elastic force, all the vapours which are in contact with it; but the neighbouring vapours rush towards the colder locality as towards a vacuum, either in the form of visible vapour or clouds, in which case they are carried by the winds; or as invisible vapour, in which form their movement may be determined by diffusion.

The effect of the *unusual prevalence* of certain winds in producing an increase of rain, or the reverse, is well known, and is quite intelligible on the principles we have explained. Thus in tropical climates, during the steady prevalence of the trade winds, the currents intermingle but little, the atmosphere is perfectly cloudless, and no condensation takes place. But when these great currents, following the course of the sun, begin at certain seasons of the year to shift their direction; their uniform course suffers derangement, they become intermixed, and condensations of moisture commensurate with the high temperature, are produced to an extent quite unknown in temperate climates. These condensations form the violent periodical rains of hot climates. So also in temperate climates, as for instance in our own country, winds coming from the south and from the west are from a warmer climate, and hold much vapour in solution; while winds from the opposite points are colder, and are therefore relatively drier. Hence winds from the south and from the west, are