A Peter Closon – circa 1650 Lantern Clock Comparisons and Observations

G.Cox DEC2009

Arguments for attributing a full sized lantern clock (as recently surfaced - DEC 2009), as a product from the workshops of Peter Closon – 'Neer Holburn Bridge' London', a prolific maker of these clocks from 1625-1660 in the Lothbury clockmakers' district in London.

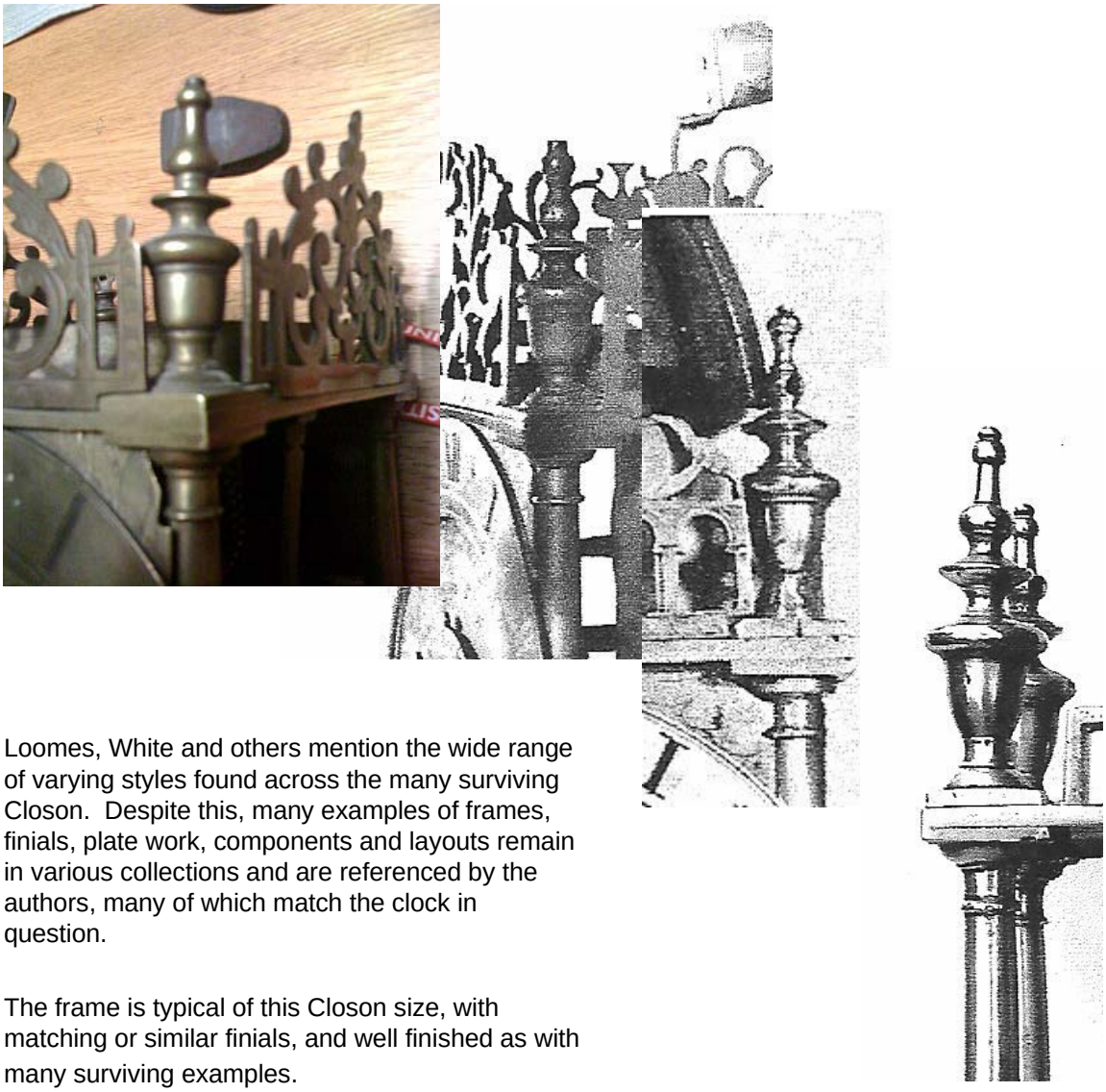
By comparing various common details and observations with those from known examples well documented in the (3) major works on the subject*, it can easily be demonstrated that dial plate, frame, and movement are original to one another and produced in the same workshop as those examples in the comparison, accepted and attributed to Peter Closon.

* Eartly English Clocks - Dawson ,Drover, and Parkes 1982

English Lantern clocks – White 1989, and Lantern Clocks and Their Makers – Loomes 2008

gcoxuk@gmail.com

1. Background – Matches amongst various styles of a prolific maker bridging 1st and 2nd periods of production



Loomes, White and others mention the wide range of varying styles found across the many surviving Closon. Despite this, many examples of frames, finials, plate work, components and layouts remain in various collections and are referenced by the authors, many of which match the clock in question.

The frame is typical of this Closon size, with matching or similar finials, and well finished as with many surviving examples.

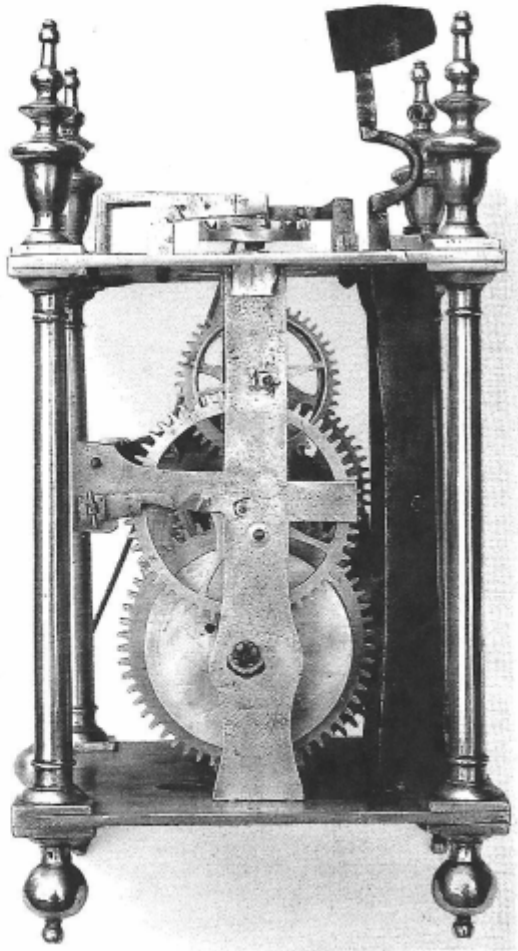
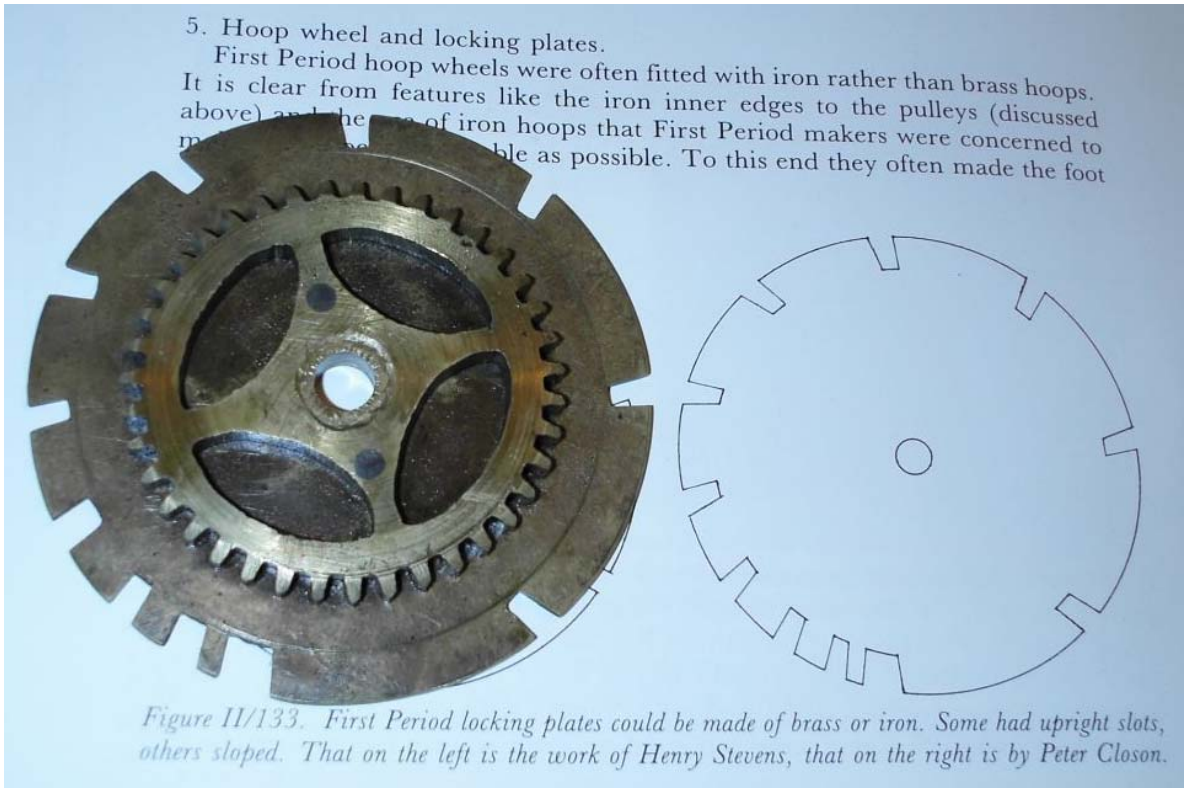


Fig 8.5 Originally a balance-wheel clock by Peter Closon, converted later to verge pendulum. Late features are: matchstick flower half-hour markers, dolphin frets, late pattern finials but grander and taller than usual. Date 1650s. (Photograph: John Robey)

Fig 8.6 (above right) Civil War period clock signed on the dial plate 'Peter Closon Neere Holburne Bridge Londini Fecit' surrounded by superbly-engraved flowers, which enclose the signature. Lack of alarm-work gives the engraver more scope. (Photograph: John Robey)

Fig 8.7 (right) The movement from the front, dial removed. An unusual feature is that the crossbar is foreshortened on the right and two iron upright posts hold the pivots for the hammer. During conversion to pendulum a semicular section was added to the hammer shaft so that it would not foul the pallet arbor when pulled right back. (Photograph: John Robey)

2. Matching Components - Plates and layout

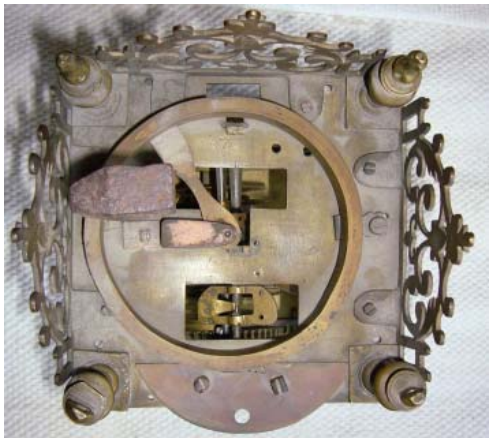


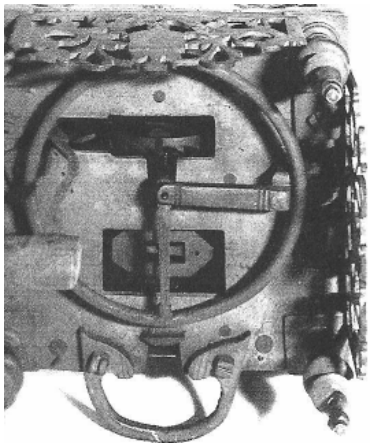
5. Hoop wheel and locking plates.

First Period hoop wheels were often fitted with iron rather than brass hoops. It is clear from features like the iron inner edges to the pulleys (discussed above) and the [illegible] of iron hoops that First Period makers were concerned to [illegible] as possible. To this end they often made the foot

Figure II/133. First Period locking plates could be made of brass or iron. Some had upright slots, others sloped. That on the left is the work of Henry Stevens, that on the right is by Peter Closon.

George White mentions Closon's preference for large count wheels ~3.25 inches in diameter compared to other makers choosing smaller wheels. The example in question measures the same, and matches the line drawing example exactly, including the angled slot layout.





The top plate to the example shown in in Dawson, Drover and Parkes matches

(pg 64 plate 74)

Matching Components - Plates and layout (cont'd)

Loomes shows a pre-civil war example with an identical front plate layout to the clock in question (page 94 fig 8.5-7) .

There are other examples in various sources that show the scalloped lower right corner of the right arm.

3. Matching Foundry Marks - ‘Matchstick man’

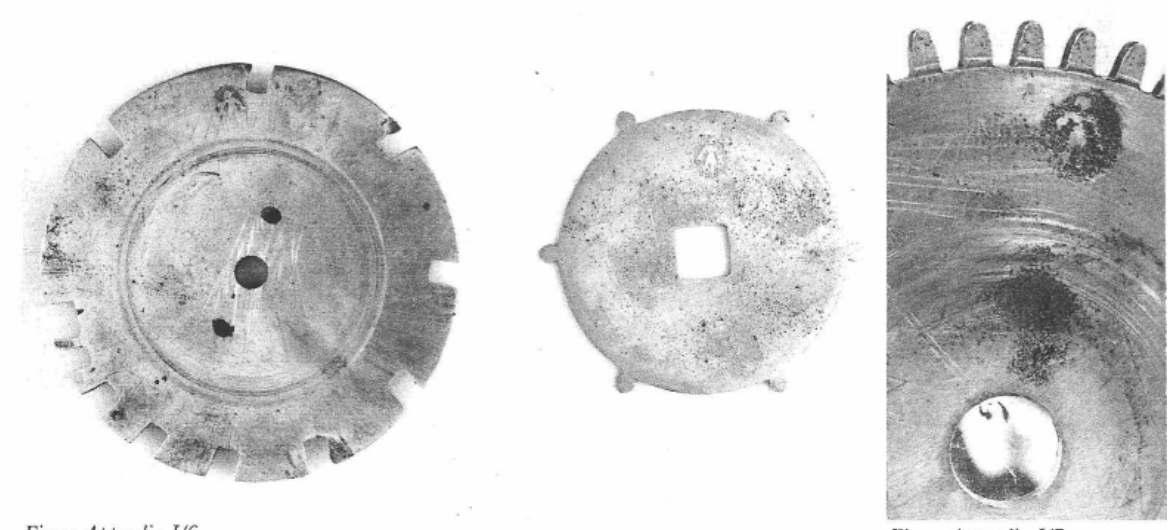


Figure Appendix I/6

Figure Appendix I/7

v. On the reverse of a lantern clock alarm disc and count wheel of a lantern clock by Peter Closon (figure Appendix I/6).
vi. On the hour wheel of an anonymous pediment top longcase in a private collection.
(Information kindly supplied by Jeremy Evans, Senior Conservation Officer in the Dept. of Medieval and Later Antiquities at the British Museum.)

There are (3) examples of the Matchstick man found on the clock in question: the star, count-wheel, and the hour wheel.

5. Typical Closon Large Count Wheel / ‘Matchstick man’

Figure Appendix I/8

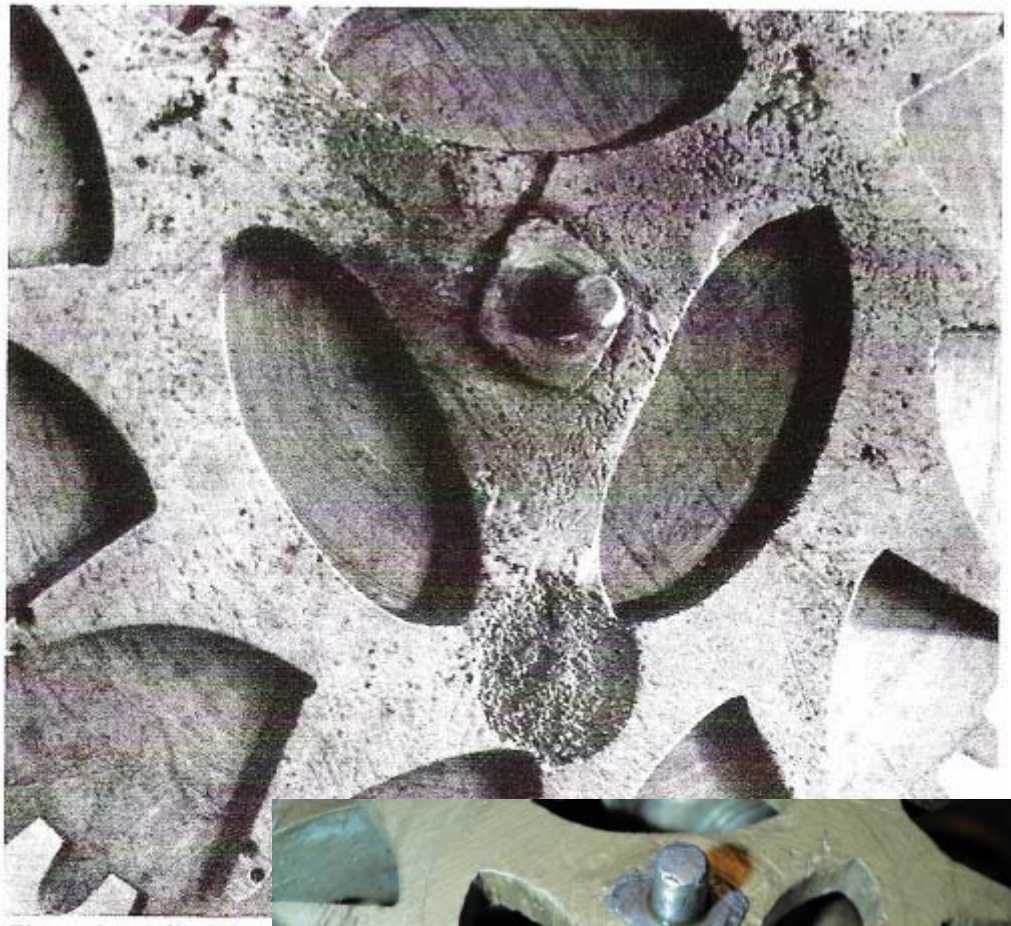


Figure Appendix I/9

…and located in the same position in both star and count-wheel

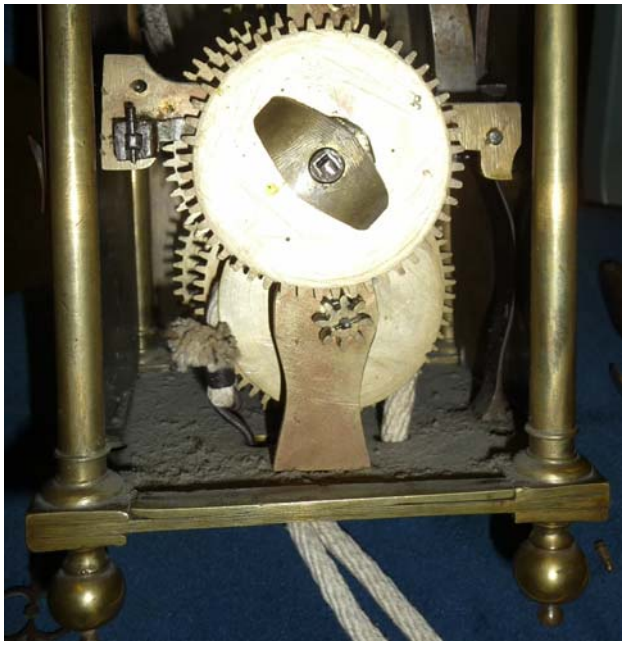
6. The Controversy: Raising the Dial & Hour Wheel 3mm (18th C anchor / pendulum Conversion)

It can be proposed that at some stage early on, as with most (if not all balance wheel clocks) the clock was altered in order to allow escapement change to long pudendum anchor escapement. In doing so it was necessary to change the gearing requiring removal of the original 4-pin pinion of report (filed directly onto the great wheel arbor as with it's strike train counterpart which remains – *see slide 10*), adding a thin squared post to accept a larger diameter, separate, 8-pin brass pinion. The results of this change raises the hour wheel ~3mm in height.

To accommodate this increase, the hour wheel was raised the same distance and repositioned ; there is evidence of the plugged pivot hole underneath the current hole. To accommodate the repositioned hour-wheel assembly, dial and the dial plate was also repositioned. There is clear evidence the top ~3mm of the dial plate has been removed, and the a shim of corresponding height has been added to the frame bottom plate.

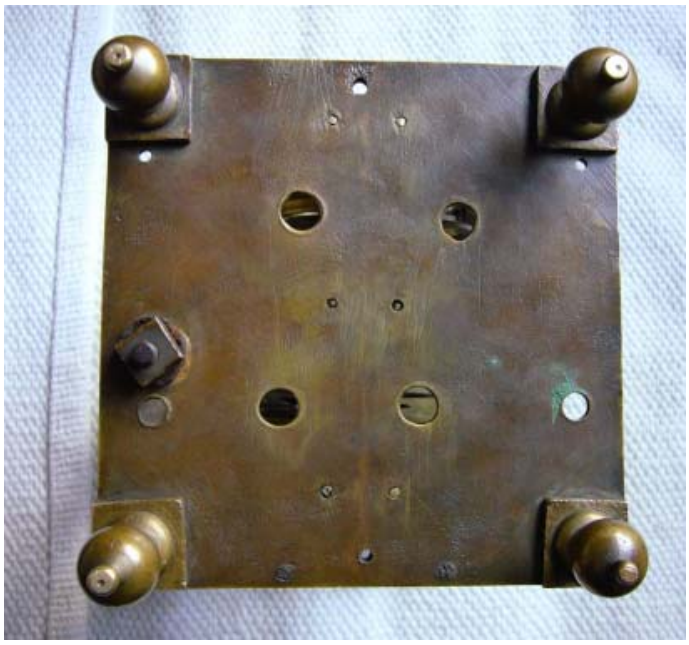
To accommodate this change, the dial was repositioned and perhaps subsequently replaced with a replacement dial of suitable proportions now screwed / riveted in the required position.

Near perfect fit of the dial plate corner cut-outs to capitals and bases can be demonstrated. The bottom dial plate post lines up to the bottom frame plate hole position, where (without the shim) the plate would be retained.

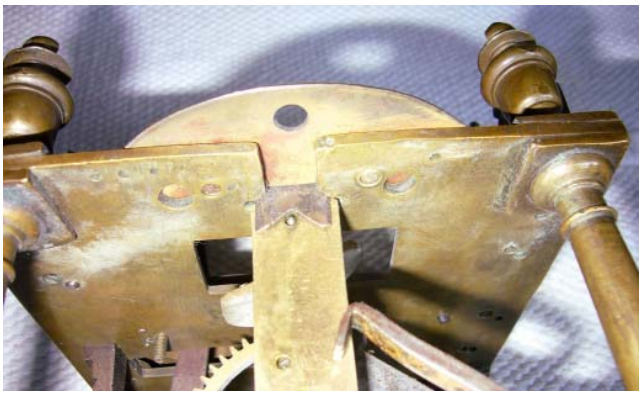


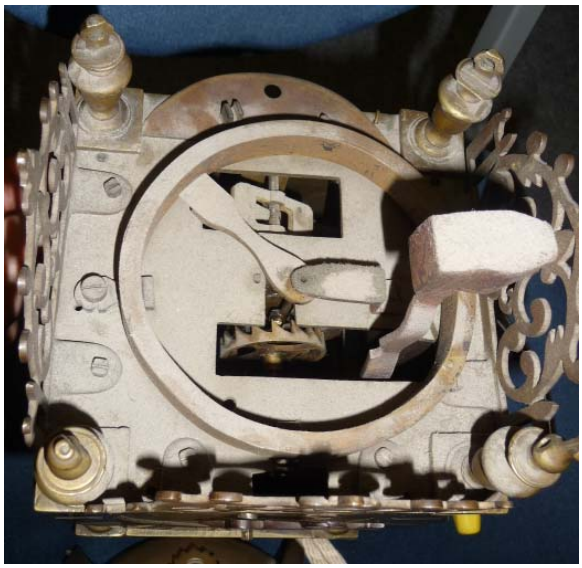
6. The Controversy - Raising the dial & hour wheel 3mm (18th C anchor / pendulum Conversion)

- Similar fit / finish work of the back plate



9. Replacements / Alterations Over Time – non Closon





- Rear finials tops had broken off; new mounting holes drilled to accept the bell strap pins
- Front finial holes files / new holes drilled to accept bell strap reposition
- Although there are holes drilled in the rear the top plate, no evidence exists of ther having been a hoop mounted / riveted
- No evidence of any wall spikes on either the feet or back plate
- There is a wall or bracket location plate installed, secured by early screws with corresponding threads

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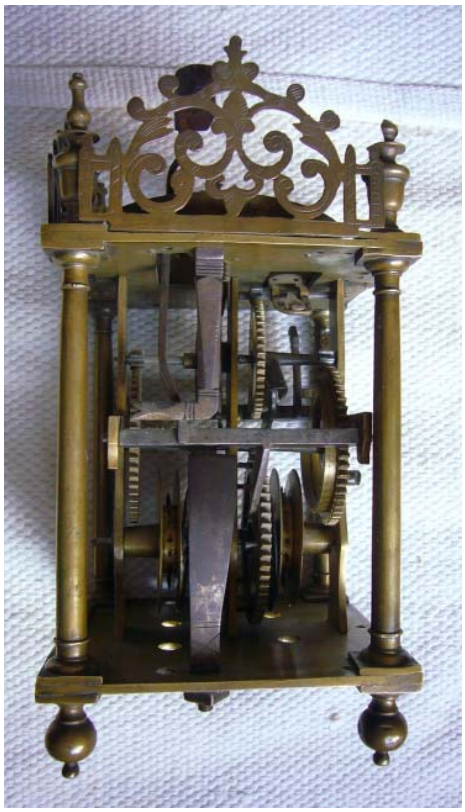

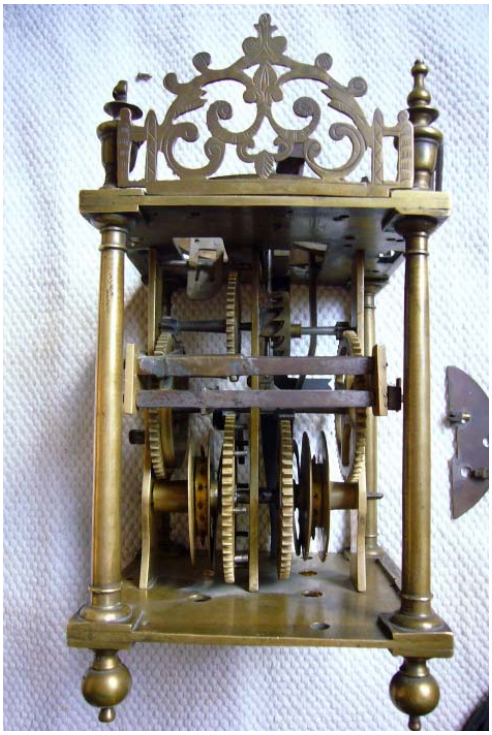

- A balance re-conversion exists early 20th c?
- Replaced hammer spring
- The hammer stop appears to be an old Ebsworth type, no obvious alteration, possibly replaced
- Frets are old replacements using second set of fret holes
- Old bell and bell strap – provincial origin

10. Summary

In my opinion the clock in question is clearly of original Lothbury design and manufacture, with frame, movement, and dial plate original to each other. Past long pendulum conversion is evident and the requirements of doing so justifies the subsequent changes / additions, including the dial / dial plate alterations that now exist. The dimensions of the alterations match the mechanical requirement, and the former position of then original mating surfaces of adjacent components match very well.

At some stage the bell / bell strap had been fitted a with a provincial replacement, with top finials adjusted to accept new mounting holes as dictated by the rear broken finials. Frets replaced.

The hammer stop may or may not have been replaced; the hammer spring almost certainly has been.

The bottom plate has been fitted with the usual two additional holes (one either side) to allow fitting of rope pulleys to extend the running time.

Early 20th century balance wheel reconversion has involved a new crown wheel and at least one pinion, a poorly executed ‘chunky’ balance and verge.

Energy Dispersive XRF will be performed filing from main brass components in order to further prove consistency of alloy / trace metals (to with 1%), showing common source.