

always an equal line to the semi-circle, which measures an angle of 32 minutes for a diameter, we shall find by this rule that a square glass of six inches loses its square figure at the distance of about 60 feet, and that a glass of a foot square loses it at 120 feet, and so on of the rest.

By reflecting a little on this theory we shall no longer be astonished to find, that at very great distances a large and small glass afford an image of nearly the same size, and which only differs by the intensity of the light; we shall no longer be surprised that a round, square, long, or triangular glass, or any other figure, always yields round images\*; and we shall evidently see that images do not increase and lessen by the dispersion of light, or by any loss in passing through the air, as some naturalists have imagined; but that, on the contrary, it is occasioned by the augmentation of the disks, which always occupy a space of 32 minutes to whatever distance they are removed.

So, likewise, we shall be convinced, by the simple exposition of this theory, that curves, of any kind, cannot be used with advantage

\* This is the reason that the small images which pass betwixt the leaves of high and full trees, and which falling on the walks are all oval or round.