

261. Since these openings into the interior of the earth are so numerous over the surface, we may conclude that this interior is intensely hot. But we have other proofs of this internal heat. In many countries hot springs rise to the surface. Even in England, which is a long way from any active volcano, the water of the wells of Bath is quite warm ( $120^{\circ}$  Fahr.). It is known, too, that in all countries the heat increases as we descend into the earth. The deeper a mine the warmer are the rocks and air at its bottom. If the heat continues to increase in the same proportion, the rocks must be red hot at no great distance beneath us.

262. It is not merely by volcanoes and hot-springs, however, that the internal heat of the earth affects the surface. The solid ground is made to tremble, or is rent asunder, or upheaved or let down. You have probably heard or read of earthquakes: those shakings of the ground, which, when they are at their worst, crack the ground open, throw down trees and buildings, and bury hundreds or thousands of people in the ruins. Earthquakes are most common in or near those countries where active volcanoes exist. They frequently take place just before a volcanic eruption.

263. Some parts of the land are slowly rising out of the sea; rocks, which used always to be covered by the tides, come to be wholly beyond their limits; while others, which used never to be seen at all, begin one by one to show their heads above water. On the other hand some tracts are slowly sinking; piers, sea-walls, and other old landmarks on the beach, are one after another enveloped by the sea