near the meridian of 120° to the meridian of 97°, or through a breadth of 23°, or nearly 1500 miles. The higher emerged peaks of the Rocky Mountain region were perhaps 4000 or 5000 feet out of water; the Sierra Nevada, 3000 to 4000 feet. Many peaks have Cretaceous rocks at a high level; one, Slaty Peak, in Colorado, at 13,000 feet, and this is supposed to have lost 3000 feet of Upper Cretaceous by denudation. The floor of the Great Basin was probably at a height of 1000 feet and less, and its ridges 2000 to 4000 above sea level. Almost all the rest of the surface was near the sea level or below it. The *geanticline* added at least 13,000 to the height of the summit region; of central Nebraska, 3000 feet (taking only present altitudes), and of western, 5000 to 6000 feet; of Colorado, east of the Front Range, 6000 to 7000 feet; of central Mexico, at least 10,000 feet; of the Sierra Nevada, 10,000, a third of it probably through the general geosynclinal movement, and the rest through one or more faults; and so on. The average elevation of western North America was certainly tripled. This would make the increase of mass at least 10 times. But, as a large part was a total gain, since it rose from the sea level, the amount probably much exceeded this; 12 or 15 times may be nearer the fact. Supposing no addition in the eastern half except that of the Cretaceous and Tertiary sea border, the gain in mass for the whole continent would be over six times.

It is to be admitted that the present elevation cannot in any region be a correct measure of the actual height at the close of the Tertiary. It is safe to say only that it is the final elevation after denudation and such Quaternary oscillations as may have since occurred. The mean height may be much less now than it was at the close of the Tertiary.

In South America, the region of the Andes through the length of the continent underwent at the same time an elevation of many thousands of feet. In Ecuador, the Upper Cretaceous forms most of the peaks of the eastern Andes, and has a height in some of the ridges of 6000 meters (19,686 feet); in Peru, northeast of Lima in 11½° S., near the Pass of Antaranga, a height of 4803 meters (15,754 feet); in the Province of Huamachuco, 2000 to 5000 meters; in 12° S., between Pachachaca and Jauja, the Gault, at 5000 meters (16,405 feet).

In Haiti, according to Gabb, the Miocene has an elevation of 200 to 2000 feet; and a sea-border of limestone, a height of 170 feet and less. In Jamaica there are 2000 feet or more of white limestone, and the rock covers six sevenths of the area of the island. A yellow limestone below on Jamaica is Miocene; and the thick white limestones of Jamaica and Santo Domingo as well as of Cuba are probably of Tertiary origin, if not partly of Quaternary.

On the Barbados, there is an oceanic deposit consisting of a score or two of feet of calcareous earthy material, largely made of Globigerinæ, overlaid in some places by 100 to 130 feet of siliceous Radiolarian earth, and above this other calcareous and pumiceous beds, with red clays 100 feet or more; and these beds underlie the elevated coral-reef rock of the island from the seashore to a height of 800 to 900 feet. They are regarded by Jukes-Browne and Harrison (1891, 1892) as probably Pliocene, and as evidence of a Pliocene subsidence of 2000 to 3000 fathoms, or to such depths as now afford similar