

matter revolving elliptically in a gaseous condition. We have thus mere conjecture and supposition side by side with certain knowledge. A philosophical study of nature strives ever to elevate itself above the narrow requirements of mere natural description, and does not consist, as we have already remarked, in the mere accumulation of isolated facts. The inquiring and active spirit of man must be suffered to pass from the present to the past, to conjecture all that can not yet be known with certainty, and still to dwell with pleasure on the ancient myths of geognosy which are presented to us under so many various forms. If we consider volcanoes as irregular intermittent springs, emitting a fluid mixture of oxydized metals, alkalies, and earths, flowing gently and calmly wherever they find a passage, or being upheaved by the powerful expansive force of vapors, we are involuntarily led to remember the geognostic visions of Plato, according to which hot springs, as well as all volcanic igneous streams, were eruptions that might be traced back to one generally distributed subterranean cause, *Pyriphlegethon*.*

* According to Plato's geognostic views, as developed in the *Phædo*, *Pyriphlegethon* plays much the same part in relation to the activity of volcanoes that we now ascribe to the augmentation of heat as we descend from the earth's surface, and to the fused condition of its internal strata. (*Phædo*, ed. Ast, p. 603 and 607; Annot., p. 808 and 817.) "Within the earth, and all around it, are larger and smaller caverns. Water flows there in abundance; also much fire and large streams of fire, and streams of moist mud (some purer and others more filthy), like those in Sicily, consisting of mud and fire, preceding the great eruption. These streams fill all places that fall in the way of their course. *Pyriphlegethon* flows forth into an extensive district burning with a fierce fire, where it forms a lake larger than our sea, boiling with water and mud. From thence it moves in circles round the earth, turbid and muddy." This stream of molten earth and mud is so much the general cause of volcanic phenomena, that Plato expressly adds, "thus is *Pyriphlegethon* constituted, from which also the streams of fire (*οἱ ῥύακες*), wherever they reach the earth (*ὅπη ἂν τυχωσι τῆς γῆς*), inflate such parts (detached fragments)." Volcanic scoriæ and lava streams are therefore portions of *Pyriphlegethon* itself, portions of the subterranean molten and ever-undulating mass. That *οἱ ῥύακες* are lava streams, and not, as Schneider, Passow, and Schleiermacher will have it, "fire-vomiting mountains," is clear enough from many passages, some of which have been collected by Ukert (*Geogr. der Griechen und Römer*, th. ii., s. 200); *ῥύαξ* is the volcanic phenomenon in reference to its most striking characteristic, the lava stream. Hence the expression, the *ῥύακες* of *Ætna*. Aristot., *Mirab. Ausc.*, t. ii., p. 833; sect. 38, Bekker; Thucyd., iii., 116; Theophrast., *De Lap.*, 22, p. 427, Schneider; Diod., v., 6, and xiv., 59, where are the remarkable words, "Many places near the sea, in the neighborhood of *Ætna*, were leveled to the ground, ὑπὸ τοῦ καλουμένου ῥύακος;" Strabo, vi., p. 269; xiii., p. 268, and