Equatorial Sundial - cross-shaped with compass

Metalwork Collection

Accession Nr.:	53.519.1
Artist/Maker:	Purman, Marcus (1588 előtt - 1616)
Place of production:	Munich
Inscription:	talpán (ld. Baille p. 259.)
Materials:	brass; pewter
Techniques:	cast; engraved decoration
Dimensions:	width: 4,9 cm height: 8,1 cm thickness: 2,5 cm

Even after the discovery of mechanical clocks, the most ancient form of timepieces, sundials, were still in use for centuries. Although a sundial is a simple timepiece, its construction required great expertise. Marcus Purman (Purmann), a compassmaker and clockmaker (†1616), was one of the most famous mechanics of his age he created very precise and artistic sundials in Munich. This cross-shaped sundial is one of his few works to have survived. The foot contains a compass and the following inscription: “MATTHIAS ABBAS ORDINAVIT MARCUS PURMAN FECIT MONACHII ANNO 1594”. Sundials of similar shape are preserved at the Museum of the History of Science and Technology in Oxford, the Adler Planetarium in Chicago and the Germanisches Nationalmuseum in Munich, all dating from the turn of the 17th century. Equatorial sundials are portable: they can be set in any location. Their name comes from the fact that their dial-plate has to be set parallel to the celestial equator. From the foot of this sundial, a small plate of quarter cycle can be folded out, and the cross has to be set to the degree of latitude indicated there. The dial can be found on the sides of the vertical arms of the cross and on the top of the horizontal arm. The exact time is shown by the shadow cast by the vertical upper arm on the horizontal arm and by the horizontal arm on the lower vertical one. The sundial is richly decorated with engraved images: on the front is depicted Christ on the cross, and on the back the bronze serpent of Moses – a typological prototype of salvation.

Literature

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