northerly direction to the Philippine Islands, Mindanao, Fugo, and Luçon. From Formosa, by the Loo Choo Isles to Japan, the line runs north-eastward; a course which it continued through the ten volcanos of Japan, and the nine active vents of the Kurilian islands to the burning mountains of the peninsula of Kamschatka.

The Aleutian Islands continue the line of volcanic activity (an island having been thrown up in 1795, 3000 feet in height, according to Langsdorff) to the point of Russian America called Alaschka, which is believed to be also volcanic.

American Volcanos.

Traces of powerful volcanic action, now extinct, appear about the head waters of the Columbia and Missouri rivers; and probably along more southern parts of the lofty ranges of the Rocky Mountains, yet but imperfectly known to Europe. The peninsula of California possesses, besides the lofty Mount St. Elia (17,875 feet above the sea), two other active volcanos. The line of igneous action is continued through Mexico, but not in the general direction of the high mountain range. This goes to the south-east, and it is in a line crossing it obliquely, nearly east and west, that the fire active vents of Mexico, Tuxtla, Orizaba, Popocatepetl, Jorullo, and Colima, are situated. The distance of Jorullo from the sea is 36 leagues, and that of Popocatepetl somewhat greater; and this circumstance may be thought to invalidate the seeming necessity of proximity to water as an element of volcanic excitement. But it appears not unreasonable to admit the existence here of a great transverse fissure, on whose prolongation westward are situated the volcanic (extinct) group of the Revillagigedo. Several intermediate points of extinct volcanic action connect the five active vents above noticed in Mexico.

Between Mexico and the Isthmus of Darien, in the provinces of Guatimala and Nicaragua, are no less than twenty-one active volcanos, running in the line of the

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