

within a few miles of the southernmost extremity of the African mainland is the more remarkable when the distinctness of the Atlantic and the Indian and Pacific reef fauna is borne in mind. It seems probable that when our knowledge of the distribution of the reef species is more extended, it will be found that many species are common to these apparently distinct regions; the path of communication being that indicated by the *Manicina areolata*, round the southern extremity of Africa. The thermal barrier can scarcely be considered a difficulty in the way, since the eastern and western shores of the mainland at this point are bathed by the warm waters of the Mozambique and South Atlantic currents respectively. In this connection it is extremely desirable to have a thorough and accurate examination of the species of Corals on the coasts of Natal.

Milne-Edwards and Haime (Cor., ii. p. 137) have recorded the Pacific and Indian Ocean species *Stylophora palmata* from the Cape of Good Hope, but it may be doubted whether this term was not used in its more general sense, The Cape, that is, signifying Cape Colony. If the species be found actually at the Cape of Good Hope, we have at least one species which is known to be common to the Atlantic and the Indian and Pacific reef regions.

PECULIAR CASES OF DISTRIBUTION.

Under this head, brief reference is made to some of the more peculiar conditions under which certain species of Corals are known to exist, one case of which the Challenger furnishes.

1. Generally speaking the presence of fresh or brackish water is sufficient to prevent all coral growth; *Cylicia rubeola*, Quoy and Gaimard, however, flourishes in the River Thames, New Zealand, and *Madrepora cribripora*, Dana, inhabits nearly fresh water.

2. Muddy water is equally destructive to coral growth, yet *Porites limosa*, Dana, flourishes under such conditions, while *Astræa bowerbanki*, Edw. and H., as recorded by the Rev. J. E. Tenison-Woods, does not seem to mind mud or sediment, or even muddy brackish water; it grows incrusting a large proportion of the stones at the mouth of the Mangrove Creek, Australia, all these stones being covered with mud and slime, and washed over, twice in the twenty-four hours, by muddy, brackish water.

3. The extreme saltness and density of the waters of the Dead Sea might have been thought sufficiently unfavourable for the development of coral life, but *Stylophora pistillata*, Esper, a common Red Sea species, is recorded from this locality by Milne-Edwards and Haime.

4. Exposure at low tide is generally destructive to coral life, but at Banda, as observed by Professor Moseley, an Astræan which was thus exposed appeared to suffer no more in consequence than do the common sea-anemones of our own coasts (see quotation under "Banda Corals"), while Dana records that species of *Porites* and *Siderastræa* left exposed at low tide, do not appear to suffer from the effects of sunshine and rain while thus exposed.