

Fuegia may be called the axis of the ocean. This axial line is nearly half the circumference of the globe in length, and the transverse diameter of the ocean full one fourth the circumference: so that the facts relating to the Pacific chains must have universal importance.

The *North Atlantic Ocean* trends to the northeast, — or at right angles, nearly, to the Pacific; this being the course of the coasts, and therefore of the channel. Moreover, it is the course of the central plateau along the bottom of the north Atlantic.

The Asiatic coast of the Pacific has the direction of the northeasterly system. The course is not nearly a straight line, like the corresponding eastern coast of North America, but consists of a series of *curves*, which series is repeated in the island chains off the coast and in the mountains of the country back. Moreover, the curves *meet* one another nearly at right angles. The first one, that of the Aleutian Islands, extends as a great festoon between the two continents, America and Asia. The last one, which is 1800 miles long, commences in Formosa, and extends along by Luzon, Palawan, and western Borneo (*ba*, Fig. 25) to Sumatra, and terminates at *right angles* with Sumatra; and another furcation of it (*dc*) passes by eastern Borneo or Celebes, and terminates at *right angles* with Java and the islands just east. The rectangularity of the intersections is thus preserved; and the curve of the Australasian chain has in this way apparently determined the triangular form of Borneo.

The Aleutian Islands (range No. 1) has a length of 1000 miles. The Kamchatka range (No. 2) commences at right angles with the termination of the Aleutian, and bends around till it strikes Japan at a right angle. The Japan range (No. 3) commences north in Saghalien, and curves around to Corea. The Loochoo range (No. 4) leaves Japan at a right angle, and curves around to Formosa. The Formosa range (No. 5) is explained above. There is apparently a repetition of the Formosa system in the Ladrões near longitude 145° E.

(3) **East and West Indies.** — The general courses in the East Indies have been mentioned on pages 38, 39. In the West Indies and Central America there is a repetition of the curves of the East Indies. The course of the range along Central America corresponds to Sumatra and Java; and the line of Florida and the islands to the southeast makes another range in the same system.

(4) **The American continents.** — In North America, the *northwest* system is seen in the general course of the Rocky Mountains, the Cascade Range, and Sierra Nevada; in Florida; in the line of lakes, from Lake Superior to the mouth of the Mackenzie; in the southwest coast of Hudson Bay; in the shores of Davis Straits and Baffin Bay; — and with no greater divergencies from a common course than occur in the Pacific. The *northeast* system is exemplified in the Atlantic coast from Newfoundland to Florida, and, still farther to the northeast, along the coast of Greenland; and to the southwest, along Yucatan, in Central America. The Appalachian Mountains, the river St. Lawrence to Lake Erie, and the northwest shore of Lake Superior, repeat this trend.