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*mous physical force in perpetual exertion at every point, through all the immensity of space.*

(66.) As this is the conclusion we are landed in—for the evidence for the truth of the undulatory doctrine, or something equivalent to it, accumulating, as we shall see, in all quarters, and in the most unexpected manner receiving confirmation from facts utterly un contemplated by its originator, obliges us to look on this result as something more than a scientific rhodomontade—we shall endeavour to present it to the conception of our readers in a point of view which may enable them to realize it more distinctly. All who know the nature of a barometer are aware that the column of mercury 30 inches in height sustained in its tube, is the equivalent of the pressure of the aërial ocean which covers us, on its sectional area; and is just sufficient to counterbalance the pressure, on an equal area, of an atmosphere five miles in height of air *everywhere of the same density as at the surface of the earth.* This height (five miles) is what is termed in Barometry, “the height of a homogeneous atmosphere,” and affords a measure of what may be called the intrinsic elasticity of the air, of an exceedingly convenient nature; and which is received as a kind of natural unit, in Meteorology and Pneumatics. Substituting now light for sound, and for air the luminiferous ether, we should have for the corresponding height of our homogeneous atmosphere (gravity being supposed uniform) five and a half billions of miles, or about one-third of the distance to the nearest fixed star! The measure thus afforded of intrinsic elastic power is of the