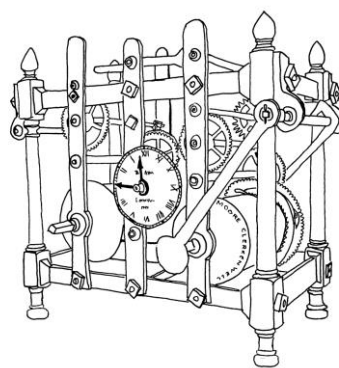


# Looking After Your Church Clock



## Introduction

These notes aim to bring the Church clock to better notice in the parish. Clocks are often the Cinderellas of the Church, yet they are often of great historical value and in many cases have been in the parish for centuries. With only a little sensible maintenance they can have an indefinite life.

A short general piece such as this cannot act as a manual for maintenance, but this is unnecessary as there are two booklets that do the job admirably. The first is, *Turret Clocks: guidelines for their maintenance and repair and for the installation of automatic winders* (Council for the Care of Churches, 1996), but perhaps even better is *The Turret Clock Keeper's Handbook*, (Antiquarian Horological Society, 1998). These provide the enthusiastic and technically competent amateur with all they need to know about looking after a Church clock. However, most parishes will not be able to do this and will take out an annual maintenance contract with a reputable clockmaker. This is about the soundest investment a parish can make for its clock. It will also pick up the odd malfunctions that if neglected can so often lead to catastrophic failure and expensive repairs.

## General

**Ownership and Repairs** - In some cases there is a doubt over the actual ownership of the Church clock, it sometimes having been given by a donor or the local council. Whoever owns the clock, it still comes under Faculty Jurisdiction so, apart from routine maintenance, whatever is done to it has to be authorised. The simplest cases may be classed as *de minimis*, which will mean the minimum of formalities, the Archdeacon can advise on this.

**Manual Winding and Automatic Winding** - Many parishes are experiencing difficulties in finding or replacing a clock winder. These people are like gold and are worth seeking out or retaining. Not only do they look after the clock's timekeeping and spot trouble at the earliest stage, but as regular tower climbers they are the first to notice any general problems there. If it is impossible to find a winder, then you may consider fitting automatic winding to the clock. As long as this is done in a non-destructive and reversible way, it can prove satisfactory.

What is not generally acceptable is to fit an electric synchronous motor into the clock to control its timekeeping. This not only completely changes the nature of the clock, but its fittings can destroy or mutilate an historic mechanism. The other bad habit of replacing a perfectly acceptable clock of indefinite life with an electric clock, and placing the original on display in the Church, is mercifully less prevalent today. Museumising a clock in this way is fine at first, but what starts as a proud display can too often become merely a nuisance and

dust trap to the next generation; and the clock is put at risk. If automatic winding is chosen, it is still important that one person remains solely responsible for it (even if they wish to share their duties.)

That person will from time to time adjust the clock, for automatic winding does not improve the clock's timekeeping abilities, and keep an eye out for trouble. Your clockmaker will give short and simple instruction on these duties.

## The Clock and Bells Together!

Any work contemplated for either clock or bells should take into account any possible effect on the other. Nothing must be done to one that will interfere with the working of, or access to, the other. In appropriate cases both the D.A.C. Bells and Clocks Advisers should be called in to advise. (Though specialists, these people give their time and expertise for nothing, so the parish is put to minimum expense.)

## Safety

Clocks are often situated in places difficult to get to, and have heavy weights, both of which have safety implications. The following areas need to be checked:

general cleanliness, particularly pigeon droppings which can cause breathing problems; ladders, stairs and their fittings; flooring, platforms and trapdoors - rotten, holes in them, safety rails etc; unguarded moving parts - e.g. striking flies, auto-wind chains; lighting - of access and clock itself; electrical apparatus, especially old wiring; danger of falling objects - weights, pendulum if suspension fails. The two booklets above detail this more closely.

If one person goes into the tower alone, they should leave a message with someone of the approximate length of time away. Accidents can happen and people do inadvertently get locked into towers! Clocks are often associated with bells and these have safety guidelines of their own.

## The Mechanism

**Housing** - Church towers are notoriously dusty places so the clock should be inside a cupboard or other housing. It is also important to keep the area of the clock clean and tidy.

**The Frame** - iron and steel frames get rusty; wooden frames can be attacked by insects. Generally, the job of de-scaling or painting a metal frame is one for the professional, for the frame really needs dismantling, and repainting may not be appropriate on an historic mechanism. Avoid rubbing down metal frames to remove rust as particles can get into the bearings. With care, wooden frames can be treated with a good clear colourless insecticide.

**Oiling** - Many Church clocks are over-oiled. This is bad practice, and though clock wheels turn exceedingly slowly, oil will trap dust and grit to convert it into an extremely efficient grinding paste. Therefore oil only the pivots and bearings, and that sparingly, and use only proper turret clock oil (suppliers can be found via the CCC booklet or DAC Clocks Adviser.) Do not oil the teeth of the wheels or the pinions; the only exception to this being the teeth and

pallets of the escapement which constantly ride over each other. (If your clock person doesn't know what this means, don't let them go near the clock with an oil can; rely on a maintenance contract.)

**Weights, Lines, Pulleys, Clicks and Ratchets** - From the safety viewpoint, these are the most important thing to check regularly. They are the means by which the weights are kept suspended, and the failure of any one of them could cause a dangerous accident. It goes without saying that it should be impossible for anyone to walk beneath the clock weights. The weights themselves should be contained within a chute with a metal cage below to contain them if they fall. Churches that do not have weight chutes should seriously consider installing them, otherwise the metal cage has to be much larger to cater for the possible deflation of the weights in falling. The bottom of the metal cage should contain a strong box of broken bricks or tiles sufficiently thick to absorb the energy of any falling weight. It is a sure sign that something is wrong if you have to add extra weight to the clock to keep it going. It is time to call in a professional.

The pendulum can also fall if the suspension spring fails. Check it regularly and place something beneath it to break the fall in case the worst happens.

Lines should be checked regularly for fraying ropes, or rust and broken strands in wire lines. A powdery deposit from the inside of rope lines is also a bad sign. At any sign of trouble call in a professional.

Pulleys, ratchets and barrel clicks are all potential points of failure and need regular checking.

**Do It Yourself Maintenance** - For the technical details, the two booklets published by the Council for the Care of Churches and the Antiquarian Horological Society, detailed above are adequate guides. They also cover the ancillary inspections on the leading off work, the motion work, the wires and levers to the bells, and the clock hammers and their lifting of mechanisms for striking and chiming clocks.

## Further Advice

For specific advice about your clock, the Diocesan Clocks Adviser is willing to help and may be contacted via the Secretary of the Diocesan Advisory Committee. If the matter cannot be dealt with by telephone or letter, he can arrange to visit.

Technical advice can be obtained from the Church Buildings Council, Church House, Great Smith Street, London, SW1P 3NZ, or the Antiquarian Horological Society, New House, High Street, Ticehurst, East Sussex, TB5 7AL.

For historic clocks, and this includes an extremely high proportion of them, grants towards their conversion are available from the Conservation Committee of the Church Buildings Council. Local authorities are also empowered to give grants towards the maintenance of public timekeepers, and this includes Church clocks.