

all those reefs, those girdles of madrepore, which are so frequently met with in the South Sea, to the leeward of islands, are shoals depending upon the conformation of the original ground, which will be perceived to belong to it when the direction of the mountains and hills has been attentively observed. It is always where the slopes are gentle, and the sea shallowest, that the greatest masses of madrepores are found. They sprout up if it is calm ; in the contrary case, they form only scattered tufts, belonging to species which seem to be least affected by the agitation of the waters.

It has been said, and it is even a matter of general belief among mariners, say MM. Quoy and Gaimard, that there occur in the equatorial seas shoals composed of *corals*, which rise from the greatest depths, like walls at the bottom of which the sounding line finds no ground. The fact certainly does exist in so far as regards the depth spoken of ; and it is this very circumstance which is productive of so much danger to vessels, which, when taken in a calm and carried away by currents, cannot cast anchor in such places. But it is not correct to say that these reefs are entirely formed of madrepores. First, because the species which always form the most considerable banks, such as some *meandrinæ*, certain *caryophylleæ*, but especially the *astreæ*, adorned with the most beautiful and velvety colours, require the influence of light to perfect them ; because they are not seen to grow beyond a few yards of depth ; and because they cannot consequently be developed at a depth of ten or twelve hundred feet, as they would necessarily be, did they raise the cliffs in question. Besides, these different species of animals would then almost exclusively enjoy the privilege of living