Whitchurch Silk Mill Clock

The mill premises were put up for sale by auction on F 16th August 1816 and included in the description of the lots for sale there was 'a capital dial clock'; the same clock provides the time for inhabitants of Whitchurch today.

The clock was made in London by the company known as Handley and Moore. The Company (John Moore and Sons) was founded around 1790 by two apprentices who had been indentured to another clockmaking company, Thwaites. The company ran for nearly one hundred years and were prolific makers producing a wide variety of clocks for the home, railway stations and churches. A list of Church and Turret Clocks manufactured by John Moore and Sons Ltd was produced for publicity purposes in 1877 and includes over seven hundred clocks. The clock at Whitchurch Silk Mill is one of two made in 1815 and is described as having a 3 ft dial - Figure 1.

Handley and Moore were prestigious makers, from around 1866 they were described as 'Makers to the Queen' and, among the clocks listed, one was supplied to York Minster in 1840.

Figure 1 – the dial of the Silk Mill clock

The dial is gracefully positioned on the pediment surmounting the front elevation clearly visible from the Winchester Street. The clock movemen is situated in a clock cupboard immediately behind the dial in the roof void above the floor where machines can be seen winding silk thread onto bobbins in preparation for the weaving process. Although not accessible to the public, the observant visitor will be able to hear the regular ticking of the escapement – the slow steady beat of the seventy inch pendulum. A closer inspection will reveal a small box enclosing the pendulum bob supported by its rating nut - Figure 2.

Figure 2 – the pendulum bob

The clock movement is a two train movement, one train show the time and a second train to strike the hours on a bell which is situated the delicate cupola set above the mill roof. Heavy weights are required to power the clock for its eight day duration; looking near the box containing the pendulum bob, two stout ropes can be seen.

The weights are at the end of these ropes which pass over pulleys and run from the movement above, through the ceiling, across the winding floor to the far corner and then disappear downwards.

Figure 3 – stout ropes emerge from the ceiling .....

Figure 4 ..... pass along to the corner of the room and downwards .....

If you could look down in the corner, the weights would be seen below - Figure 5.

Figure 5 ..... the weights would be seen below.

The movement at Whitchurch is typical of those produced by Handley and Moore; it is a posted birdcage movement with a cast iron frame – Figure 6. The round posts with ball finials are similar to those made by Thwaites, indeed, it is often difficult to h between an early Moore clock and a Thwaites clock. Thwaites, however, used a dead beat escapement and Moore a recoil escapement; the clock at Whitchurch has a recoil escapement - Figure 7.

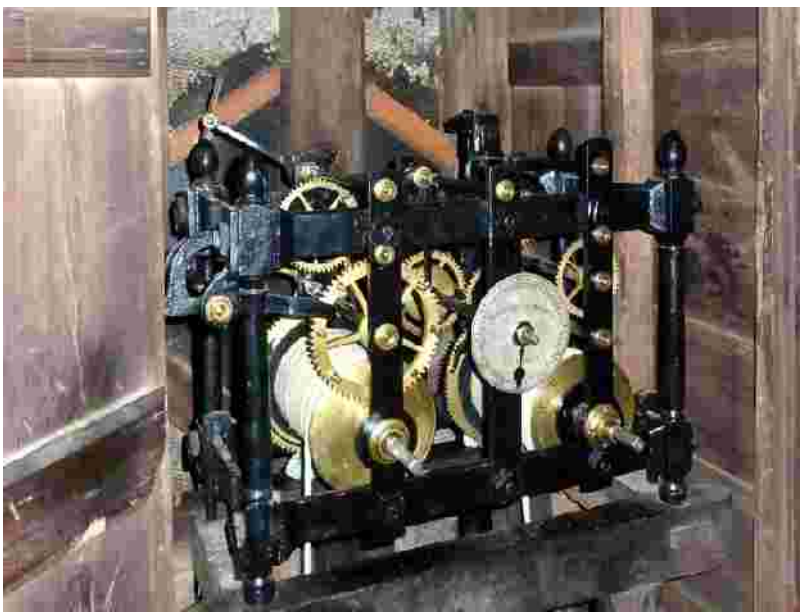

Figure 6 - the two train movement

Figure 7 - the recoil escapement

The wheels are made from brass and the barrels around which the rope is wound proudly bear the name of the maker and the date when the clock was built – Figure 9.

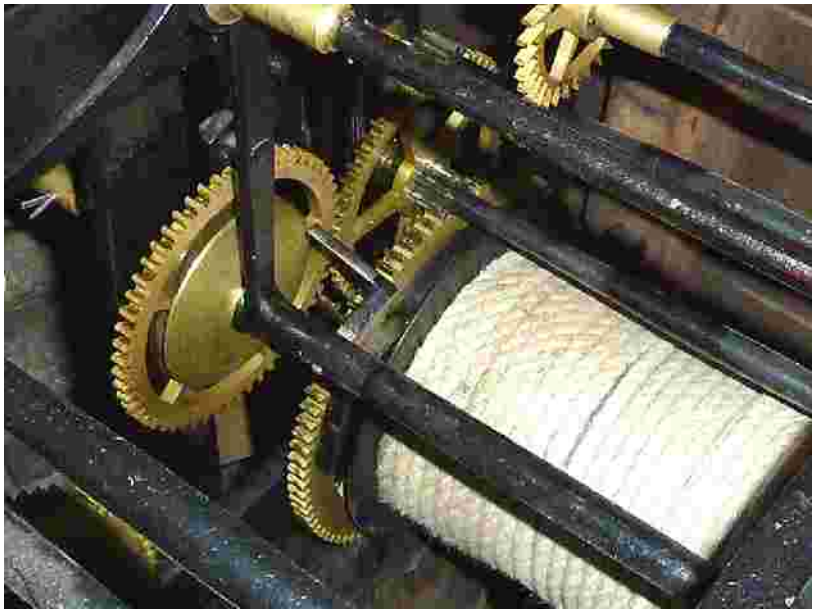

Figure 8 - brass wheels and the rope wound around the barrel.

Figure 9 - the name of the maker and the date

A short rod connects the movement to the minute hand and 'dialworks' just behind the dial ensure that the hour hand revolves with the correct 12 : 1 ratio.

Each hour, the striking train springs to life to mark hours with a count wheel determining the number of times the hammer strikes the bell. A lever, which is part of the movement, is raised for each strike and a series of linkages serve to lift the hammer.

The factory of John Moore and Sons was situated in Clerkenwell Close at the heart of London's clock and watch trade; the turret clocks were made in a separate department to the smaller domestic clocks. There was a smith's workshop and substantial facilities for wheel cutting but the casting of the frame for the clock and the brass components was contracted out. An engraving show the wheelcutting and smith's shop on the ground floor with the 'church and turret clock' shop above. The domestic clocks were constructed on the top floor. It is reported that the design of their turret clocks could not be described as innovative but they were solidly made and functional. The fact the Silk Mill clock is largely original and has been working for nearly two hundred years is testament to its design and construction. The scale of the manufactory can be readily appreciated and extended beyond clockmaking. John Moore and Sons also made wind dials and weather vanes, roof ventilators, machines for revolving the lanterns in lighthouses and machines for striking bells in foggy weather.