

duced during the night, by evaporating water in large and very shallow vessels, so that a large surface shall be exposed to the air.

We have now discussed the subject of heat, or caloric. Its *chief* chemical use is as a *solvent*. As water destroys the attraction of cohesion by introducing its particles between the particles of the body acted upon, so fire acts with regard to many bodies which are not acted upon by water. Caloric introduces its particles, and thus renders the body more liable to be acted upon by other chemical operations.

We will now advert to our last general power, *electricity*; and here we must content ourselves with a mere cursory and popular view of the subject, as it would carry us to a far greater length than our limits will admit, were we to attempt to enter into its more abstruse speculations.

If we rub with a dry hand, or with a silk handkerchief, a glass tube, and then bring it near to bits of paper, cotton, or, which is better, gold-leaf, it will first attract these bodies, and then repel them. If when the atmosphere is dry, we take a glass rod in one hand, and a stick of sealing-wax in the other, and having rubbed one of them, approach it to a bit of gold-leaf floating in the air, it will repel, and then attract it: if while the one repels it, we rub the other, and approach it to the particle, it will attract it; and thus you may proceed for any length of time, *alternately repelling and attracting*.

Such are some of the phenomena of this fluid in its weakest state: when collected in larger quantities by instruments which we shall hereafter describe, it appears as a spark. As for its operations, almost all the minute changes as well as the grander luminous appearances of matter, seem to originate in it.