

quantity separated ; and on the separation taking place in atmospheric air. When the quantity of water separated is small ; the minute detached particles diffused through a large space, are suspended in the atmosphere by its buoyancy, and assume the form of what, for the sake of distinction, we shall call *Visible Vapour*, viz. mists, clouds, &c. When the quantity separated is greater ; the particles collect into drops too large to be upheld by atmospheric buoyancy, and they fall to the earth in the shape of rain, hail, &c.

Of the two great processes of evaporation and condensation, it may be further remarked, that by a beautiful provision, they have a constant tendency to limit each its own operations : evaporation is increased by heat, and produces cold ; condensation is produced by cold, and liberates heat. Moreover, in virtue of another wonderful arrangement ; by evaporation, water is separated entirely from all foreign bodies, and is thus condensed in a state of absolute purity.

Secondly, *Of the conditions of an atmosphere of vapour alone ; and of a mixed atmosphere of vapour and air.*—We now come more particularly to consider the mode in which vapour exists in the atmosphere. To facilitate the understanding of the subject, we shall commence by supposing the air to be absent ; and shall enquire what would be the conditions of *an atmosphere of*