FRA14 105-mm Alvan Clark Refractor: Restoration/Adaptations

(Believed to be the earliest known signed and dated Alvan Clark Telescope in a private collection)

Issue 1:

Telescope was missing original 1867 equatorial mount, but came with a Lundin No.5 Mount attached to an undersized light weight tripod. Fortunately, the original 1867 66-inch tripod came with the telescope.

Action taken:

Created new mounting plate for attaching the 1867 tripod to the Lundin No. 5 mount.

Issue 2:

Lenses were in a makeshift box when received.

Action taken:

Re-mounted a portable block lens holder at the end of the Clark storage case as was customary for Clark telescopes,

Issue 3:

Storage case lid came with no latches and with the original lid mounted upside down on the case. Action taken:

Installed two brass buckle latches very similar to type used on Clark T Type storage cases, which fortuitously fit exactly in the old original hinge cutouts for the inverted lid. The reversed lid was reattached. It is speculated that this storage case may be also `the oldest known surviving Clark case in a private collection.



Original 1867 mounting plate with holes drilled to accept the Lundin No. 5 mount. Wear marks marks from 1867 equatorial mount.

Custom mounting plate for Lundin No. 5 mount with new longer custom mounting bolt and special flange for stabilizing the top of the tripod.

FRA14 Restoration/Adaptations



New plate in place and rim painted satin black



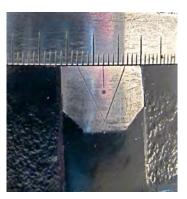
View underneath showing function of flange and new longer keeper bolt



Lundin No.5 mount on tripod



Lundin Patent Mark January 3, 1899



Latitude set point

FRA14 Restoration/Adaptations



Lenses and star diagonal came unmounted in a separate box. The lens block is removable (similar to that illustrated in Fig. 94, Alvan Clark and Sons Artists in Optics), and the eyepiece tube and star diagonal were remounted on the floor of the case using existing pivoted wooden keepers on either side of the center beam.





Storage case lid was re-attached using original hinges (not shown) and two luggage buckle latches combined with top mounted custom brass hinges. The result is similar to the latches used by Clark for the 1920s T-Type Portable Telescopes (see p. 249, "Alvan Clark & Sons ARTISTS IN OPTICS, Warner and Ariail). Someone in the past had reversed the lid so advantage was taken of the old hinge cut outs for mounting the latches. The new buckle latch with the added hinge fit perfectly into the old cutout.





End result:

Nice functional result with no change in originality as received, and a much improved size match of telescope, mount and tripod using all Alvan Clark and Sons components.



FRA14 Faceplate Alvan Clark and Sons Refracting Telescope 1867.