

*An Intimation given in the Journal des Scavans, of a sure and easie way to make all sorts of great Telescopical Glasses, together with a generous offer of furnishing industrious Astronomers with them.*

**T**He Usefulness of great Glasses for Telescopes, and the care and pains hitherto taken to perfect this Invention is sufficiently known; but the difficulty of the work doth so much increase in great Glasses of that kind, that it hath not been surmounted hitherto.

Monsieur *Borelli*, one of the Royal Academy of the Sciences of *Paris*, whose addition to Natural Philosophy, and chiefly to Chymistry, hath been known long since, hath found out a sure and very easie method to work all sorts of such great Glasses, which hath never failed him. He hath already carried the Experience of his Secret to extraordinary bignesses, having made one of them very good of two hundred foot, wrought on both sides on the same rule: Which shews, that if he had wrought it flat on both sides, the glass would have been of four hundred foot.

This easiness of making great Glasses, and the desire of procuring some advancement to Astronomical discoveries, have induced him to make presents of them in divers places to several persons capable to make use of them: And the same motive doth now invite him to make the like offer not only to the Astronomers that are dispersed up and down in the Kingdom of *France*, but also to those that are in forreign Countries, especially in those parts, where there is some established Academy or Society for Astronomical Observations; offering in this case to every one of such Societies three very good Glasses, one of ten or twelve foot for a Chamber; another of twenty five or thirty foot for ordinary observations, and a third of sixty or eighty foot, to make new discoveries with.

Private persons that are not in a condition to make Lenses for great Glasses, may, at least, make use of Glasses of fourteen or twenty foot, which he is willing to send them, therewith regularly to observe the Eclipses of the *Satellites* of *Jupiter* which happen almost every day, and afford so fair a way for  
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establiſhing the *Longitudes* over all the Earth. For, beſides that theſe *Eclipſes* are very frequent, the Emerſion and Immerſion of theſe *Satellites*, eſpecially in the ſhadow of *Jupiter*, is ſo momentany and ſo ſenſible, that they may be obſerved with the greateſt exactneſs, being altogether exempt from thoſe eſſential inconveniencies that accompany the *Eclipſes* of the Sun and Moon, which alſo are rare, and whoſe beginning and end are alwaies doubtful by reaſon of a certain ambiguous light.

The *Longitudes* of places at Sea, Capes, Promontories, and divers Iſlands being once exactly known by this means, would doubtleſs be of great help and conſiderable uſefulneſs to Navigation.

Since *Monſieur Borelli* hath found this way of working *Glaſſes*, he entrusted the ſecret of it to a perſon of the Academy above-mentioned; and he purpoſeth to publiſh the ſame hereafter, with ſome other conſiderable *Observations* touching the ſame *Glaſſes*.

*A Letter from Liege concerning Mr. Newton's Experiment of the coloured Spectrum; together with ſome Exceptions againſt his Theory of Light and Colours.*

HON<sup>rd</sup> Sir,

**M**R *Gascoigne* having received your obliging Letter of *Jan. 18*, with freſh directions from *Mr. Newton*; but wanting convenience to make the Experiment according to the ſaid inſtructions, he has requeſted me to ſupply his want. In compliance with his requeſt I have made many *Trials*; the iſſue whereof I here acquaint you with: next, with ſome exceptions, grounded on Experiments, againſt *Mr. Newton's* new *Theory of Light and Colours*.

The vertical angle of my *Prism* was 60 *deg*; the diſtance of the Wall, whereon the coloured *Spectrum* appeared, from the Window, about 18 foot: The diameter of the Hole in the Window ſhuts in length the line *a*, which upon occaſions I contracted to half the ſaid diameter; but ſtill with equal ſucceſs as to the main of the Experiment. The refractions on both ſides the *Prism*, were as near as I could make them, equal,