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## THE SUBSIDENCE OF MOUNTAINS.

Possibly the prophecy that the mountains shall be brought low, and the valleys filled, is to have a literal as well as a symbolical fulfilment. The following which I clip may interest you and others.

## W. M. WRIGHT.

"According to *La Gazette Geographique* the Cordillera of the Andes are gradually sinking. In 1745 the city of Quito was 9,596 feet above sea level; in 1803 it was only 9,570; in 1831, 9,567; and scarcely 9,520 in 1867. This amounts to a lowering of 76 feet in 122 years, or at the rate of 7½ inches per annum. We are also told that the farm of Antisana has sunk 165 feet in sixty-four years, or more than two and a half feet per annum. This is the highest inhabited spot on the Andes – about 4,000 feet higher than Quito, the highest city on the globe. The peak of Pichincha was, according to the same authority, 218 feet lower in 1867 than in 1745, a sinking of nearly two feet per annum. Assuming the accuracy of these figures, they present a curious geological problem, especially as there is no record of a corresponding change at sea level or at the foot of these same mountains, which descend rather steeply to the Pacific. If the plasticity or viscosity of the earth's crust be such as I have contended in this magazine, it follows almost of necessity that such a mass of mountain land as that in this region of Quito and Chimborazo must be squeezing itself downward into the subcrust of the earth by its own enormous weight. Although the highest of these peaks are not quite so high as the highest peak of the Himalayas, the concentration of elevation in a given area, or, otherwise stated, the mass standing above sea level in proportion to the base on which it stands, is greater than can be found in any other part of the world, and its downthrust is similarly pre-eminent. Such down squeezing and sinking must be accompanied with

corresponding lateral thrust, or elbowing that should produce earthquake disturbances on every side. The facts fully satisfy this requirement of the theory, as the country all around the region in question is the very fatherland of terrible earthquakes."

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