

America, and following the chain of the Andes, passes along the Cordilleras of Mexico, thence into California, and thence northward as far at least as Columbia river; which it crosses between the Pacific Ocean and the Rocky Mountains. 3. A volcanic region, ten degrees of latitude in breadth and 1,000 miles long, extending from the Azore Islands to the Caspian Sea, abounds in volcanoes, though very much scattered. The region around the Mediterranean is perhaps better known for volcanic agency than any other on the globe; because no eruption occurs there unnoticed.

Volcanoes not arranged in lines or zones are called central volcanoes, and are more or less insulated. Examples will be found in Iceland, the Sandwich Islands, Society Islands, Island of Bourbon, and a region in Central Asia of 2,500 square geographical miles, from 800 to 1,200 miles from the ocean.

The number of active volcanoes and solfataras on the globe, is estimated at 407, and the number of eruptions about twenty in a year, or 2,000 in a century; though on both these points there is room for considerable uncertainty.

The following table will show how the active volcanoes and solfataras are distributed on the globe.

CENTRAL VOLCANOES.

	<i>On Continents.</i>	<i>On Islands.</i>	<i>Total.</i>
In the Mediterranean Sea	1	3	4
In the Atlantic Ocean		24	24
In the Indian Ocean		3	3
In the Pacific Ocean		8	8
Asiatic Continent	3		3

VOLCANOES ARRANGED IN LINEAR SERIES.

Parts of Europe and Asia	3	4	7
Australia	13		13
Oceanica		188	188
North America	17	35	52
Central America	38	10	48
South America	54		54
Antarctic Continent		3	3
	129	278	407

278 of these volcanoes, or more than two-thirds, are situated upon the islands of the sea; and of the remainder, the greater part are situated upon the borders of the sea, or a little distance from the coast. Hence it is inferred that water acts an important part in volcanic phenomena; indeed, it seems generally admitted that the immediate cause of an eruption is the expansive force of steam and gases. It ought not to be forgotten, however, that some volcanoes are far inland, as Jorullo, in Mexico, and the volcanoes in central Asia.

Intermittent Volcanoes.—Only a few volcanoes are constantly