

Devonian" is described. I learn from this note that Barrande has instituted a genus, *Plumulites*, for certain fossils regarded by him as the capitulum plates of sessile Cirripeds; this name *Plumulites* includes the genus *Turrilepis* proposed by Woodward for a form which he regarded as bearing a scaly peduncle; Barrande, "in regarding his specimens as all capitulum plates, and not the scales of the peduncle, has based his conclusions upon the external markings of the plates, rather than upon any such variation in shape and size as we should expect to find in the capitulum plates of a Lepadid." I have not been able to peruse the original work of Barrande; but judging from what Mr. Clarke states about the close resemblance of Barrande's specimens and his, and in the second place, from the figure Mr. Clarke gives of his specimens, the sessile nature of this Silurian and Devonian Cirriped appears to me to be very problematical. A good figure of the innermost side of the valve which is considered as the scutum of a sessile Cirriped would perhaps show the impossibility of supporting the view of Barrande and Clarke. The figure given resembles, by its triangular outline, the scutum of a Barnacle, but several species of *Scalpellum* and *Pollicipes* have scuta of a triangular outline as well. Finally, I need hardly recall the fact that they may be all capitulum plates, and yet belong to a pedunculate Cirriped.¹ However, the question whether these plates belong to a sessile or a pedunculate Cirriped must remain an open one; that they belong to Cirripedia can hardly be doubted, and this granted, we learn from it that our knowledge as to the distribution of the Cirripedia in time is very imperfect, and in the second place, that the conclusions arrived at, by comparing the living and the fossil forms, must be received with the greatest reserve.

With respect to the relation between the geological history of the Cirripedia and their occurrence at considerable depths, the information literature provides us with is extremely insignificant. Even the approximate ranges of depth at which the larger number of Cirripedia are found are not in our possession. Darwin (1854) says that *Balanus crenatus* inhabits water down to 50 fathoms, and (1851) that most of the species of *Scalpellum* are inhabitants of deep water. With the exception of the Norwegian Expedition of the "Vöringen," the earliest attempts to increase our knowledge with regard to the inhabitants of the great depths of the ocean were fruitless as regards the Cirripedia. As far as I am aware the species of *Scalpellum*, dredged by Prof. G. O. Sars, and published in his lists of new Crustaceans and Pycnogonids of the expedition of the "Vöringen," are the only instances, recorded in zoological literature, of animals of this order inhabiting the great depths of the ocean. In one of the letters, addressed to Prof. v. Siebold, during the voyage of H.M.S. Challenger, v. Willemoes Suhm stated that the only Cirriped often met with at a considerable depth, was the genus *Scalpellum*; but a careful examination of the collection put into my hands soon

¹ A third species of *Plumulites* (*Plumulites newberryi*) has been described by Mr. Whitfield from the Huron (Genesec and Portage) shales (*New York Academy of Science*, March 1882).