

the effect will be. Let there be near the said Vessel a Stop-cork, so closing the Glass that no Air can enter. Fill the whole Glass, and the whole Cane full of Water; then shutting the Cane in the extrem part, let the Vessel be inverted, so as that it stand on its upper part, and let the extreme part of the Cane be immersed in water; and whilst it is immersed in the water, let it be opened, that the Water may issue out of the Vessel; which will all go out of it, The Cane remaining full to the height of 46 Palms, and 26 Minutes, and the remaining space above will be empty, there being no way for the Air to enter: then shut the neck of the Vessel with the Stop-cock, and the Vessel will be empty. He that disbelieves it, let him weigh it, and he will find, that as many Cubic feet of water as there are issued out, so many ounces and half ounces less will it weigh, than what it weighed first, when it was full of Air: which is sufficient for my purpose.

I suppose, Fourthly, The truth of the Demonstrations of Euclides 11 and 12 Books, which are also evident by Experiment, which proveth, that the Superficie of Balls or Spheres increaseth in a duplicate proportion to their Diameters, and their solidity in a triplicate. Duplicate proportion is, when three numbers are such, that the third contains the second as often as the second contains the first, as 1, 3, 9. or 1, 4, 16. And triplicate proportion is when 4 such numbers are taken of which the 4th contains the 3rd as often as the 3rd contains the 2nd, and the 3rd contains the 2nd as often as this contains the 1st, as in 1, 3, 9, 27. or in 1, 4, 16, 64. So if you take two Balls, one of which have a Diameter twice as big