

tropical regions, the mean winter temperature of the water is not below 68° F.

Passing from the Indian to the *Atlantic Ocean*, we find little or no coral on the west coast of Africa. The islands of Cape St. Ann and Sherboro, south of Sierra-Leone, are described as coral by Captain Owen, R.N., in the *Journal of the Geographical Society* (vol. ii., p. 89); but this has been since denied. The Island of Ascension, in 7° 56' S., and 14° 16' W., must have been bordered by growing coral, as Quoy and Gaymard mention that a bed of coral rock may be seen buried beneath streams of lava. Quoy also states that the corals which formed these reefs are no longer found alive, and adds that volcanic eruptions have probably destroyed them. The cold polar currents along the western African coast are the cause of the absence of corals from it, to within six or seven degrees of the equator; and these cold waters may at times extend still farther north. The same obstacle to the diffusion of species eastward, mentioned as occurring in the Pacific—that is, westward currents—exists also in the Atlantic, and probably with the same effect.

On the American shores of the Atlantic, north of the equator, there are few reefs, except in the West Indies. The waters of the Orinoco and Amazon, and the alluvial shores they occasion, exclude corals from that part of the coast.

In the West Indies, the reefs of Florida (p. 167), Cuba, the Bahamas (p. 174), and of many of the eastern islands, are well known. On the east coast of Florida they continue up as far as Cape Florida, in latitude 25° 40' N.; but the west coast is free from them. There are also said to be patches at intervals along the coast of Venezuela and Guatemala; but the west shores of the Gulf of Mexico, as well as the northern, like West Florida, are mostly low, and without reefs; they are within the influence of the Mississippi and other large rivers. Some species of reef corals however occur in the vicinity of Aspinwall (p. 87). The Bermudas are of coral origin, and the most northern point of growing reefs.

South of the equator, on the east coast of South America,