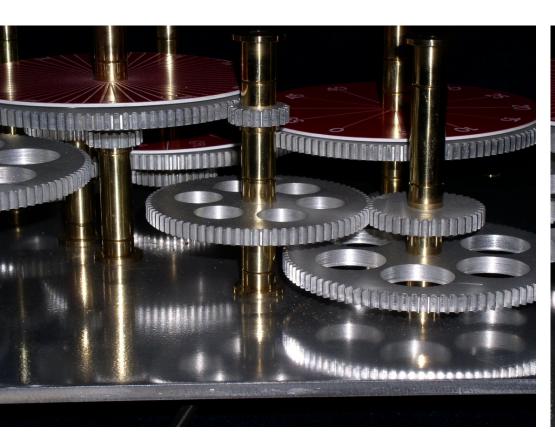


It has been named "The Arimathera Metal Calendar Clock". The pronunciation is [ar-uh-muh-te-ruh]. The three large red dials indicate Seconds, Minutes and Hours. The three black dials indicate Days of the Week, Days of the Month and Months of the Year. The arrangement of gear combinations had to be determined, the gear mesh ratios and number of gear teeth computed using algebra and placed into an Excel spreadsheet program. A drawing was made with the use of a Solid Works 3D modeling program. It is powered by a 1 RPM synchronous motor which enables it to keep very accurate time. The Seconds Wheel rotates at 1 RPM per minute and the Months of the Year Wheel (a 145 tooth gear) rotates at 1 RPM per year or about a half of a tooth per day. A 20 diametral pitch involute gear cutter with a 20 degree pressure angle was used to cut the 22 gears in the gear train.

Clock Base drilled to exact calculated center distances between gear sets. Brass bushings are shown installed.









The Arimathera Metal Calendar Clock

