

volcanic systems, but the most modern lie farther to the south. The western continuation strikes the Azores. As a general conclusion, it appears that earthquakes extend the evidence of subterranean disturbance much beyond the area covered by volcanic ejections.

If, taking another view of the subject, we inquire the relation of this distribution of volcanic vents to the features of European physical geography, it immediately appears that all the *active* volcanos are situated in islands or peninsulas, or, in general, very near to the sea-side. Further, it is evident that the same law of *proximity to water* applies to the *ancient* volcanos of Auvergne, the Rhine valley, the Hungarian and Transylvanian volcanos, and the Euganean hills, &c. ; for these points, now far removed from wide sheets of water, were bathed by fresh waters (Auvergne, Transylvania), or the sea (Euganean hills, &c.), at the time when they were theatres of igneous violence.

Asiatic Volcanos.

Proximity to the sea, or to large surfaces of inland waters, characterises, in like manner, the points where volcanic action is now, and has formerly been, manifested on the continent and islands of Asia. On either side of the sea of Marmora, from the Dardanelles to Constantinople, volcanic accumulations appear. Syria and Palestine, often desolated by earthquakes in early periods, abound in volcanic appearances. Near Smyrna these are extensive *, and the vicinity of the Dead Sea is volcanic. The Caucasian chain of mountains is full of volcanic accumulations; Ararat is of this character. At Bakur, on the western side of the Caspian, is the celebrated "field of fire," where excavations in the soil yield naphtha, and gas rises, which is easily inflamed. The Elburz range of mountains, on the southern side of the Caspian, presents one important volcano in action,

* Strickland, in Geol. Proceedings, 1837.