W. P., THE USE OF THE QUADRANT.<br>London 1655

## Mathematical Inftrument

The Ufe of a

called a

QUADRANT. Shewing very plainly and easily to know the exact Height or Diftance of any Steeple, Tree or Houfe, \&cc. Alfo to know the Hour of the Day by it: the Height of the Sun, DMoon, $^{\text {, or Stars: }}$ and to know the time of Sun rifing, and fetting ; and the length of every Day in the Year: the place of the Sun in the Ediptick: the Azimuth, Right Afcenfion and Dedination of the Sun. With many other neceffary and delightful Conclufions. Performed very readily.

## Written by $W . P$.

Psal. 92.6. A brutish man knoweth not: neither doth a fool underfand This.

The Quadrants and thefe Books are to be fold by foseph Moxon at his fhop in Corn-bill at the fign of Atlas, in London. 1655.
"The Use of a Mathematical Instrument called a QUADRANT" is a small book starting with the following explanation:

## T H E

US E
Of the
Quadrant.

AQuadrant is the fourth part of a Circle, and is comprehended between two Semidiameters ; as in the Figure A B C, where A is the Center, A B one of the Semidiameters, and A C the other and the outmost Verge B C is the Limb of the Quadrant, or more properly the Quadrant it self, being one Quar-
 ter of a Circle, and therefore is called by the Latine word Quadrant.

To take the Altitude of the Sun without looking by the eye.
What is meant by Altitude ?
Now in some Quadrants there is described a Quadrat, which is made of two lines coming from the Semidiameters, $A B$ and $A C$, as in the Figure you may see marked; and they are divided into fifty equal parts. That part of the Quadrat which is next the Sights, is called The Scale of Con-
 trary shadow; and the other, The Scale of Right shadow. The use of the Quadrat is to take Heights and Distances without measuring them.

## Sect. II.

Shewing the use of Houre lines, and Azimuth lines, \&c.

BEcause the Quadrat and Quadrant fills not up the Instrument, but that there is vacant places left without any inscription; therefore many knowing men have invented several Lines \&c. to fill them up with :

And first of all, Stophler (in his Elucidatio Fabricce ususque Astrolabii) teaches to make Hour-lines for the time of the day ; yet he describes them in his Quadrant in such an imperfect manner, that it is plainly to be seen he rather affected ease, then truth.

Since him. M. Gunter hath invented Hourlines, after a more perfect way, and also illustrated the Quadrant with Azimuth-lines, and a Scale of the days of the Moneth, an Arch of the Horizon and the Ecliptique line, and also the Places of some notable Stars that lie between the Equator and Tropick.

The use of the Circle of Months, Ecliptick, Horizon Line of Declination, HourLines, Azimuths, and the five Stars, are briefly as followeth.
First the Use of the Circle of Moneths. Secondly, The Use of the Ecliptick Line.
Thirdly, The use of the Horizon Line.
Fourthly, The use of the Hour-lines.
Fifthly, The use of the Azimuth lines.
Lastly, The use of the five Stars is thus:

FINIS.

