

European fauna, and adds nearly 200 fathoms to its bathymetrical range, which is still further increased to 533 fathoms by the dredgings of the telegraph ship "Dacia," some four degrees more to the west. Judging from a figure published in *La Nature*¹ I imagine that it was also obtained by the "Talisman" in 1500 metres off Rochefort.

Among the numerous Comatulæ which were dredged at Station 192 in the Arafura Sea was a single mutilated specimen which has given me very great trouble (Pl. LII. fig. 2). Three of the rays which are preserved have bidistichate series, and the first two brachials above the axillaries are clearly united by syzygy, the radiating ridges being very distinct on the exposed distal faces of two of the first brachials. But I have had much difficulty in determining the nature of the union between the two outer radials and the two distichals respectively; and after repeated changes of opinion, I have come to the conclusion that there is a bifascial articulation in each case. The specific formula thus becomes the same as that of *Actinometra pulchella*, and in the absence of better preserved material it seems best to refer the individual in question to this protean species. The eastern form has fewer cirrus-joints, with larger and blunter spines than may occur in the Caribbean type; and the characters of the lower pinnules do not seem to be quite the same in the two cases. But I have been unable to make out any differences which would serve to separate the two forms specifically, though it is quite possible that they may reveal themselves when better preserved material is examined. On the other hand there is no *a priori* reason why *Actinometra pulchella*, which occurs on both sides of the Atlantic, should not also inhabit the Eastern seas. Another common Caribbean species, *Antedon carinata*, is widely distributed through the Indian Ocean and also occurs in the Pacific; while *Antedon quinquecostata*, which was dredged by the Challenger at Station 192, together with the doubtful form under consideration, is very closely allied to the Caribbean *Antedon spinifera*.

On the whole, then, it appears most probable that the specimen obtained by the Challenger in the Arafura Sea really does belong to *Actinometra pulchella*, though one would like to see a more perfect specimen before definitely making such a large addition to the geographical range of the Caribbean type. It is also possible, on the other hand, that we are here dealing with a varietal form of *Actinometra maculata* from Torres Strait (Pl. LV. fig. 2); but I rather doubt this being the case, as its arm-joints are relatively longer than those of that type, and the terminal cirrus-joints are more compressed laterally. The Copenhagen Museum contains a form from Bowen with very much the same characters, which bears the MS. name *Actinometra fusca*, Lütken. This may be either *Actinometra pulchella* or *Actinometra maculata*, but the question of its specific identity must be left for a future decision.

¹ See H. Filhol, *Explorations sous-marines, La Nature*, 1884, 12 Ann. p. 329.