

proximate depth of origin of an earthquake. Let Fig. 73, for example, represent a portion of the earth's crust in which at *a* an earthquake arises. The wave of shock will travel outward in successive spherical shells. At the point

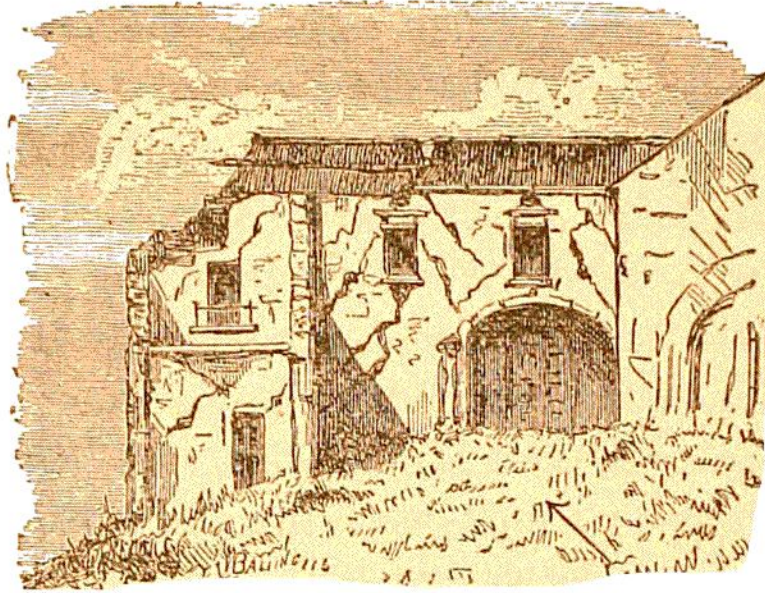


Fig. 72.—Wall shattered by an Earthquake, of which the “path of emergence” has been in the direction shown by the arrow. (After Mallet.)

*e* it will be felt as a vertical movement and loose objects, such as paving-stones, may be jerked up into the air, and descend bottom uppermost on their previous sites. At *d*, however, the wave will emerge at a lower angle, and will give rise to an undulation of the ground, and the oscillation of objects projecting above the surface. In rent buildings,

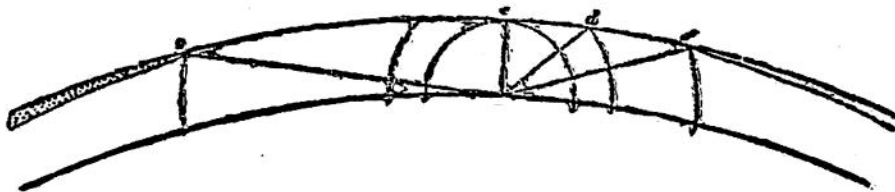


Fig. 73.—Mallet's mode of estimation of depth of source of Earthquake movements.

the fissures will be on the whole perpendicular to the path of emergence. By a series of observations made at different points, as at *g* and *f*, a number of angles are obtained, and the point where the various lines cut the vertical (*a*) will