This presentation describes the restoration of a model time ball made by Synchronome around 1912.
In 2007 the family of the late Lawrence Tapprel, who had been an apprentice at Prouds Electric Clocks and Scientific Instruments in Sydney and had collected many relics passed on to us the remains of something we recognised from a photograph sent by Prouds to the Synchronome Electrical Co of Australasia in Brisbane in 1916. Soon we realised that it was a model time ball.
Time Balls were traditionally sited at ports to allow ship's navigators to accurately synchronise their chronometers by observing the fall of the ball at 1pm each day. There is one, no longer operating, on the top of the Old Windmill in Wickham Terrace in Brisbane. Sydney Observatory still operates theirs every day.
A time ball spoke of accurate timekeeping, and small models were popular in display windows of jewellers, as these examples from Edinburgh and the National Maritime Museum in Greenwich show.
In 1910, the Synchronome Co. in London installed a four foot diameter ball on a building in Kingsway. Billed as the only automatic time ball in the world, it was dropped every hour.
At the same time they brought out a ‘small working model’ ‘which forms a most attractive shop window novelty’ for watchmakers and jewellers
To restore the relic we had, we obtained a toy electric motor that was almost identical to the original in the old photograph, and made a replacement for the missing magnet coil.
The new motor was not a perfect fit and required two spacer/adaptor plates. We also had to cut a replacement worm gear and derust and repaint the iron base.
The spring wire parts of the motor switch had been lost and were replaced with reference to the old photograph. The motor current is brought to the switch through a wire inside one of the tripod legs.
Finally, a Christmas tree decoration was pressed into service as a ball.