

## THE MADREPORARIA.

By THOMAS WHITELEGGE,  
Zoologist, Australian Museum.

Mr. C. Hedley furnishes the following note :—

“For one who has surveyed the wealth of life as developed on the great coral reefs of Queensland, New Guinea, or New Caledonia, the chief impression of the coral reef of Funafuti is its poverty. In a single tide one could collect more genera and species on any of the former reefs than an industrious search of several weeks would yield from the latter. Neither is the poverty of species compensated for by an abundance of individuals.

“At the first glance over the windward reef flat, no living corals would probably be seen, but an exploration of the deep cracks and pools near the outer edge would usually reveal a few *Astræa*, *Porites*, and others, sheltered from the blows of the surf.

“A better field for observation is provided by the small reefs which stud the lagoon. Two or three of these, just in front of the village, and from a quarter to half a mile from the shore, yielded much of the material now dealt with.

“On approaching a coral reef the first glimpse a naturalist usually has of his quest are the great hemispherical masses of some *Astrean* coral, dimly seen through the shoaling water, studding the sea floor. If the boat passes a submarine ledge, from its face are sure to project the large basin or bracket-shaped corallia of *Montipora*, sometimes in clusters like a group of huge sea mushrooms. Jumping overboard in shallow water he is likely to step on a flat tabular mass of pale purple, whose corallites are too small to be distinguished in the water. Applying hammer and chisel, he will find that at his first venture he has struck the hardest, toughest, and most unbreakable thing on the whole reef, a *Porites* block. From the *Madrepora* bush beside it his difficulty, on the contrary, is to convey his samples ashore intact. The stout limbs of red, yellow, or green *Pocillopora* or *Stylophora* snap easily; while a skull-shaped mass of *Astræa* will split along the grain. A fragile little coral is the *Pocillopora cæspitosa*, which grows in dainty little pink tufts here and there among the stones. *Fungidæ* were very uncommon on Funafuti; I only picked up one alive and saw a few others dead on the western side of the atoll.