

## DISTRIBUTIONAL AREAS.

A sharp line of demarcation apparently separates the Reef-Coral fauna of the Atlantic on the one hand and the Pacific and Indian Oceans on the other (with the doubtful exception of *Isophyllia australis*, which has been recorded from both regions by Milne-Edwards and Haime, Cor., ii. p. 375); though from the occurrence of *Manicina areolata* in 20 fathoms water in Simon's Bay, Cape of Good Hope, it may be doubted whether the two areas will prove to be so sharply defined.

In the Atlantic, no definite districts can be made out, the fauna throughout being essentially West Indian.

In the Pacific and Indian Oceans, the fauna is characterised generally by more or less uniformity, exception being made, however, in the cases of the districts of the Sandwich Islands and the West Coast of America, each of which appears to be more or less markedly circumscribed by the distinctness of the forms which flourish there.

The Reef-Corals of Tahiti are similar in many respects to the Corals of the Red Sea, many species being common to both; while almost the same may be said of the Corals of the Friendly Islands, the Fiji Islands, and the Philippines.

It must be confessed, however, that any attempt to generalise from the facts at hand, as to the relation of the fauna of the chief centres of coral growth in the Pacific and Indian Oceans, must be at least premature, and this owing to several causes.

In the first place, for a large number of the species which have been described, more especially by the old authors, no definite locality is recorded; the locality being either altogether omitted or given under such vague terms as, "Indian Ocean," "East Indies," "Austral Seas," "Australasia," &c.

In the second place, of the large collection of Corals in different museums but little is really known, owing to the want of published detailed reports or catalogues of the collections.

And in the third place, while several voyages and expeditions have been accomplished through many parts of the coral regions during which collections have been made with more or less interesting results, yet no prolonged and exhaustive examination of the genera and species of Reef-Corals found in any one locality, excepting in the Red Sea, has yet been made by any practised naturalist; so that our knowledge of the distribution of the Reef-Corals throughout the multitudinous islands and formations of the Indian and Pacific Oceans is, at the best, fragmentary and unreliable.

It is a welcome sign, however, of the impetus which recent research has given to the study of the Anthozoa, that two practised naturalists are carrying on investigations into the fauna of certain districts of the Indian and Indo-Pacific Oceans and it cannot be doubted that extremely interesting additions will be made therefrom to our knowledge of the Corals of these regions.