

Energy of Motion and of Position. 21

by the action of the sun's rays and carried to the upper regions of the atmosphere. Here they may float around for days, weeks, or months, each one carrying its little load of energy, which is given up at the moment the conditions are right for condensation into rain-drops. At the moment of condensation the energy that was stored in the moisture spherule by the power of the sun's rays is given up in the form of heat, or electricity, or both. It may appear first as electricity until the cloud is charged to the point of disruption, when the whole is converted into heat through the electric discharge. All of the phenomena of a thunderstorm, hailstorm, or tornado, with their terrific manifestations in the form of thunder, lightning, wind, and rain, are simply the result of a sudden releasing of the stored energy in the myriads of moisture spherules that were placed there by the power of the sun, when they were silently and invisibly wrested from the surface of the water, or from condensed moisture globules floating in the air.

If we should measure the energy that is released during a thunderstorm by the condensation of moisture spherules, and follow it through the various manifestations of thunder, lightning, wind, and rain, together with the energy set free in the form of heat, the whole of the energy expended in these