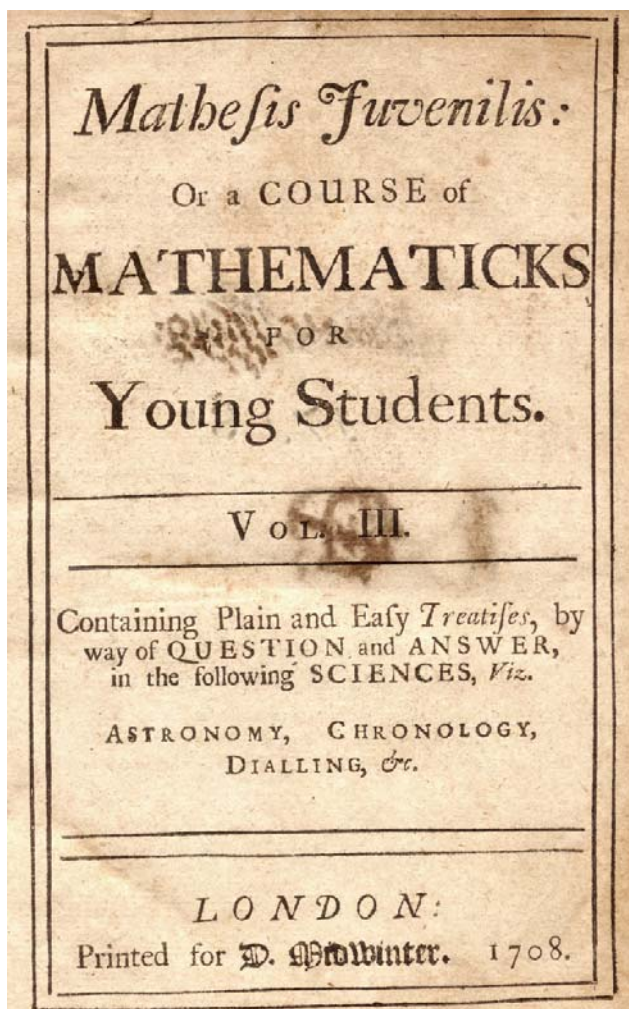


JOHANN CHRISTOPHER STURM, MATHEMATICS

London 1708



“*Mathesis Juvenilis*: Or a COURSE of **MATHEMATICKS** FOR Young Students.” is a smallish book with the following sections:

INTRODUCTION TO THE **GNOMONICS,** OR *Holologiography.*

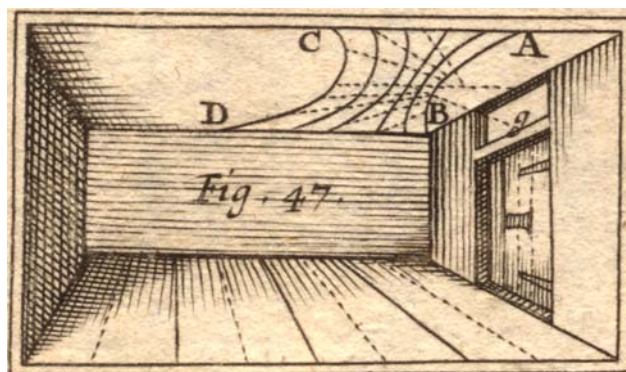
Gnomonicks, Or the ART of **DIALLING.**

SECTION I. *Of the Primary kinds of Vulgar Dials.*

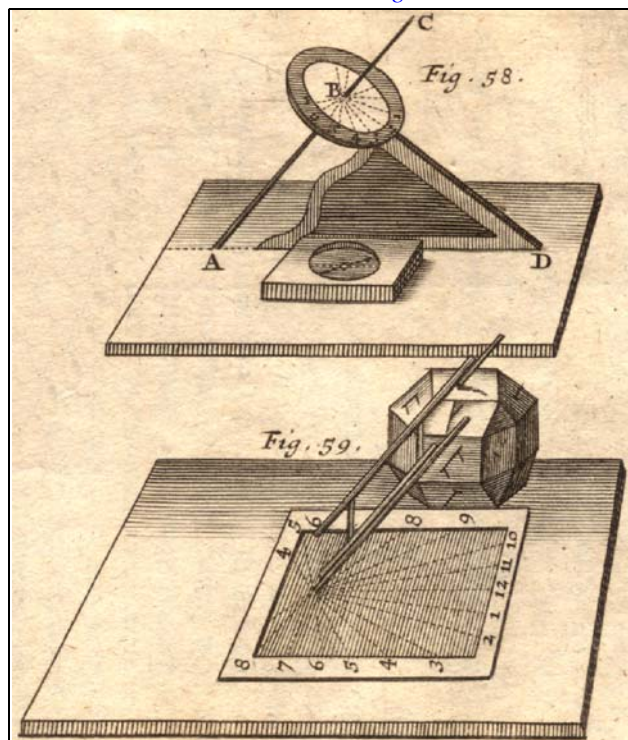
CHAP. I. *Of the General and Fundamental Rule for drawing Sundials.*

CHAP. II. *Of the Equinoctial Dial, as well the Upper as the Under.*

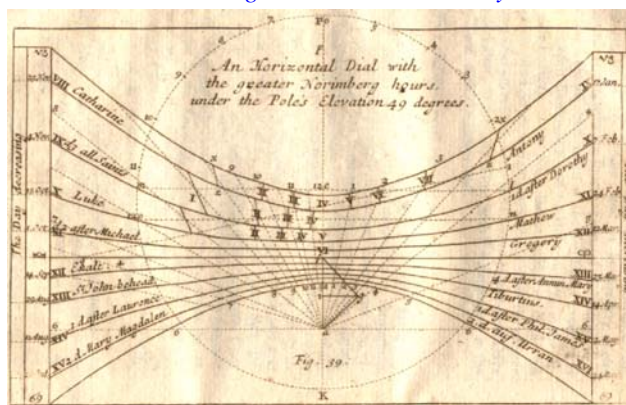
CHAP. III. *Of the Polar Dial, both the Upper and Under.*



Room with a Ceiling Dial



“Delineating Sundials Mechanically”



“An Horizontal Dial”

CHAP. IV. *Of the East and West Dial.*

CHAP. V. *Of the Horizontal Dial*

Number of Pages: 453 including 163 pages of Dialling.

Page Size: 7½" x 4¾"

Illustrations: 35 full pages of illustrations containing 89 figures.

CHAP. VI.

Of Vertical dials, as well South as North.

CHAP. VII.

Containing compendiously, in one Figure, all the Dials hitherto described apart.

SECTION II.

The Secondary Sorts of Vulgar Dials.

CHAP. I.

Teaching the way of making, and also the use of the Instrument to take Declinations.

CHAP. II.

Of delineating both Vertical and also Horizontal Decliners.

CHAP. III.

Of Dials inclined Forwards or Backwards to the South or North, or which are Inclined or Reclined.

CHAP. IV.

Of Declining Dials.

SECTION III.

Of the Inscriptions of the Twelve Signs, and of the Italian, Babylonian, and Ancient, &c. Hours.

CHAP. I.

Of the general Foundation of these Inscriptions.

CHAP. II.

Of the Application of the Fundamentals explain'd above, for inscribing the Celestial Signs; and the Lengths of the Days and Nights, &c.

CHAP. III.

Of inscribing the Italian or Bohemian Hours.

CHAP. V.

Of Inscribing the Babylonian Hours.

CHAP. VI.

Of the Inscription of the Hour Lines of the greater Norimberg Dials, as they call it.

CHAP. VII.

Of the Ancient Dials, called also the Jewish and Planetary Dials.

CHAP. VIII.

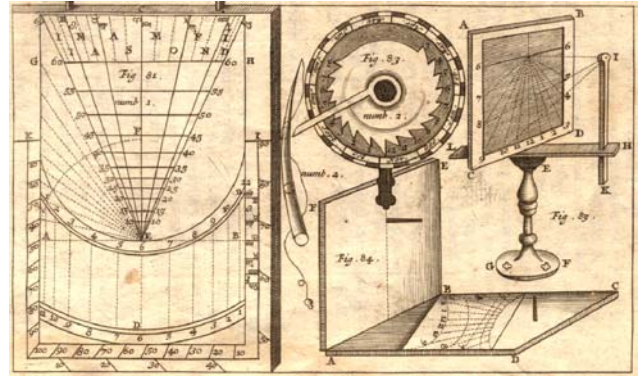
Of some other remarkable things to be inserted in Vulgar Dials, yet rather to be hinted at in this Place, than actually to be exhibited.

CHAP. IX.

Of a certain Line which is useful to be delineated in all the Dials, hitherto described, which we call the Line of the Horizon.

SECTION IV.

Of the various kinds of Specular Dials, designed upon Spheres or Concave Hemispheres, Cylinders, and other Bodies regular or irregular.



Some of the Portable Dials Illustrated.

CHAP. I.

Of Reflex'd or Specular Dials.

CHAP. II.

Of the various Trunks and Bodies, whose Planes or perfiles may receive the various sorts of Dials described in the former Sections.

CHAP. III.

Shewing how various sorts of Sundials may be designed by a certain mechanical and delightful Artifice upon any Superficies, otherwise very unfit for receiving them.

CHAP. IV.

Of that Kind of Trunks or bodies, which are so prepared on purpose, that Dials being delineated in their Superficies, have no need of peculiar Indexes, but shew the Hours by the Shadow of their Corners.

CHAP. V.

Shewing how Sun-Dials may be designed within or upon Spheres or Hemispheres.

CHAP. VI.

Of Ring-sun-dials, properly so called.

CHAP. VII.

Of Column or Cylindrical Dials.

CHAP. VII.

Of Quadrantal Sundials.

CHAP. XI.

Of certain Kinds of Universal Sun-dials.

CHAP. X.

Of the divers sorts of Nocturnal, Lunar, and Stellar Dials; as also of certain Organical Instruments, by whose help the divers kinds of Dials may easily be designed.

Mantissa.

FINIS.

Soli Deo Gloria.