object observed have a certain extent, as the moon, which occupies half a degree of space to our eyes, then the image of this object will occupy a space of three inches diameter in the focus of the objective glass of thirty feet; and the aberration caused by the sphericity producing a confusion in any luminous point, it produces the same on every luminous point of the moon's disk, and, consequently, wholly disfigures it. There would be, then, much disadvantage in making use of elliptical glasses or long telescopes, since the means have been found, in a great measure, to correct the effect produced by the different refrangibility of the rays of light.

From this it follows, that if we would make a telescope of 30 feet, to observe the moon, and see it completely, the ocular glass must be at least three inches diameter, to collect the whole image which the objective glass produces to its focus; and if we would observe this planet with a telescope of 60 feet, the ocular glass must be at least six inches diameter, because the chord which the angle measures under which the moon appears to us, is, in this case, nearly six inches; therefore astronomers never make use of telescopes that include the whole disk of the moon, because they would magnify but very little. But if