2. *The mountain chains and volcanoes of the continents mostly confined to their borders.* — The facts on these points are briefly mentioned on page 32 and beyond. The situation of the chains on the continental borders, so well exhibited in North America, and the position of the greater mountain-mass of this continent, *greater by 25 times*, on the borders of the larger ocean, have manifestly a cause that is in some way connected with the mutual relations of the border region and the oceanic basin adjoining. The author has explained these features (1847, 1873) on the view (1) that the lateral pressure at work was lateral thrust chiefly *from* the oceanic direction against the continental borders (the landward side of the border region being the side of least pressure or greatest resistance); and (2) that since the oceanic area was depressed below the level of the continental, the thrust was in a small degree obliquely upward. If the crust in which the strain exists has only five miles of depth, there is still stronger reason in favor of this explanation, and for accepting it also as accounting for the making of the greater mountain-mass on the side of the widest ocean; for width of ocean, not depth, is the important element. The view explains equally the abundance of border volcanoes.

3. *Great mountain uplifts in the later part of geological time and also great igneous ejections.* — The fact that the highest and broadest of mountains and the chief part of the mass of the continents were lifted above the ocean mostly after the Cretaceous period is one of the most marvelous in geological history.

After the crust had become stiffened by the thickening, plication, and solidification, and partly the crystallization, of the strata of the supercrust, the chief movement in mountain regions, caused by the ever-continuing lateral pressure, was an upward one, and then mountain chains received through epeirogenic movements their great heights. Under the same circumstances, moreover, igneous ejections and volcanoes reached their maximum at the close of the Cretaceous and during the Tertiary.

In correspondence with the great continental geanticlines of the Tertiary and later time, there should have been oceanic geosynclines, for the material constituting the rising mass could have had no other source than the crustal mass beneath the oceans. On this point there is the great fact of the subsidence over the central Pacific, described on page 349, of which the coral islands are a monumental record. Its area was hardly less than 6000 miles in length, and the breadth, reckoning only from the Hawaiian to the Friendly Islands, over 2500 miles. Such a subsidence fully meets the demands of the Pacific-border geanticline of North America. It suggests, also, that the other great mountain-masses, uplifted during the Tertiary and Quaternary, among them the lofty Andes and the still loftier Himalayas, derived a supply of material by a like method from beneath the oceans. Under this compensating relation, the two great movements become one epeirogenic event, and, therefore, the combined result of one comprehensive cause.

4. *North America a type-continent.* — Among the continents, North