ſeen together. 4. In the Method of ſetting it exactly perpendicular to a *Second*, if need be. 5. In its *Fixation* and *Motion*, it being ſo fixed and moved, that, if once ſet to the Objects, it continues to move along with them, as long as 'tis neceſſary to continue, or be very certain of, any Obſervation. 6. In its being to be made and adjuſted without difficulty, and not to be put out of order without deſign; as alſo in its great eaſineſs of being rectified and again adjuſted. 7. In its being not very chargeable.

All theſe perfections the *Author* explains, and endeavours to make good, by deſcribing and delineating this Inſtrument and all the parts thereof, and endeavouring to obviate ſuch exceptions, as he fore-ſaw might be made againſt it. To all which he annexes occaſionally ſomething that relates to the priority of the Invention of the *Circular pendulum*; and likewiſe a Deſcription of a Wheel-work, which, *he ſaith*, may be called the perfection of ſuch work, having the perfecteſt Idea, he thinks, that toothed Wheel-work is capable of, performing the ſame effect, as if the Wheel and Pinion had an indefinite number of Teeth. Which done, he deſcribes the Frame for keeping the Inſtrument, which is the main Argument of this Book, in its Perpendicularity, and yet always in the *Azimuth* of the Cæleſtial object; with a Digreſſion of the great Uſe of this Principle in Dialling, Equalling Time, Clock-work, *&c.*

He mentions alſo a Mechanical way, he hath, of calculating and performing *Arithmetical* operations, much quicker and more certainly, than can be done by the help of *Logarithmes*.

He concludes the whole by ſhewing divers of the particular Uſes of this New Quadrant, as 1. For meaſuring the Refraction of the Air. 2. For regulating the Places of the Fixt Stars and of the Planets. 3. For ſtating the Latitude of Places. 4. For examining the Influences of the Planets on the Earth. 5. For meaſuring the quantity of a Degree upon the Earth, 6. For meaſuring ſeen Diſtances. 7. For Levelling. 8. For taking the Diameters of the Sun, Moon, and other Planets. Where, by the by, are mention'd two other Inſtruments, one for taking Diameters to *Seconds*; the other, for looking on the body of the Sun without harming the eyes.

Errata left uncorrected in Numb. 108.

Pag. 170. l. 20. r. *Stores of Salt.* p. 185. l. penult. r. *ſometimes to the thickneſs of a ſtem.* p. 187. l. 15. r. *bought.* ibid. l. 30. r. *did coagulate.*

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