

may have, the rays will never collect in the same part; the longer the telescope the more interval it will have between the focus of the red and violet rays, and consequently the more confused the image of the object observed.

Refracting telescopes, therefore, can be rendered perfect only by seeking for the means of correcting this effect of the different refrangibility, either by composing telescopes of different densities, or by other particular means, which would be different according to different objects and circumstances. Suppose, for example, a short telescope, composed of two glasses, one convex and the other concave; it is certain that this telescope might be reduced to another whose two glasses would be plain on one side, and on the other bordering on spheres, whose rays would be shorter than that on the spheres on which the glasses of the first telescopes have been constructed. However, to avoid a great part of the effect of the different refrangibility of the rays, the second telescope may be made with one single piece of massive glass, as I had it done with two pieces of white glass, one of two inches and a half in length, and the other one inch and a half; but then the loss of transparency is a greater inconvenience than the different refrangibility