

siderable variety of localities, led me to acquiesce in the conclusions of Pourtalès and Rathbun, which were also adopted by Ludwig<sup>1</sup> two years later.

*Remarks.*—*Antedon carinata* is thus very extensively distributed in tropical and subtropical seas. Originally described from Mauritius, it has since been found at Ceylon, the Seychelles, Madagascar, Zanzibar, Muscat, Aden, and in the Red Sea. The British Museum contains specimens from St. Helena; it is common all along the South American coast from Rio Janeiro to Pernambuco, reappears at Venezuela, and was dredged abundantly in 278 fathoms off St. Lucia. As yet it is only known from Chile on the Pacific coast of America; and this is further south than any locality on the Atlantic coast at which the type has yet been obtained. I have a strong suspicion too that an individual from Norfolk Island, which I saw at Vienna in 1880 with the museum name *Antedon marmorata*, is very closely allied to, if not identical with, *Antedon carinata*; but I should prefer to leave the point undecided for the present, until I can make a more detailed examination of the Vienna specimen. In the same year I found some very typical examples of *Antedon carinata* in the museum at Hamburg, which were labelled as having been obtained at Java. This of course is only separated by a part of the Indian Ocean from Mauritius and the Seychelles; but if the locality of these four specimens is rightly given, it is curious that no other examples of *Antedon carinata* from the eastern shores of the Indian Ocean should have occurred in any one of the numerous collections of Comatulæ which I have examined. Thus, for example, it is not represented in Dr. Anderson's collection from the Mergui Archipelago. It has been recently obtained at Ceylon, however, but Mr. G. C. Bourne was unable to find any Comatulæ at all on the Coral reefs of the Chagos Islands, which occupy an intermediate position between Java and the Seychelles, although he was good enough to make a special search for them on my behalf. Under these circumstances, therefore, I must confess to a certain amount of doubt respecting the presence of *Antedon carinata* at Java, as the Hamburg label records, and can only wait with interest for further information on the subject.

The characters of the centro-dorsal, arms, and lower pinnules distinguish *Antedon carinata* very clearly from the other members of the *Milberti*-group. In fact, as hinted above, it may become desirable at some future time to remove the type from this group altogether. The lower pinnules are all of tolerably equal length, and only differ in the proportions of their component joints. The stoutness of the joints increases up to the third outer pinnule (on sixth brachial), and the next two or three pinnules are most frequently almost equally stout, but in a few cases the size of the pinnule-joints decreases from this point onwards. In full-grown individuals the width of the arm remains uniform until the second syzygy (eighth brachial), after which the joints become more triangular, and the width begins to decrease, while the median keel or crest becomes more

<sup>1</sup> Verzeichniss der von Prof. Dr. Ed. van Beneden an der Küste von Brasilien gesammelten Echinodermen, *Mém. Acad. Sci. Bruxelles*, 1882, t. xliv, p. 5.