Crossley Telescope Primary Washing

Removing and washing the Crossley primary mirror.

To start, install the RA support post. The top of the post has a rounded cutout that cradles the small weights on the end of the shaft. Use the wedge blocks to adjust the support height to level out the mirror cell and support the weight of the telescope once the mirror cell is removed.
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Level the mirror cell and lock the DEC motion.

The wedge blocks used to level the telescope in RA.
The telescope has not been used for a couple of years and even though covered has gotten quite dirty. This is an image of the dirty pre-washed mirror taken at a low angle through an access port. The mirror is SiO overcoated.

We had a broken tapered pin in the crank assembly of the mirror removal fixture. It pays to test before it is positioned under the mirror.
The mirror cell and mounting flange on the telescope are numbered for alignment purposes. This image shows position number three. There are a total of three mounting bolts to attach the cell.

This is an image of the push pull bolts used for aligning and removing the mirror cell. When removing the cell *NEVER!!* move the pusher screws. Moving the pusher screws will misalign the mirror.
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Make sure the mirror fixture is positioned so the crank clears the cell while lowering. We had to remount the cell and reposition the fixture.

We washed the mirror in the cell using as little water as we could. The band for removing the mirror from the cell is missing so washing in the cell is necessary. Just be prepared for the water cleanup under and around the cell.
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Drying the cell and floor after drying the mirror with blotter paper.

The finishing touches are done and the mirror is ready to remount in the telescope. Looks like a freshly coated optic.