

the luminary to be one inch, whereas in the day we should not be able to discern it beyond the proportion of the above ratio ; and as this is a circumstance which attends all objects when viewed at those different periods, we may conclude that one principal reason for our not being able to discern things at a greater distance, is the brilliancy of the light which fills up the intermediate space, and so destroys the reflected rays from those still more distant objects. When we are surrounded with strength of light the objects near make a forcible impression on the retina of the eye, and obliterate those far off, which are weak and faint ; and, on the contrary, if we view a luminous body in the night, even at a considerable distance, that becomes perfectly visible, while those which are near are scarcely discernible. From these reasons it is, that a man at the bottom of a deep pit can see the stars, or, by employing a long tube in a dark room, may obtain some effects from the telescope in the middle of the day. From this it is evident, that if bodies were furnished with more strength of light they would be visible at greater distances, although the angle was not increased, for a small candle, which burns bright, is seen much far-