The sun's rays penetrate to, and spread unconfined throughout, their deepest regions, and the diffusive motion is perpetually downwards, but, as it proceeds, becomes more and more feeble, and too faint to admit of reverberation from the bottom.

Evaporation is slower, in proportion to the greater bulk of a fluid. To prove this, two tin vessels, whose forms were similar, and capacities to each other as 5 to 1, were placed on the top of a stove equably heated. During the time the water evaporated from the vessel which was as 5, the vessel which was as I was filled up 6 times, and was 6 times emptied by evaporation. One sixth part more water than the larger vessel contained was dispersed from the smaller vessel, in the same time, and by exactly the same agent.

Evaporation is slower, also, in proportion as the volume of fluid is more collected. The water shed by a cloud, when scattered over a plain, is dissipated in a period of time incalculably shorter than an equal quantity would be if collected in a pond. In the latter condition, the heat has liberty to range; in the former, the heat, arrested by the earth, and reflected therefrom, suddenly carries off the particles of water. Indeed, if each drop of the water which composes an ocean could be carried off by the sun with as much speed as a single drop cast on a solid body, it probably would require but a few days to empty the Atlantic Ocean, were the atmosphere capable of receiving it; and the land sections of the globe would have to sustain an uninterrupted deluge from above.

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