All the material forces, therefore, of the universe, both mechanical and physiological, with their actions and reactions, their equilibria and perturbations, are tending gradually toward a general and permanent rest. The threads of their mutual connection may be closely interwoven, but somewhere there is a beginning and an end. Within the grand cycle of their active lifetime apparent circles may be described, but, like the eddies of a river stream, they are lost in the general current, or, like the gyrations of a disk descending through the sea, they are only apparent, and wend their way toward ultimate rest. The same exact conditions are never reproduced. [See Appendix, Note IX.]