

McCLEAN TELESCOPE (1897)

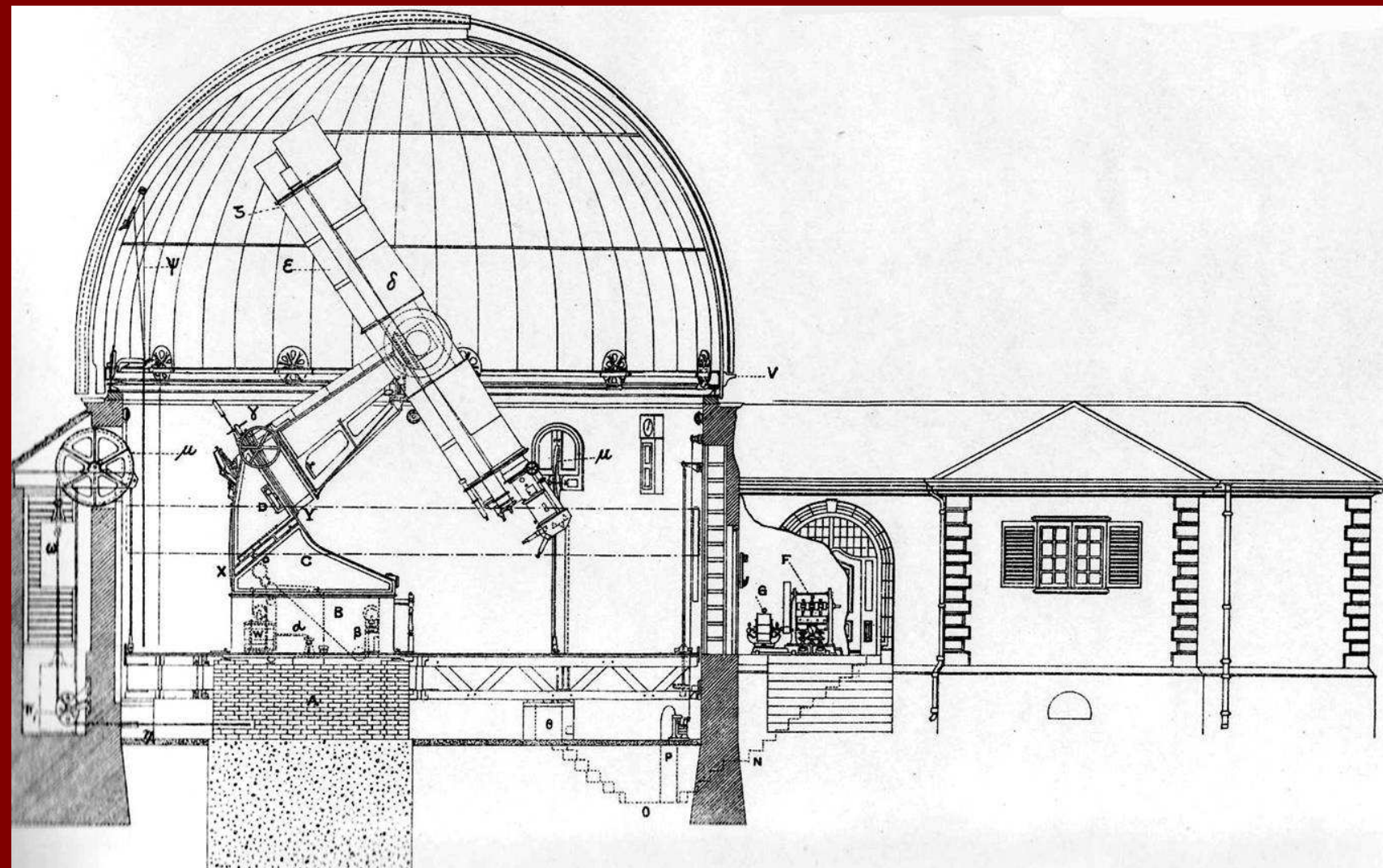
The McClean or Victoria Telescope was the gift of Frank McClean, a wealthy engineer and talented amateur astronomer who was a great admirer of Sir David Gill.

The telescope was built by Sir Howard Grubb of Dublin. The main tube carries a lens of 61 cm diameter (24 ins) and 6.8 m focal length to give a scale on the photographic plate of 30 seconds of arc per mm.

Both McClean and Gill were interested in the then-developing field of spectroscopy and the telescope was equipped with a 3-prism spectrograph made by the Cambridge Instrument Company.

Early photographic plates were only sensitive to blue light. The main telescope was optimized for this and is not suitable for visual use.

However, a second telescope of 46 cm (18 ins) that could focus all colours was provided for visual observations.



One photograph could take an hour or more and so a guide telescope of 20 cm diameter (8 ins) was also provided. The observer had to keep adjusting the telescope using the guider.

After 1926 the telescope was mainly devoted to finding the distances of nearby stars

Beside the telescope was a spectroscopic laboratory for comparing earthly substances to what was found in the stars.

The dome was made by Thomas Cooke & Sons of York. The architect of the building was Herbert Baker. The rising floor is hydraulically operated by the original pump.