

JOSEPH BATTY'S superior 30-hour

While it cannot be denied that most longcase clocks made for the prosperous end of the market had a duration of eight days, a month or even longer before needing rewinding, there were also 30-hour clocks of quality. Even Thomas Tompion, Ahasuerus Fromanteel and other great names in clockmaking made some of these shorter duration clocks, so they should not be dismissed as simple clocks for the less affluent.

Thirty-hour clocks are intended to be wound every day, with an extra six hours leeway if they are not wound promptly. In today's hectic 'don't-have-a-minute-to-waste' lifestyle winding a clock every day is regarded as a chore, even by many of those that own an antique one. But that was not always the case and some of those who could afford an eight-day clock

by John Robey, UK

chose a 30-hour one as it brought them into daily contact with what was probably their most valuable possession, apart from the house they lived in. Provided it is not situated in an inconvenient place, such as a room that is only used infrequently, winding can be part of the daily ritual of locking up before retiring for the night.

Of course there are many 30-hour clocks that were made to sit in a humble cottage, usually with a small square dial and often with a single hand, housed in an unsophisticated short case made of oak or pine painted to simulate oak. There were some clockmakers who catered for those who wanted a more refined clock—though not necessarily of the latest London fashion—but actually preferred one that needed winding daily. One of these was Joseph Batty of Halifax who made the clock shown in **figure 1**. Clocks signed by this maker are known ranging from simple square-dial 30-hours to arch-dial eight-day clocks as well as a number of short duration clocks with a moon in the arch, like this one.

The West Yorkshire town of Halifax has a long tradition of clockmaking, with well-



know names such as Ogden, Lister and Stancliffe producing a variety of different types of clock, including 30-hour clocks, often with a 'penny moon' above the dial centre, that are popular with today's collectors. Joseph Batty is less well known and most of what is known about him is summarised in *CLOCKMAKERS OF NORTHERN ENGLAND* by Brian Loomes, published in 1997 by Mayfield Books, supplemented by online information from parish registers. He was born in 1738, son of Edward Batty a Halifax clockmaker, who had married Elizabeth Scholefield five years earlier. She was the daughter of Robert Scholefield, one of five Rochdale, clockmakers of that name, with numerous relatives all working in the trade. In 1752 Joseph Batty was apprenticed to his maternal grandfather in Rochdale, then moved back to Halifax in the 1760s and worked there until his death

Figure 1. The oak and mahogany case.

in 1801. There is no record of him taking on apprentices of his own.

His clocks are usually signed 'Jo Batty' and often without a placename, but this one is specified as coming from Halifax. During the late eighteenth century the town was a prosperous manufacturing and trading centre for woollen cloth and the original owner of this clock might have been involved in the trade, perhaps as a mill manager or foreman rather than a mill owner, but we will never know for certain.


The case is made of oak with a swannecked pediment, hood pillars and trunk quarter columns made of mahogany, **figure 2**. The shaped top of the trunk door with a moulded edge, the pediment, the ogee feet and even the figured oak, are all features of a northern case. Its London counterpart of the period would be veneered with mahogany on an oak carcass, have an arch-topped trunk door with applied mouldings round the edge, a domed or pagoda-topped hood and stand on a single or double plinth. The proportions of the case would also be different, with a London clock being slimmer and taller. 



Figure 2. The hood with a mahogany swan-necked pediment.



Figure 3. The dial with a rolling moon in the arch.

Of course there were regional variations in style within the northern counties, especially for the highest quality clocks, and cases from Liverpool, Manchester or Newcastle have distinctly different styles. Joseph Batty's clock is in a typical Yorkshire case of about 1780. It is the sort of case that would be used for a 'middling' eight-day clock, but here used for a 30-hour clock with a superior dial.

The brass dial, figure 3, is approximately 13in wide by 18½in tall (306mm by 467mm). This is the size that would be expected of a provincial eight-day dial, rather than a 30-hour one, which are often noticeably smaller. The cast-brass spandrels are a variant of the 'female head in foliage' pattern. This was very popular in the early eighteenth century and was sometimes, as

here, still being used much later. Arched 30-hour dials are not common, and those with rolling moons are seen even less often. But, as with most things in horology, there are always exceptions and a few clockmakers seem to have specialised in using them on their 30-hour clocks.

The arch, figure 4, has an attractive band of decorative engraving round the edge. This consists of 12 box-like sections, each containing leaves on a hatched ground. The painted moon is bordered by a silvered ring engraved with the age of the moon. Each moon rises and sets behind silvered hemispheres. The left-hand one probably mean to represent the sun, the right-hand one representing the earth with lines of latitude and longitude. But no land masses are depicted.

Between each moon face are rural scenes, but they are rather dark and proved difficult to photograph. However, close inspection shows that one includes two male figures, a dog, two horses, a cow, a man on horseback just appearing from behind a moon face, with a row of trees in the background. The other scene shows a man, a woman and a dog standing near a river with a multi-arched stone bridge and a couple of rowing boats.

The upper part of the dial centre, figure 5, includes the engraved name: 'Jo: Batty Halifax'. His first name might be interpreted as John, but the contemporary abbreviation of this is usually Jn^o, and it is actually Joseph, who was probably known as Joe to his family, friends and acquaintances. Below the dial centre is the round face



Figure 4 (top right).
Close-up of the
arch.

Figure 5 (centr
right). Joseph
Batty's name in the
dial centre.

Figure 6. A female
face engraved
below the
calendar.

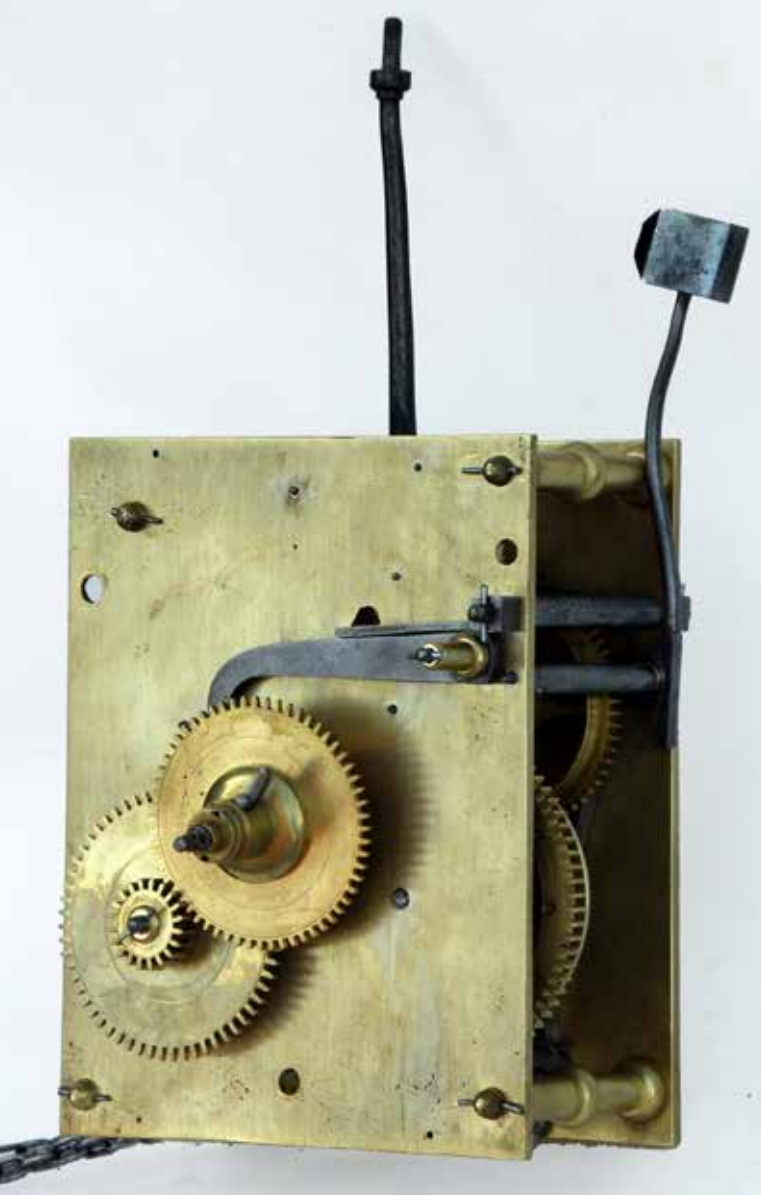


Figure 7. Front view of the movement.

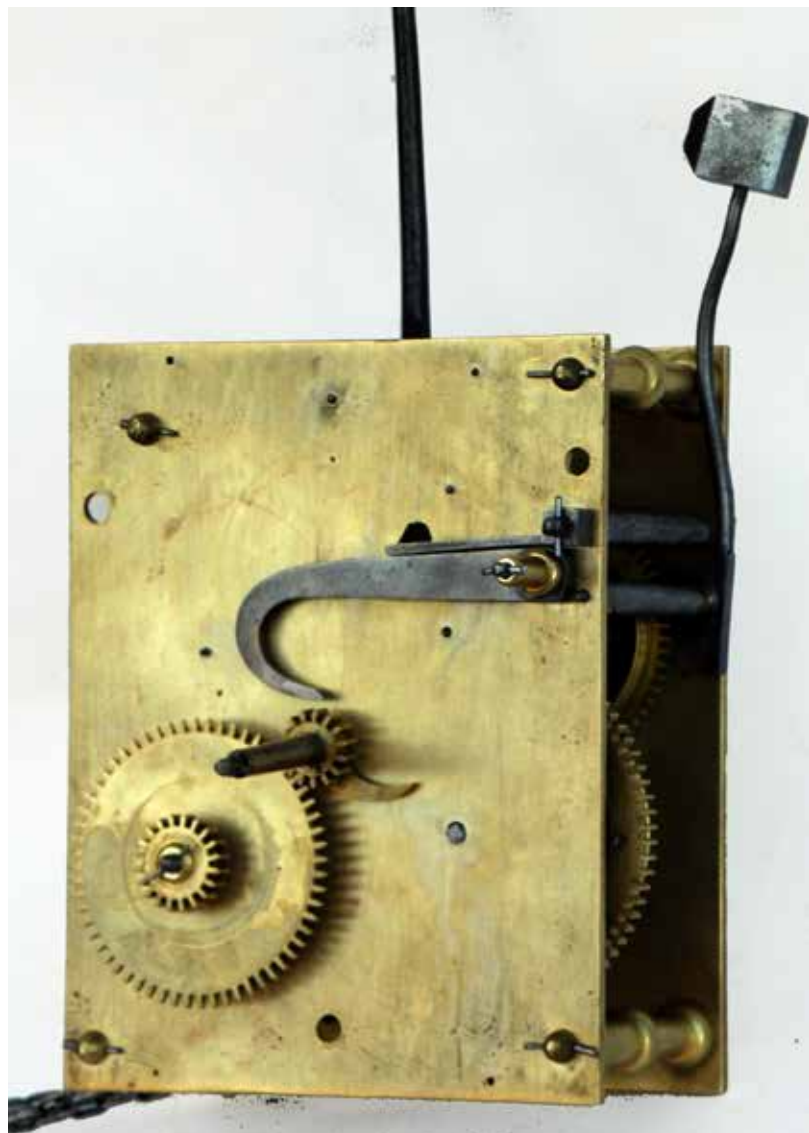


Figure 8. The hour wheel removed to show the curved lifting arm to let off the strike.



Figure 9. Components of the hour hand-assembly.

of a young woman with staring eyes, a small nose and mouth. Her hair looks rather like a laurel wreath, but is probably meant to represent plaits which protrude at the sides. There are unusual curved items at either side which might be meant to represent a straw hat or bonnet worn on the back of her head, with the top of it obscured by the curved calendar aperture and two panels containing stylised flowers. Is she meant to represent an actual person, such as the wife or daughter of the

first owner or even of Joseph Batty? If it is the latter then this could have been his own clock—but we are very unlikely to know for certain.

At first glance the chain-driven movement, **figures 7 and 8**, looks like a typical late eighteenth-century well-made 30-hour example, not 'mass produced' but hand-made (as evidenced by scribed circles on the front plate). But it has some features that are only found on better quality clocks. Instead of the lifting piece being lifted by

a pin on the rear of the minute wheel, on this clock the pin is replaced by a curved brass arm. The usual arrangement of the strikework has the lifting piece squared on to an arbor with an internal warning detent, while the locking detent is lifted out of the gap in the hoop wheel via an internal link. On this clock the lifting piece pivots on a post instead of being fitted to an arbor and has a warning flag that passes through a slot in the front plate to intercept the warning pin on the third wheel. The locking

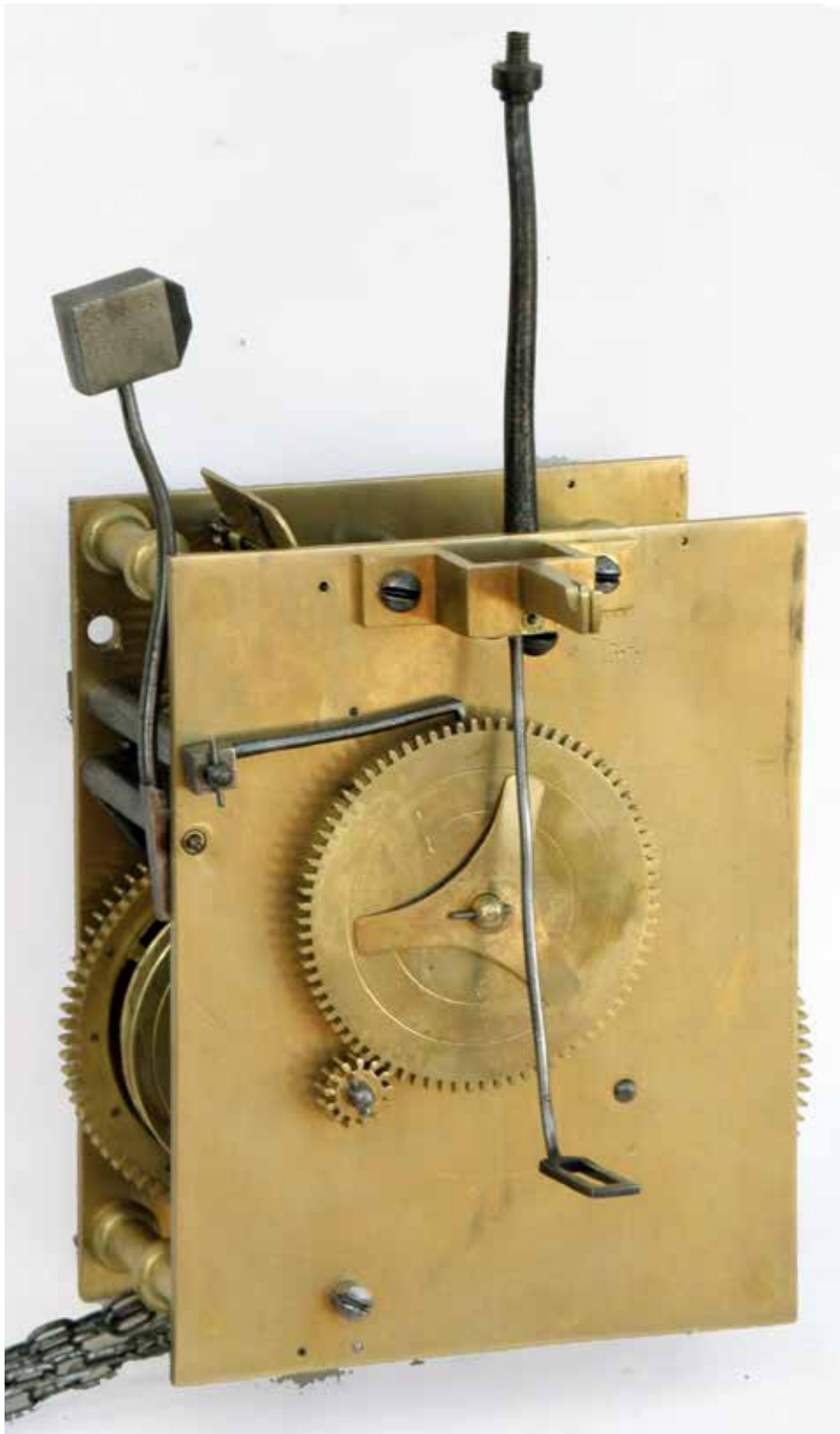


Figure 11. Rear of the movement showing the one-piece cast countwheel.

arbor is positioned just above the pivot post and carries an external link at its front end, with the usual internal locking detent at the rear. While this arrangement is not especially unusual it is not found that often and does not appear to be associated with any particular region or clockmaker.

The construction of the hour wheel is of a type that was usually reserved for eight-day clocks, but even for these is had largely been abandoned by the latter part of the eighteenth century. Instead of the

hour wheel being fixed firmly to the pipe that sits over the minute pipe and also carries the hour hand, there is a slip washer that allows the hour hand to be adjusted, **figures 9 and 10**. Most clockmakers and movement makers eventually regarded this as an unnecessary luxury and relied on the motionwork to be meshed correctly during assembly. There is some advantage with countwheel clocks as the hour hand can be synchronised to the strike without going through a large number of strikes, but then



Figure 10. The slip washer holds the hour wheel on its pipe.

the clock has to be stopped until the hour is correct again, so there is no real advantage. Perhaps the greatest benefit is with a clock with a once-a-day calendar ring, where, if the date changes in the middle of the day, the hand can be advanced by 12 hours. But since this clock has a twice-a-day calendar disc it is difficult to understand why Joseph Batty chose to use a movement with an adjustable hour hand.

The countwheel, **figure 11**, is the type widely used on 30-hour clocks by the end of the eighteenth century, which has the slots cut into a ring or hoop cast integral with the wheel, **figure 12**. A close examination of the slots, especially the double-width one that counts just one strike, shows quite clearly that it was cut with a rotary cutter in an 'engine', not sawn and filed by hand. This might have been a wheel-cutting engine with a depth stop and a special cutter, or it could have been a machine specially dedicated to do just this one job.

This raises the question: did Joseph Batty make the movement? If he was a prolific maker with many surviving clocks then there is a good chance that he was the actual maker of the movement. But only a handful of clocks bearing his name are known, though of course there may be others not yet recorded. This movement has the look of one that was made by a specialist manufacturer, supplying finished movements to 'clockmakers'. They would add a dial, hands, pendulum, weight and chain then fit it into a case bought from a local cabinetmaker to fulfil an order from a customer. This is how most clockmakers in towns and cities would have operated, running a retail shop selling and repairing clocks and watches as well as silverware, cutlery and jewellery.

The final feature of this clock we need to look at is the method of advancing the moon disc twice a day. There are several different methods that can be used to do



Figure 12 (top). The slots cut into a hoop cast integral with the wheel.

Figure 13. Detail of the slots.

Figure 14. The rear of the dial showing part of the moon dial, the pusher rod and the calendar.

this, the most common method being a pivoted lever with a movable tip or 'nag's head' that pushes the moon by one tooth but allows the tip to slip back ready for the next push. This arrangement comes in a number of variants, often with a spring return for the lever. But there is a particularly simple alternative method that has just a single pusher bar with no need for a pivoted tip or a return spring. It appears to have been most popular on clocks from West Yorkshire and southern Lancashire and is so simple and almost foolproof that it is surprising that it was not more commonly used.

Figure 14 illustrates the arrangement on Joseph Batty's clock, and also shows the lower edge of the moon disc and the calendar disc. The mechanism is just a square-section iron rod that passes relatively freely through a hole in a bracket screwed to the rear of the dial. At the lower end is a large foot to provide a large surface for the lifting flag to push against and also to add enough weight for the bar to return under gravity without the need for a spring. Other examples of this method have a wider flat iron or brass strip, with

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or without a T-shaped foot. On this clock the hour-hand pipe has a flag with two steps, **figure 9**. The short one advances the calendar disc by one click and the long one lifts the moon arm, both during every 12-hour rotation.

As the arm is lifted the top end engages with a tooth on the moon disc, advancing it by one notch. As the rod falls back under gravity, aided by the extra mass of the foot, the tip slides back over the slope of the tooth, with the rod swivelling slightly in the support bracket until it is ready for the next upward push. A small step in the bar contacts the bracket to prevent it falling too far. There is no spring click to prevent the moon disc from moving inadvertently, instead this is achieved just by friction. There is so little to go wrong that it is surprising that it is not seen more often.

While 30-hour clocks are usually regarded as the poor relation of their eight-day counterparts, they can be very interesting indeed. Some are collected for their naïve rural construction and others for their quirkiness. But Joseph Batty's clock has features that raise it above the ordinary to be a truly superior 30-hour. 📌