

youngest mountain-chains were pre-eminent for the large participation of volcanic rock in their composition, more especially along marginal fault-lines.

Dana's views on mountain-building were based chiefly on the Appalachian Rocky Mountains, and were well adapted to the geological relations in North America. They were therefore widely accepted in that country. Many of the ideas were criticised by his compatriots, and the healthy interest awakened in the subject reacted favourably upon Dana's concept, as it enabled the author to revise and improve certain portions. Joseph Le Conte was the most brilliant of Dana's helpers in working out the evidences of horizontal components of pressure in mountain-folding; Dana so frequently cited Le Conte in his later publications that it is difficult to define the individual merits of the two geologists.

To the North American geologists undoubtedly belongs the credit of founding the theory of horizontally-acting forces and rock-folding upon an ample basis of observation.

Shaler distinguished between the uprise of continents and that of mountain-systems. Both were explicable upon the basis of the earth's contraction; but whereas the continents had taken origin from furrows which affected the whole thickness of the earth's crust, the mountains only represent foldings in the external parts of the crust which have served to relieve the lateral pressures produced by the contraction of the deeper horizons.

The method of research followed by Professor Suess marks the beginning of a new epoch in the questions of crust-deformation. Two aspects appealed strongly to Professor Suess, the tectonical problems presented by individual mountain-chains, and the relation of all the mountain-systems on the surface of the earth to the physical changes in progress since the beginning of the earth's history. Since Elie de Beaumont's misguided effort, no geologist had attacked the question from its universal aspect, and the supreme scientific success attained by the first volume of *Das Antlitz der Erde*, or *The Face of the Earth*, by Professor Suess, was a tribute to a work accomplished with the highest bibliographical skill and literary finish, the fullest geological and geographical knowledge, a convincing array of scientific facts that never fail to suggest an endless reserve in the background, and above all a calm, judicial, elevated tone of inquiry which the