

or the rate of its evaporation, as well as the actual quantity of water in the state of vapour in the atmosphere, will increase as the temperature increases. We need not state in detail, the exact law of this increase. It is sufficient for our purpose to observe, that at all temperatures below the boiling point of water, that is to say, at all common atmospheric temperatures; while the rate of the increase of temperature is *slow* and uniform, or in an *arithmetical* progression; the corresponding rate of the elastic force of vapour, by which the quantity of water as vapour is determined, increases much more *rapidly*, or nearly in a *geometrical* progression. This important fact is connected with several most interesting circumstances.

The phenomena of the *Condensation* of vapour from the atmosphere, are next to be explained. As the quantity of water in solution in the atmosphere, can never be greater, though it may be less, than the quantity proper to the temperature; when vapour, or what is the same thing, when a portion of air saturated with vapour, at any given temperature, is cooled below the point of saturation; a portion of the vapour is separated in the form of fluid water, while the remainder assumes the elastic condition proper to the newly acquired and diminished temperature. The forms assumed by the water so separated, are various; and depend very much upon the