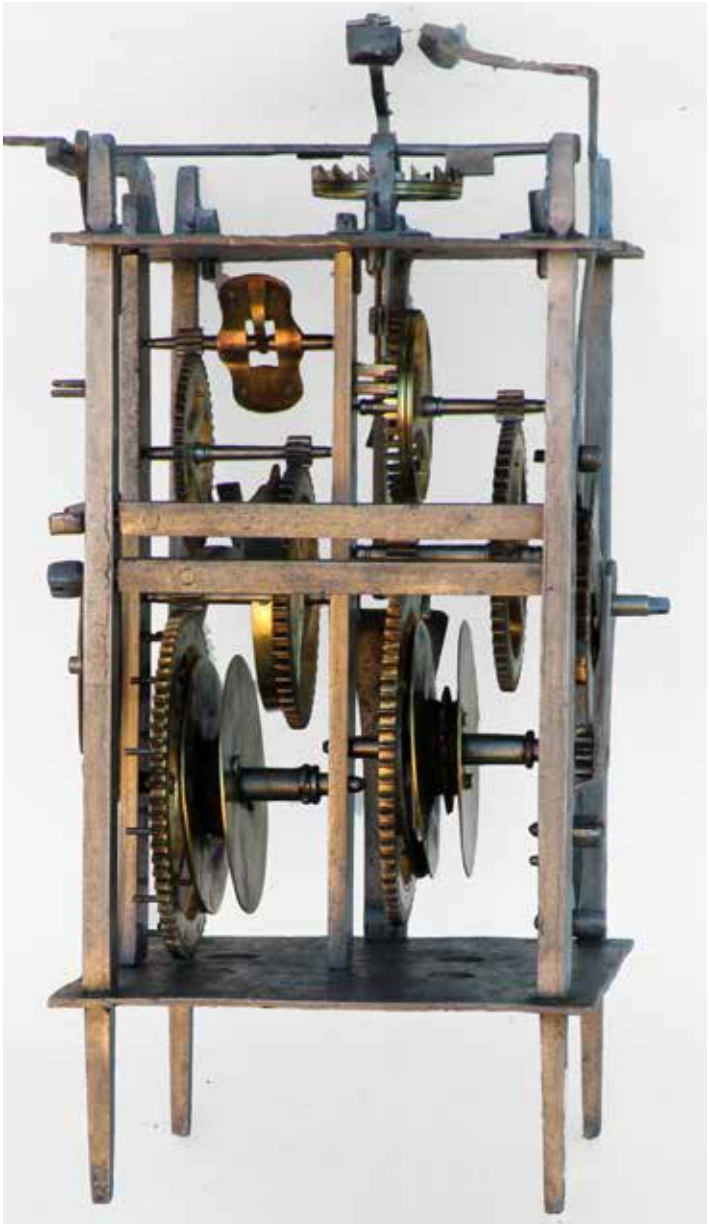


Figure 13 (top left). Front of the movement.

Figure 14 (left). Rear of the movement, showing the brass countwheel.

Figure 15 (top right). Left-hand side of the movement.

front and rear movement bars, as usual on English lantern and 30-hour posted-frame clocks, they pivot between the pillars with screw-in pivots at the rear, in the typical French manner. Since the two trains are powered by separate weights the hammer is on the right and the strikework arbors are on the left, with the hammer striking the inside of the bell, just like an English balance lantern clock. The hammer spring is held on to the lower plate by a taper pin, while the hammer head is removable and is also held to its shaft by a taper pin.

The hammer spring on Pont-Farcy movements is often quite wide, and though this one is not excessively broad it does push against two pins on the hammer arbor. The hammer stop is a curved spring screwed to the top plate. The hammer of the passing half-hour strike and its curved spring are screwed to the front movement bar. The long hammer head, like the hour hammer, strikes the inside of the bell.

The verge, with a crutch at the rear, and the crownwheel are pivoted in the usual iron cocks screwed to the top plate, while the pendulum with a brass bob is suspended by a thread from an iron back cock, **figure 11**. The pendulum of an English verge escapements, on both lantern and spring table clock is attached directly to the verge and has a knife-edge suspension. It is debatable whch method has the advantage—the aim of both systems is to allow a relatively heavy bob to be used without increased friction of a conventional pivot.

All the iron components of the strikework, hammers, springs, cocks, and the support for the hour wheel arbor are shown in **figure 12**. The complete movement is shown in **figures 13** to **17**, where many of the features discussed can be seen in situ, while the dimensions and wheel and pinion counts are shown in the panel to the right.

It now remains to consider who made this clock, where and when. Most clocks of this type are not named, though a few are known signed by Pont-Farcy clockmakers. This clock is one of the exceptions, and is signed 'Nativel A Guiberville' on the lower edge of the dial centre, just inside the chapter ring. This village, which is now usually spelt Guilberville, is only 10km (6¼ miles) northeast of Pont-Farcy. The name Nativel has several variants, but none of them are recorded as an eighteen-century clockmaker. This is not unusual as rural French clockmakers are rarely included in published lists of French clockmakers, with most attention being paid to those working in the large cities and major clockmaking centres. So without any documentary evidence only a considered estimate can be made of when it was made and about 1740 would be a reasonable guess.

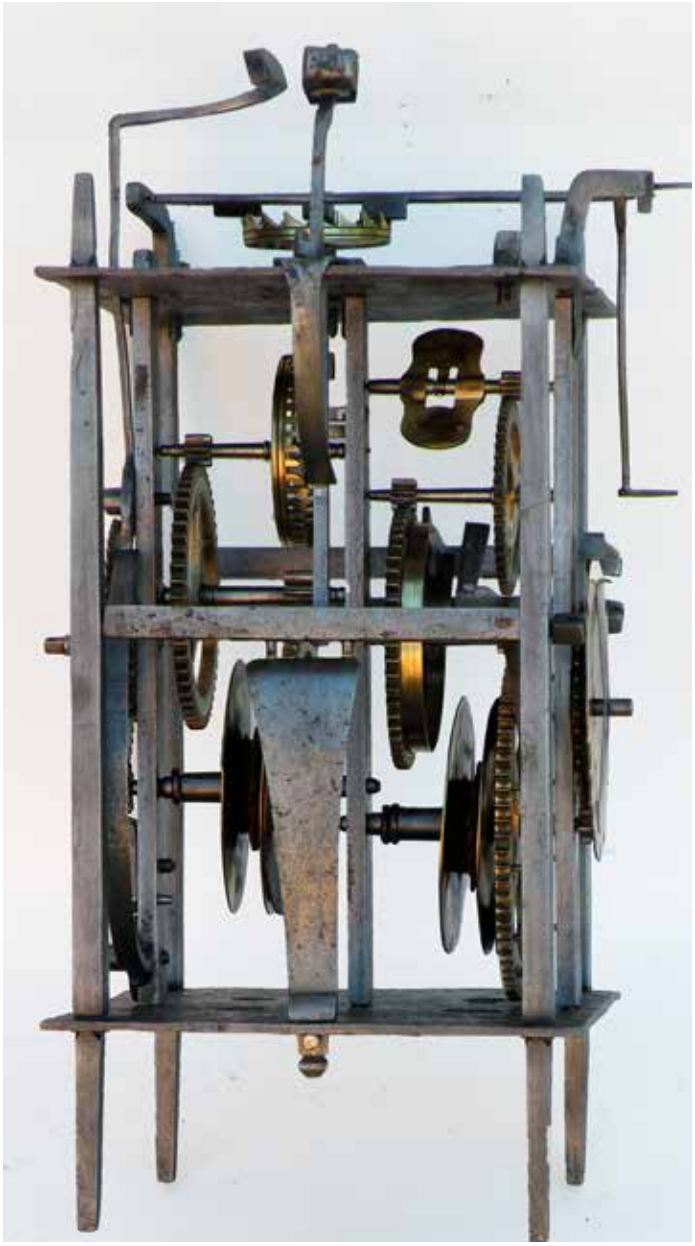
WHEEL COUNTS

Going train			Striking train		
Crownwheel	17	6	Fly		6
Contrate wheel	42	6	Warn wheel	48	6
Second wheel	54	8	Hoop wheel	54	6
Greatwheel	80	8	Greatwheel	80	
Hour wheel	56		Countwheel	78	
Beat = 0.45 seconds			Hammer pins	12	

Duration=One day

OVERALL DIMENSIONS

12½in tall x 7¼in wide x 6¼in deep (318 x 183 x 160mm)
Frame (excluding feet and finials): 7in tall x 6½in wide x 5in deep (180 x 165 x 127mm)



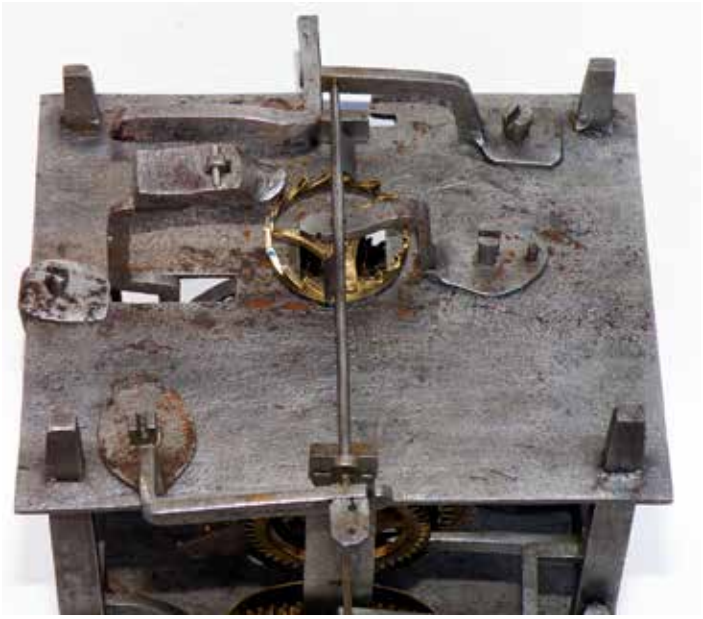


Figure 16 (left). Right-hand side of the movement.

Figure 17 (above). Top of the movement showing the verge escapement.