## WHITEHURST Bracket clock

The wellknown firm of Whitehurst of Derby made a wide range of high quality clocks, including turret, longcase and bracket, as well as numerous weight driven twoand three-train clocks, alarms and night-watchmen's clocks. This article discusses a good example of their spring clocks, often called a 'bracket clock', though they usually sat on a mantelpiece or a side table.

The ebonised pad-top case, figure 1, with a break arch, is $12^{3} / 4 \mathrm{in}(32.5 \mathrm{~cm})$ tall, standing on brass feet and with a brass-
faced plinth. Brass beading round the door glass, the pad and the canted corners, and with fish-scale side frets, combine to make it a very attractive and


Figure 1. The brass-bound ebonised case.
elegant case, ideally suited to a Victorian gentleman's parlour or library. There are brass side handles, but not one at the top. Most of Whitehurst's nineteenth-
century domestic clocks are numbered and are also often dated, and this one is no exception, having both the number 6174 and the date 1843, so no guesswork is needed to determine how old it is.

The 6in ( 15.2 cm ) wide single-sheet silvered brass dial, figure 2, has a subsidiary dial and hand in the arch to change from strike to silent, useful if the clock is used in a bedroom. The elegant hands indicate the time against the usual
Roman hour numerals and a minute band, though by this date Arabic minute numerals had been abandoned. There is the typical 'Whitehurst Derby' o-


Figure 2. The single-sheet silvered brass dial.


Figure 3. Front of the movement.

signature, with finely engraved simple scrolling being the only decoration on the elegant dial.

Victorian taste is often a mass of over-elaborate decoration, especially later in the nineteenth century, but here there is very little to distract from telling the time. This is certainly something that the founder of the firm, John Whitehurst FRS (1713-88), would have approved of. His clocks often have no seconds dial or a calendar, which were regarded as superfluous to the main function of telling the time.

The twin fusee movement, figures 3

Figure 5. The hold-fast for the pendulum, stamped name and date.


Figure 4. Rear of the movement showing the biasing spring for the strike / silent and the hold-fast for the pendulum.
to 4, is of the finest quality, as expected on a Whitehurst clock, with five pillars, a stepped base and shallow shaped top corners to the plates, an anchor escapement and rack-and-snail striking. Since this is a repeating clock using a pull cord on the right of the case to lift the rack, the snail is on a 12-pointed starwheel. This is indexed round just before the hour by a pin on the hour wheel and kept in place by a springloaded brass jumper. This ensures that the current hour is repeated, apart from the very short period just before the next hour strikes.

The strike / silent mechanism is the often-found two-armed lever with a slot in a short vertical arm that engages with a pin on a disc moved by the strike / silent
hand. This moves a longer horizontal arm with a wedge at the end to push (or 'pump', to use horological jargon) the lifting piece rearwards.

Instead of the usual arrangement with the lifting piece and warning detent pivoting on a fixed post, here they are fitted to a long arbor through the plates. When this arbor is pumped rearwards by the wedge, the let-off pin on the reverse minute wheel can raise the lifting piece to set off the strike. When the lever is in the silent position the arbor is pumped forward by a flat spring screwed to the rear plate, figure 4, so now the pin misses the lifting piece and there is no strike. This means that the hour strikes as normal whenever the repeat cord is pulled. The alternative method of
silencing a clock is by preventing the rack from falling, but then it cannot be let off manually.

Also fixed to the rear plate is a holdfast to prevent the heavy pendulum from swinging about when the clock is being transported, figure 5. This comprises a horizontal brass bar screwed to the plate having a slot for the rectangular pendulum rod which is held in place by a thumbscrew (not shown). There are also two pairs of screws for the angle brackets that hold the movement in the case.
The rear plate is stamped 'Whitehurst Derby 1843'. The number 6174 is stamped on the front plate, but this is not very clear in the photographs and is not shown.

The side views of the movement, 0 -


Figure 6. Right-hand side of the movement.
figures 6 to 7, show that the fusees have gut lines rather than chains, while the hammer stop is a brass plate screwed to the centre of the top left-hand knopped pillar and hangs down to contact the hammer shaft towards its lower end. This allows the hammer to rebound off the bell more easily and avoid jangling. The fusee stops can be seen, but apart from these obvious components there is little to comment on.

Often photographs are sent of a clock showing the case, dial and side views of the movement, expecting this to be sufficient to enable the full story of the clock to be discovered. The owners are disappointed to find that it is a view of the front of the movement with the dial removed that is needed. In reality all that side views can tell you is the type, such as spring or weight driven, gut, rope or chain driven and what sort


Figure 7. Left-hand side of the movement.
of escapement, all of which are quite obvious anyway. The shape of the pillars, with knops and fins or just knops, can indicate whether it is early or late, but that is about all.
The pendulums of bracket clocks with anchor escapements often extend to the bottom of the case, where a rating nut beneath the bob, as usual on longcase clocks, is virtually inaccessible. There are two solutions to this problem: a fast /


Figure 8. Pendulum with the rating nut above the bob.
slow adjustment on the dial, or the rating screw situated above the bob. With the first method the suspension spring slides between fixed chops and hangs from the rear end of a horizontal lever pivoted near the centre. The front end is raised or lowered by a cam fixed to the adjusting hand.

An alternative method was often used on nineteenth-century bracket clocks, including those made by Whitehurst.

Instead of the rating screw passing through the pendulum bob with the nut below, it fits in a 'cradle' fixed to the top of the bob. The knurled rating nut is now in a convenient position for easy adjustment, figure 8. This method was also used on other types of clock, such as French portico clocks with a large bob and a mock grid-iron pendulum.

A less elegant way of achieving rating adjustment from the top of the bob is


Figure 9. Pendulum adjustment above the bob on a chiming bracket clock by Brockbank \& Atkins, London.
to fit the rating screw to the rear of the bob and pass it through a hole in a small bracket on the pendulum 'rod', which is actually a rectangular-section brass strip, The rating nut now supports the bob as just described, figure 9.

It is always a pleasure to service a quality clock and this one was no exception. Grateful thanks are due to the owner for permission to share its details with readers of Clocks. ® $^{\prime}$

