narratives of earthquakes present, and educing from these, by an appeal to the established laws of the higher mechanics, a theory of earthquake motion." In this his earliest contribution to the subject he announced his famous definition of that motion as "the transit of a wave of elastic compression in any direction, from vertically upwards, to horizontally, in any azimuth, through the surface and crust of the earth, from any centre of impulse or from more than one, and which may be attended with tidal and sound waves dependent upon the former, and upon circumstances of position as to sea and land." This epoch-making essay was followed by his paper on the "Observation of Earthquake Phenomena" contributed to the Admiralty *Manual of Scientific Enquiry* in 1849, and thereafter by a voluminous series of Reports published by the British Association for the Advancement of Science from 1850 to 1858. These Reports included a Catalogue of recorded earthquakes from 1606 B.C. to A.D. 1850, and a full discussion of the facts and theory of earthquake phenomena.

Mallet's enthusiasm in the study of these phenomena received a vivid stimulus from the occurrence of the Neapolitan earthquake of December 1857—the third in point of extent and severity hitherto experienced in Europe. Under the auspices of the Royal Society, he was enabled to visit the scene of devastation in southern Italy, shortly after the calamity, and to make careful observations of the effects upon buildings and upon the surface of the ground. The results of his investigation formed the subject of his work in two volumes *The First Principles of Observational Seis-*