

size of the sun taken in relation with its distance from the earth; the size of the earth, which enables it to retain its present atmosphere; the eccentricity of its orbit and the inclination of the ecliptic; the relative amounts of land and sea, and a host of other factors. Together these probably make of the earth, in comparison with other bodies, an extremely favorable abode for the living organism. Yet it cannot be denied that in detailed chemical constitution the earth is certainly more or less typical of all similar bodies. Moreover the earth's crust and its atmosphere, being formed in accordance with

ing continents, as formerly observed, be completely changed by such an addition to the land, and the whole of their fertile regions be reduced to arid deserts? Now, this distribution of sea and of land, so wonderfully adapted as it appears to be to the present state of things, depends of course in a great measure upon the *absolute quantity* of water in the world. While, on the other hand, the *relative gravity* of water, as compared with that of the earth, keeps the ocean within its destined limits, notwithstanding its incessant motion. Thus Laplace has shown that the world would have been constantly liable to have been deluged from the slightest causes, had the mean density of the ocean *exceeded* that of the earth! Hence the adjustment of the quantity of water and of its density, as compared with that of the earth, afford some of the most marked and beautiful instances of design." — PROUT, *The Bridgewater Treatises, Treatise VIII, "Chemistry, Meteorology, and the Function of Digestion."* London, 1834, pp. 186-187.