Making a Fake Cylinder Phonograph as a Prop

By Jim Scott - September 2014

For CAT Theatre's performance of *Sherlock Holmes: The Final Adventure* (October 24-November 8, 2014), it was necessary to build a facsimile of an old fashioned cylinder phonograph.


EDISON
STANDARD
1 2 3 4 5 6 7 8 9
INCHES

This phonograph is made from birch plywood. The flat base was ready-made, probably intended for making a plaque. It was about the right size, so I let it determine the other dimensions, except that the height of the four sides was determined by the width of available hobbyist plywood. The small black plastic base was a sort of tray thing I had lying around.

The crank is a window crank, painted gold. It turns, but doesn't perform any function.

The brass belt-drive wheel is made from two sliding-door recessed "pulls", glued back-to-back. The belt is an actual black rubber belt left over from a vacuum cleaner. The belt drive, which passes through a slot in the top of the phonograph box, doesn't actually move; the two ends of

the belt are fixed in place on the underside of the lid.

The gold-painted cylinder spindle (that a wax cylinder slides onto) was cut from a dowel. The larger-diameter black cylinder that it extends from was cut from a plastic part given to me by one of the set designers. The vertical brass tube is a leftover from a ceiling fan installation. It already had holes in it perfect for the gold-painted horizontal rod (another dowel) that fits through it.

Original cylinder phonographs had two kinds of amplifying horns: various flared trumpet shapes, and simple cones. This one has a cone made from a fiberboard witch's hat decoration with the brim removed. Painting it black was no problem, but painting the gold stripe around it was a tricky geometry problem. The base of the horn is half of a solid wooden sphere, elaborately drilled to fit the tip of the horn and the horizontal dowel supporting it.

I used black Sugru to cover the four screw heads used to attach the black plastic base to the wooden lid, and to cover the glue at the base of the vertical brass tube.

I got the Edison logo from a Google images photo. I corrected the perspective and forced the image into the size and proportions I wanted. I printed two of them on a sheet of glossy photo paper, cut out the ribbon shape, and used double-sided tape to affix one to each of the two long sides of the phonograph.