

a continent, causing displacements of the rock formations along lines measuring hundreds of miles in extent, must have been attended by a succession of earthquakes of unwonted violence, which would have caused destruction by the vibrations in the rocks beneath, and also indirectly through the deluging waves sent careering over the land from any seas in the range of the vibrations. Whenever the shakings of the continent extended beneath the ocean, these deluges from earthquakes of Laramide origin would have been destructive over all the coasts of a hemisphere. As land was mostly low at the time, the earthquake waves may have made their marches inland for hundreds of miles, and have left alive only the smaller animal species and the vegetation.

This sweeping from the world of so large a part of its life, and especially that of Mesozoic characteristics, was a much-needed preparation for the era of the "Reign of Mammals." It was an opportunity for the "survival of the fittest" on a grand scale; that is, the survival of those species that could withstand the special causes of destruction, and of the many that were out of harm's way. The exterminations were the removals of hindrances to progress. The survival of the fittest and of the lucky ones, while not directly species-making, was the origin of new associations in continental and oceanic life; that is, of new faunas and new floras over the world, in which, under the modified geographical and physical conditions, the elements existed for further change and progress.