The geographical distribution of the volcanoes which have been in a state of activity during historical times, the great number of insular and littoral volcanic mountains, and the occasional, although ephemeral, eruptions in the bottom of the sea, early led to the belief that volcanic activity was connected with the neighborhood of the sea, and was dependent upon it for its continuance. "For many hundred years," says Justinian, or rather Trogus Pompeius, whom he follows,* "Ætna and the Æolian Islands have been burning, and how could this have continued so long if the fire had not been fed by the

* "Accedunt vicini et perpetui Ætnæ montis ignes et insularum Æolidum, veluti ipsis undis alatur incendium; neque enim aliter durare tot seculis tantus ignis potuisset, nisi humoris nutrimentis aleretur." (Justin, *Hist. Philipp.*, iv., i.) The volcanic theory with which the physical description of Sicily here begins is extremely intricate. Deep strata of sulphur and resin; a very thin soil full of cavities and easily fissured; violent motion of the waves of the sea, which, as they strike together, draw down the air (the wind) for the maintenance of the fire: such are the elements of the theory of Trogus. Since he seems from Pliny (xi., 52) to have been a physiognomist, we may presume that his numerous lost works were not confined to history alone. The opinion that air is forced into the interior of the earth, there to act on the volcanic furnaces, was connected by the ancients with the supposed influence of winds from different quarters on the intensity of the fires burning in Ætna, Hiera, and Stromboli. (See the remarkable passage in Strabo, lib. vi., p. 275 and 276.) The mountain island of Stromboli (Strongyle) was regarded, therefore, as the dwelling-place of Æolus, "the regulator of the winds," in consequence of the sailors foretelling the weather from the activity of the volcanic eruptions of this island. The connection between the eruption of a small volcano with the state of the barometer and the direction of the wind is still generally recognized (Leop. von Buch, *Descr. Phys. des Iles Canaries*, p. 334; Hoffmann, in Poggend., *Annalen*, bd. xxvi., s. viii.), although our present knowledge of volcanic phenomena, and the slight changes of atmospheric pressure accompanying our winds, do not enable us to offer any satisfactory explanation of the fact. Bembo, who during his youth was brought up in Sicily by Greek refugees, gave an agreeable narrative of his wanderings, and in his *Ætna Dialogus* (written in the middle of the sixteenth century) advances the theory of the penetration of sea water to the very center of the volcanic action, and of the necessity of the proximity of the sea to active volcanoes. In ascending Ætna the following question was proposed: "Explana potius nobis quæ petimus, ea incendia unde oriantur et orta quomodo perdurent. In omni tellure nuspiam majores fistulæ aut meatus ampliores sunt quam in locis, quæ vel mari vicina sunt, vel a mari protinus alluuntur: mare erodit illa facillime pergitque in viscera terræ. Itaque cum in aliena regna sibi viam faciat, ventis etiam facit; ex quo fit, ut loca quæque maritima maxime terræ motibus subjecta sint, parum mediterranea. Habes quum in sulfuris venas venti furentes inciderint, unde incendia oriantur Ætnæ tuæ. Vides, quæ mare in radicibus habeat, quæ sulfurea sit, quæ cavernosa, quæ a mari aliquando perforata ventos admiserit æstuantes, per quos idonea flammæ materies incenderetur."