

life. It must always be remembered that it was in the pursuit of scientific knowledge that he lost his life by venturing too near the scene of the disastrous eruption of A.D. 79, which overwhelmed Herculaneum and Pompeii. If the tradition be correct that Empedocles met his death by approaching too close to the edge of the crater of Etna, this philosopher may perhaps be claimed as a victim to the desire to explore the mysteries of volcanic action. But in the case of Pliny there is no uncertainty. He is enrolled for all time as the first definitely recorded martyr to the cause of geological science.

After referring to the opinion of the Babylonians that earthquakes and all allied phenomena are to be ascribed to the influence of the stars, Pliny remarks: "My own belief is that they are caused by wind. They only occur at times of complete calm, when the wind, having sunk down into the subterranean chasms, breaks forth once more."<sup>1</sup> He enumerates a number of earthquakes of note, and in discussing the phenomena that take place in connection with them on land and sea, he states that towns with numerous culverts and houses with cellars suffer less than others, and that, for example in Naples, those houses are most shaken which are built on hard ground. He likewise recounts instances of volcanic eruptions and the appearance of new volcanic islands, but without throwing any light on the causes of these disturbances.

It thus appears that during classical antiquity no perceptible advance had been made in the investigation

<sup>1</sup> *Hist. Nat.* II. 81.