

that which it would assume, if while in a fluid state, it began to revolve on its axis with its present velocity; and hence the probability is strong that this was the origin of its oblateness. But if originally fluid, it must have been igneous fluidity; for since the solid matter of the globe is at present 50,000 times heavier than the water, the idea of aqueous fluidity is entirely out of the question. If the rate of revolution had been greater than it is now, the poles would have been flattened more, and if the rotation had been less rapid, the poles would have been flattened less than at present. To have formed a perfect sphere, there must have been no rotation at all.

*Proof (2). All the crust of the globe has been in a melted state.*—As to the older unstratified rocks nearly all admit that they are of igneous or aqueo-igneous origin. As to the aqueous and metamorphic rocks, also, it will be admitted that they were originally made up of fragments derived from the unstratified rocks; and consequently that they have been melted. Hence if the entire crust of the globe has been melted, it is a fair presumption that it was the result of the fusion of the whole globe.

*Proof (3). The universality of a tropical or ultra-tropical climate, in the earlier geological ages, and in high latitudes.*—If the earth has passed through the process of refrigeration, there must have been a time, when the whole surface had such a high temperature, as is denoted by its organic remains. A climate, also, chiefly dependent on subterranean agency, would be more uniform over the whole globe, than one dependent on solar influence: and the first appears to have been the agency in those remote ages.

*Other Suppositions.*—1. Lyell has proposed an hypothesis, dependent upon the relative height of land in high latitudes at different periods, to explain the tropical character of organic remains, without the aid of a secular refrigeration. But this has already been treated of. 2. Another hypothesis has been advanced with much confidence by certain writers, not, however, practical geologists, to the same effect. It supposes these organic remains to have been drifted after death from the torrid zone. But their great distance in general from the torrid zone, the perfect preservation, in many cases, of their most delicate parts, with other evidences of quiet inhumation near the spot where they lived, such as the preservation in several cases of the softer parts of the animals, render such a supposition wholly untenable.

*Proof (4).*—*This theory furnishes us with the only known adequate cause for the elevation of mountain chains and continents.*