

With respect to the *sources* of the electricity of the atmosphere there have been many opinions. It seems now to be admitted that electrical excitement does not arise from the mere evaporation and condensation of water ; but that in order to produce such excitement, there must always be some chemical combination or separation.\* Thus electrical excitement is the result of the chemical changes which often accompany the evaporation of water. During combustion also, there is an ample evolution of electricity ; the burning body giving out negative, the oxygen positive electricity. In like manner, the carbonic acid sent forth during vegetation is charged with negative electricity ; and at the same time the oxygen, as is most likely, is charged with positive electricity. Derivation from these sources has been deemed quite sufficient to explain the very large quantities of electricity, which are so often accumulated in the clouds. It is however probable that there are yet other causes, or at least *one* other cause, on which, in numerous instances, this accumulation may still more immediately depend. We allude to a supposed combination of oxygen with the vapour of the atmosphere. For reasons which we cannot here detail, our opinion is, that this supposed combination of aqueous vapour with oxygen, more

\* Pouillet, *Elémens de Physique expérimentale et de Météorologie*, tom. ii. p. 823.