

of accurate data had not then been collected to permit any satisfactory computation of the depth of origin of earthquakes, which might considerably vary, he yet thought that "some kind of guess might be formed concerning it," and in illustration of such a "random guess" he supposed that the depth at which the Lisbon earthquake took its origin "could not be much less than a mile, or a mile and a half, and probably did not exceed three miles."

From this brief summary of his opinions it will be seen that Michell still laboured under the popular and time-honoured delusion that volcanoes take their rise from the combustion of inflammable strata below ground, and that he attributed earthquakes exclusively to the influence of these subterranean fires. Realising that the sudden development of large bodies of vapour within the terrestrial crust might start the disturbances of earthquakes, he made a great onward step in showing that successive waves would be generated in that crust, and would travel outwards, in constantly diminishing amplitude until they finally died away. It was the first time that this conception of earthquake motion had been laid before the world. Michell, however, appears to have assumed the propagation of the vapour to be the cause of the wave-like motion of the ground. He speaks of the vapour "raising the earth in a wave as it passes along between the strata, which it may easily separate in an horizontal direction." He refers to "the wave at the surface of the earth occasioned by the passing of the vapour under it," and states that "the shortest way that the vapour could pass from near Lisbon to Loch Ness