

angle, directed backward,"¹ and (2) the fact that the web is attached to an equal extent both to the dorsal and ventral aspects of the arms.²

With regard to the former of these matters I am inclined to doubt its value, because in the case of *Cirroteuthis meangensis* I found a young individual with the cartilage disposed as in *Stauroteuthis*, while in a larger one it was placed in the usual manner. Furthermore, the examination of the specimens of *Cirroteuthis mülleri* in the Zoological Museum at Copenhagen led me to the conclusion that the cartilage was liable to considerable displacement by the unequal contraction of so soft and loosely compacted a body when immersed in alcohol, and that an observer who had only one specimen for investigation might easily be deceived as to its original position.

As to the latter point, it constitutes, to my mind, the chief diagnostic character of *Stauroteuthis*, if it be proved to exist. It may seem gratuitous to hint that so careful an observer as Professor Verrill may have made a mistake in such a matter as the attachment of the web to the arms, but he does not record the absence of the usual inequality, and it is a point which, unless exaggerated, as in the case of *Cirroteuthis magna*, is not very striking, and is also one which has been observed in every specimen examined with a view to ascertaining its existence. More explicit information as to this point, and as to the form of the internal cartilage, would be very acceptable to teuthologists.

The specimen under discussion was at first referred to *Stauroteuthis*, because, although the web was much lacerated, it appeared as though it could be traced almost to the extremities of the arms, and that name (with a query) was affixed to the drawing (Pl. XI. fig. 3), in which also the margin of the web was "restored" in agreement with this view as to the affinities of the animal. Since the cartilage has been extracted, however, and has been compared with that of *Cirroteuthis magna*, it has been found to present a most decided agreement with it (compare Pl. XIII. figs. 1, 2, and 3, 4), and a renewed examination of the arms and the fragments of the web has shown that the appearances previously relied upon were deceptive, so that there seems now every reason to regard this specimen and the larger one as conspecific.

Cirroteuthis pacifica, Hoyle (Pl. X.).

1885. *Cirroteuthis pacifica*, Hoyle, Diagnoses I., p. 235.

1885. " " Hoyle, Prelim. Rep. I., p. 112.

Habitat.—Station 181, off the south-eastern extremity of Papua, August 25, 1874; lat. 13° 50' S., long. 151° 49' E.; 2440 fathoms; red clay. One mutilated specimen.

The Body is almost entirely absent. The *fin* is obovate in form, and thickened along the posterior margin, thin and membranous at the extremity and along the anterior

¹ Ceph. N. E. Amer., p. 382.

² *Op. cit.*, pl. xxxii.