JOHN BROWN, THE DESCRIPTION AND USE OF A JOYNT-RULE

London 1661

The Deſcription and Uſe
OF A
JOYNT-RULE:

Fitted with Lines for finding the Hour of the Day, and Azimuth of the Sun, to any particular Latitude ; Or to apply the ſame generally to any latitude.

Together with all the uſes of *Gunters* quadrant applyed thereunto, as Sun-riſing, Declination, Amplitude, true place right Aſcenſion, and the hour of the Night by the Moon, or fixed Stars;

A ſpeedy and eaſie way of finding of Altitudes at one or two ſtations ; Alſo the way of making any kinde of erect Sun-Dial to any Latitude or Dedination, by the ſame Rule: With the Deſcription and Uſe of ſeveral Lines for the menſuration of *Superfices*, and *Solids* , and of other Lines uſually put on Carpenters Rules :

Also the uſe of Mr. *Whites* Rule for meaſuring of Board and Timber, round and ſquare ; With the manner of uſing the *Serpentine-line* of Numbers, Sines, Tangents, and Verſed Sines.

Contriv'd & written by J. Brown, *Philom.*

London, Printed by *T. J.* for *J. Brown*, and *H. Sutton*, and ſold at their houſes in the *Minories*, & *Threadneedle-ſtreet*. 1661.

Using the Joynt-Rule

"The Description and Use OF A JOYNT-RULE" is a small book containing the following:

CHAP. I.
The Description of the Lines on the Rule, as it is made onely for one Latitude, and for the finding the hour of the day onely.

CHAP. II.
The Uses of the Rule follow.

CHAP. III.
A further description of the Rule, to make it to shew the Suns Azimuth, Declination, True place, right Ascention, and the hour of the day or night, in this, or any other Lattitude.

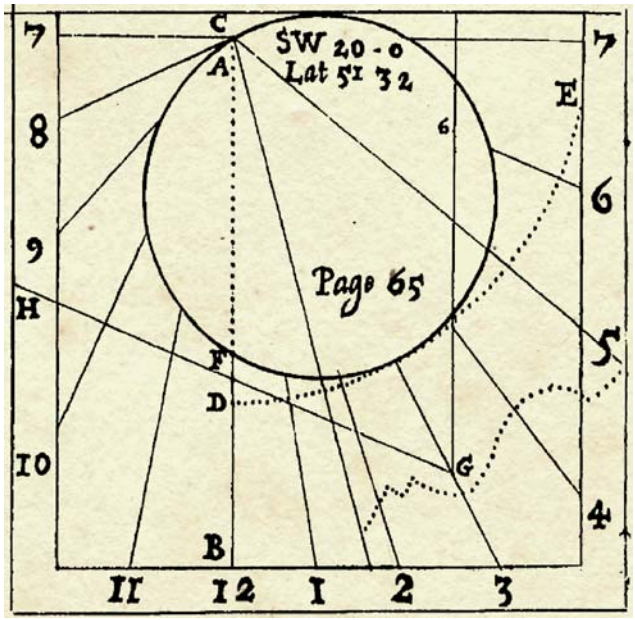
CHAP. IV.
The Uses follow in order.

CHAP. V.
Having the Suns Declination, or day of the moneth to finde the Azimuth at any Altitude required for that day.

CHAP. VI.
To finde the hour of the Night by the Moon.

CHAP. VII.
To finde the hour of the Night by the fixed Stars.

Number of Pages: 190
Illustrations: 11



A Vertical Declining Dial

C H A P. VIII.
To finde the Amplitude or Azimuth of the fixed Stars ; also their rising, setting, and southing.

C H A P. IX.
To perform the fore-going work in any latitude, as rising, amplitude, ascensional difference, latitude, hour, and azimuth, wherein I shall give onely the rule, and leave out the examples for brevity sake.

C H A P. X.
To finde all the necessary quesita for any erect declining Sun-dial both, particularly and general, by the lines on the Dial side, also by numbers, sines, and tangents artificial, being Logarithms on a Rule.

C H A P. XI.
To draw a Horizontal Dyal to any latitude.

C H A P. XII.
To draw a Vertical, Direct, South, or North Dyal.

C H A P. XII. (sic.)
To draw an erect East or West Dial.

C H A P. XIII.
To finde the declination of any Plain.

C H A P. XIV.
To draw a vertical declining Plain to any declination.

C H A P. XV.
To draw the Hour-lines on an upright declining Dial, declining above 60 *degrees.*

C H A P. XVI.
To finde a perpendicular altitude at one or two stations, and observations by by the degrees on the rule. (sic.)

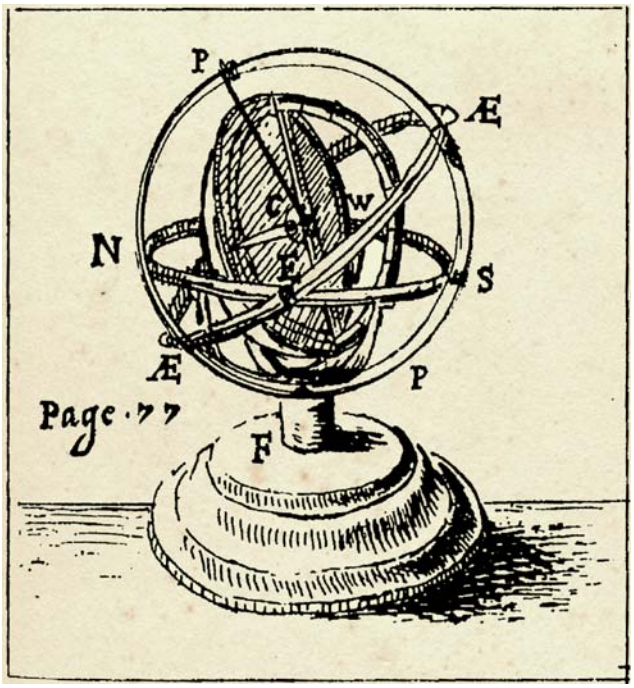
C H A P. XVII.
The use of certain lines for the mensuration of superficial and solid bodies, usually inserted on Joynt-Rules for the use of Work-men, of several sorts and kindes.

C H A P. XVIII.
The use of Mr. Whites *rule, for the measuring of Timber and Board, either by inches or foot measure.*

C H A P. XIX.
Certain Propositions to finde the hour, and the Azimuth, by lines on the Sector.

C H A P. XX.
A brief description, and a short touch of the use of the Serpentine-line, or Numbers, Sines, Tangents, and versed sine contrived in five (*or rather* 15) *turn.*

F I N I S.



Instrument to Demonstrate Dialling Techniques