

above the point of three fourths of the height of the tube, and increase still more considerably by being frozen. But if the tube be well stopp'd, and perfectly at rest, the water will continue to descend, and will not freeze, although the degree of cold be six, eight, or ten degrees below the freezing point ; congelation, therefore, presents, in an inverted manner, the same phenomena as inflammation. A heat, however great, shut up in a well-closed vessel, will not produce inflammation unless touched with an inflamed matter ; so, likewise, to whatsoever degree a fluid is cooled, it will not freeze unless it touch something already frozen, and this is what happens when the tube is shaken or uncorked ; the particles of water, which are frozen in the external air, or in the air contained in the tube, strike the surface of the water, and communicate their ice to it. In inflammation, the air, at first very much rarefied by heat, loses its volume, and fixes itself suddenly. In congelation, water, at first condensed by the cold, takes a larger volume, and fixes itself likewise, for ice is a solid substance, lighter than water, and would preserve its solidity if the cold continued the same ; and I am inclined to believe that we may attain the point of fixing mercury at a less degree