Measurements B represent the results of a similar comparison of the yet more robust *Antedon tenella* from the West Atlantic with other immature examples of *Antedon prolixa*, larger than that already considered, but absolutely smaller than the individual of *Antedon tenella* with which they are compared. In each case alike the cirri of *Antedon prolixa* with an incompletely developed calyx and arms, are longer and have more numerous joints than individually larger examples of *Antedon tenella*. The difference in *absolute size* may be judged from the fact that in *Antedon prolixa* (B) there is a length of but 4·5 mm. between the pinnule on the seventh and that on the thirteenth brachial; while in *Antedon tenella* this distance measures 7 mm., and yet the cirri of this latter type are not much more than half the length of those of the young *Antedon prolixa*.

The reverse is the case with the pinnules, however; the first pinnule of *Antedon tenella* has nearly forty joints, and reaches 15 mm., while that of the young *Antedon prolixa*, 10 mm. long, has but twenty-seven joints, though its cirri are so much better developed than those of the other species.

It will, I think, be evident from the above-mentioned facts that *Antedon tenella* and *Antedon prolixa* are different species, and not merely different stages of growth of one and the same type, as supposed by Fischer. The most robust examples of *Antedon tenella* with fully-developed arms and pinnules have very distinctly smaller cirri than immature and absolutely smaller examples of *Antedon prolixa*. This demonstrates the fallacy of Fischer's conclusion, which he further endeavours to support by the following passage :— "Sollten noch irgend welche Zweifel entstehen, so werden dieselben wiederlegt durch die Thatsache, dass ich gleichzeitig mit den bereits beschriebenen Exemplaren zwei *Pentacrinus*-Stadien auf einer *Rhynconella* aufsitzend fand, die volkommen mit den Beschreibungen übereinstimmen, die Sars in seinen 'Mémoires des crinoïdes vivants' gibt, und auf Taf. v und vi abbildet."

I must confess that I cannot see the force of this reasoning. Fischer found two examples of *Antedon prolixa* at Jan Mayen, and two smaller forms, together with two Pentacrinoids, all four of which he referred to *Antedon sarsii* (*tenella*). But I do not understand at all why the occurrence of these two Pentacrinoids[1] should render it so certain that *Antedon tenella* is only an immature *Antedon prolixa*. Precisely the same reasoning would entitle me to assert that *Antedon tenella* is only an immature form of *Antedon eschrichti*. For the latter species was dredged by the "Porcupine" in the cold area together with *Antedon tenella* and its Pentacrinoid; and in like manner *Antedon rosacea* was obtained on the Skerki Bank together with *Antedon phalangium* and its Pentacrinoid. *Antedon multispina* with three Pentacrinoids was dredged by the Challenger at the same Station (No. 344) as *Antedon porrecta*; while *Antedon*

[1] I cannot help suspecting that there may be differences between these Pentacrinoids and the larva of *Antedon tenella* which have escaped Fischer's notice.