(151)

confent in what has been just now declared, & the Controverfie being about Matter of fast, wherein Authority, Number, and Reputation must cast the Ballance, Monf. Hevelius, who is as well known for his Ingenuity, as Learning, will joyn and acquiesce in that sentiment.

Of a Correspondency, to be procured, for the Finding out the True distance of the Sun and Moon from the Earth, by the Paralax, observed under (or neer) the same Meridian.

Seeing that the knowledge of this distance may prove of important Use, for the Perfecting of Astronomy, and for the better establishing the doctrine of Refractions; it is in the thoughts of some very curious Persons in England, for the finding out the same, to settle a Correspondency with some others abroad, that are understanding in Astronomical matters, and live in places farr distant in Latitude, and under (or

near ) the same Meridian.

To perform which, the following Method is proposed to be observed; viz. That at certain times agreed on by two Observatours, making use of Telescopes, large, good and well fitted for this purpose, by a measuring rod, placed within the Eye glass at a convenient distance, that it may be distinctly seen, and serve for measuring small distances by minuts and seconds (which is easie enough in large Telescopes) that, I say, each of such observers, thus surnish's, shall observe the visible way of the Moon among the Fixt stars, (by taking her exact distance from any Fixt stars, that lyes in or very near her way, together with the exact time of her so appearing) and the then apparent Diameter of her Disk; continuing these Observations every time for two or three hours, that so,

if possible, two exact observations of her Apparent place among the Fixt stars being made, at two places thus distant in Latitude, and as near as may be under the same Meridian, by these Observators concurring at the same time, her true and exact distance may be hence collected, not onely for that time, but at all other times, by any single Observator's viewing her with a Telescope, and measuring exactly her Apparent Diameter. It were likewise desirable, that as often as there happens any considerable Eclipse of the Sun, that this also might be observed by them, noting therein the exact measure of the greatest Obscuration compared with the then Apparent Diameter of his Disk. For by this means, after the distance of the Moon hath been exactly found, the distance of the Sun will easily be deduced.

As for the time, fittest for making Observations of the Moon, that will be, when she is about a Quarter or somewhat less illuminated, because then her light is not so bright, but that with a good Telescope she may be observed to pass close by, and sometimes over several Fixt stars; which is about four or five days before or after her Change: Or elle at any other time, when the Moon passes near or over some of the bigger fort of Fixt stars, such as of the first or second Magnitude; which may be eafily calculated and foreseen: Or best of all, when there is any Totall Eclipse of the Moon; for then the smallest Telescopical stars may be seen close adjoyning to the very body of the Moon. Of all which particulars the two Correspondents are to agree, as soon as he, that is to joyn abroad, shall be found out; whereupon they are mutually to communicate to each other, what they shall have thus observed in each place.

Of an Observation, not long since made in England, of Saturn.

This Observation was made by Mr. William Ball, accompanied