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as the ether, the surface of the Ball of two Palms (e.g.) shall be four times bigger than the surface of the Ball of one Palm; and the whole solidity of the Ball of two Palms Diameter, increasing in a triplicate proportion, shall be eight times as great, and consequently eight times heavier than a Ball of one Palm in Diameter: so that the surface of the greater to the surface of the smaller shall be as 4 to 1, and the solidity as 8 to 1.

I suppose, Fifthly, That where one body is lighter in Specie than another, the lighter ascends in the other that is heavier, if the heavier be a liquid body; as a Ball of ordinary Wood on Water, because it is lighter in Specie than water; so also a Ball of Glass full of Air will swim at the top of water, because though Glass be heavier than water, yet taking the whole complex of the Ball, Glass and Air together, it is lighter than that, which is only a body of water.

These things being supposed 'tis certain, that if we could make a Vessel of Glass, or other matter, that might weigh less than the Air that is in it, and should draw out all its Air, after the manner above directed, this Vessel would be lighter in Specie than Air itself, so that by the Fifth Supposition, it would swim on the top of the Air, and ascend on high. Ex. gr. if we could make a Vessel of Glass, holding a foot of water, that is 80 lb. and were so thin and subtile as to weigh less than an ounce and a half: The Air being thence evacuated, which by the First and Second Supposition