

over the globe exert different degrees of the same influence. *The air, everywhere incumbent on the earth's surface, must, therefore, always be under the point of saturation;*—the relative degree of dryness being highest under the Equator, and gradually diminishing as we recede north or south toward the Poles.*

In such a mixed atmosphere as we have supposed, and as in reality surrounds our globe, if its equilibrium be undisturbed, and if it be conceived to be at rest; the admixed vapour will have nearly the same tendencies to motion, which would exist in an atmosphere of pure vapour, formerly described. But, from the more equal distribution of the vapour, when mingled with air; the contrasts between the specific gravities of different portions of vapour, in different parts of the atmosphere, will be much less striking, than if the atmosphere consisted of vapour alone. Consequently, the rates of motion depending upon such differences of specific gravity, will be less remarkable in a mixed atmosphere,

* The mathematical reader will observe, that the quantities given in the text are not rigidly accurate, but are intended only for familiar illustration of the principles regulating moisture. The truth is, as has been noticed in the text, in *no part* of a vertical column of a mixed atmosphere, in a condition of equilibrium and at rest, can the air be in a state of saturation. It has been remarked, that the degree of saturation often continues nearly uniform up to a certain point, and then suddenly decreases.