

level cities? I venture to affirm, with Mallet, Oldham, Schmidt, Höttinger, and Bocardo, that it is a sequence of accumulated strains resulting from lateral pressure in the earth's crust. There are two assignable causes of enormous lateral pressure. First, as maintained by Constant Prévost, the solid crust formed around a cooling molten globe, becoming too large for the shrunken nucleus, strives to adapt itself to the diminished interior (molten or solid). It is, therefore, laterally pressed. Relief is obtained, in part, by the development of wrinkles, as in the skin of a shriveled apple, and in part, by a process of crushing together. The strains are temporarily resisted, but soon the crust must yield. As the crust is not homogeneous, there must be stronger and weaker portions. The motion which results, in the crisis of yielding, is accumulated in isolated spots. If the pressure is a direct and simple crushing pressure, then heat results from the crushing, lava is formed and the pressure existing squeezes it, or the formation of steam lifts it, to the surface. If the pressure has not a simple, crushing tendency, there may arise a fracture. Then, in an instant, the strain is removed; the rocks recoil, and the vibratory motion is generated.

These lateral strains are augmented and localized by the attractions of the sun and moon, which cause real tidal elevations and subsidences, and thus bring the crust to a snapping tension, where the slow processes of terrestrial contraction had not yet reached it. These tidal strains are greatest when the moon and sun are nearest the earth, and also when they act together, as at new and full moon.

To add another word. While a tornado or cyclone is at its acme of violence, the barometer is low; the pressure of the atmosphere on the earth is diminished at the spot, and elsewhere correspondingly increased; the terrestrial crust must therefore, tend to develop movements of the nature of tides; and the predisposition to earthquake actions must be augmented. Observation indicates the frequent actual coincidence of earthquakes and cyclones. Similarly, a connection has been observed between the pressure of the atmosphere and