

The non-employment of it by Düben and Koren in 1844 is not difficult to understand, for the occurrence of the same specific type on both sides of the Atlantic was not such a familiar idea then as it is now; and Müller had taken no notice of *Asterias tenella*, Retzius, in his "Neue Beiträge." These were published in 1843 after his visit to Lund, and contained amended descriptions of *Asterias pectinata* and *Asterias multiradiata*, the other two Comatulæ mentioned in Retzius's dissertation, which he had personally examined. Müller's omission to notice *Asterias tenella* seems to have caused its relegation to the class of *species incertæ sedis*, from which I am glad to be able to rescue it. I am in some doubt, however, as to whether the "St Croix" of Retzius can be the island Santa Cruz, as mentioned by Gmelin. Retzius did not repeat it in his later dissertation, but simply said "Habitat in oceano Americano." Santa Cruz being a Danish island, one can readily understand that specimens collected there might come into the hands of Swedish naturalists; but on the other hand it is in latitude 18° N., considerably (about 20°) further south than any locality at which *Antedon tenella* has been dredged by American naturalists. I have tried, however, but in vain, to identify the Retzian type with any Caribbean *Antedon*, though it has all the characters of the Scandinavian *Antedon sarsii* and of *Alectro dentata*, Say.

While, therefore, I have no doubt as to its identity with these two types, I should hesitate for the present to quote it as a Caribbean species.

Remarks.—The Scandinavian variety of *Antedon tenella*, which was described as *Alecto sarsii* by Düben and Koren, is considerably smaller and less robust than individuals dredged from deep water in various parts of the Atlantic. The cirri do not seem to have more than about twenty joints, while there may be six or eight more in individuals from the New England coast, Færoe Channel, and Kara Sea. The projecting spines at the distal ends of the cirrus-joints are also less developed in the Scandinavian examples. In the larger forms from the West Atlantic the distal ends of the joints in the long oral pinnules are fringed with strong spines, so that they appear to overlap the bases of their successors, and this character is much less developed in the European variety. On the other hand, the delicate calcareous rods at the sides of the ambulacra, which Sars described in the larva,¹ are larger in the Norwegian form than in examples from deeper water; and they are sometimes entirely absent in the American variety. The latter is also remarkable for the want of constancy in the proportions of its second pair of pinnules. In some examples these have only a dozen joints and are not more than 5 mm. long, but one-third the length of the first pair. But in others they reach 7 or 8 mm. and have as many as twenty joints, a condition which I have not noticed in any individuals from the East Atlantic.

Antedon tenella is closely allied to two other cold-water species, *Antedon hystrix* and *Antedon proluxa*, with both of which it has been found associated. It is distinguished,

¹ Crinoïdes vivants, p. 51, tab. vi. fig. 20.