

TRE7 75-mm Watson Reflecting Telescope: Repair and Restoration

Issue:

The solid mahogany tube had an 1/8th-inch wide shrinkage crack from one end to the other along the top (~ 7 inches) of the optical tube.

Novel Solution:

The "crack" was moved to the bottom of the tube where the mounting bracket, which ran the length of the tube would cover the new crack; easy to say, more difficult to explain. Essentially, the mahogany tube was split into two halves along the bottom of the tube. Then the old crack was closed on the top of the tube by rotating the two halves of the mahogany tube together. Once in place the tube was glued and clamped. The mahogany tube was then refinished and telescope was reassembled. The resulting hairline crack is barely visible - can just see it at the bottom of the photo (see blue arrow). Difficult to see the crack unless great care is taken to follow it along the tube as shown between the arrows below. The new crack on the bottom (out of view) is not visible unless the telescope is disassembled.





TRE7 75-mm Watson Reflecting Telescope, c. 1790