			5 .● %		•		Right. 8 mm.		Left. 8 mm.	
Length of first arm,1										
Length of second arm,			•		•		18	"	•••	
Length of third arm,	ě	•		•		•	•••		15	"
Length of fourth arm,		•	•	•	•	•	13	**	13	"
Length of tentacle,					•	•	•••		32	"

The specimen under consideration was only placed in my hands quite recently, so that I have not had the opportunity of comparing it with Professor Steenstrup's specimens; hence its identification cannot be regarded as certain, the more so as the original diagnosis of the species is very short, being in fact not a diagnosis but merely an indication of the characters which distinguish it from the only other form (Tracheloteuthis behnii) known to the author.

I cannot be sure of its identity with Verrilliola gracilis, Pfeffer; there are one or two points in his description which may indicate specific distinctness, but they seem to me unimportant.

Tracheloteuthis (?) sp. (Pl. XXXI. figs. 6-10).

Habitat.—South Pacific, November 5, 1875; surface at night. One specimen.

November 11, 1875; surface. Two specimens (stained with carmine and mounted in glycerine as microscopic objects).

Færöe Channel, August 8, 1882; surface. One specimen.

Pl. XXXI. figs. 6, 7 represents a young Cephalopod which I have been unable to refer to any species hitherto described, but it is so exceedingly immature that it would not be justifiable to make it the type of a new species, and I therefore content myself with publishing these drawings and a few remarks, in the hope that at some future time it may find its true systematic position.

The Facies of the specimen is exceedingly like that of a Cranchia, so that in my first examination of the Challenger material I referred it to that group without any hesitation; closer examination failed to disclose the three connections between the mantle and the head, even though in order to obtain complete certainty in this point I dismounted one specimen and made an incision down the ventral aspect of the mantle.

The Body is subcylindrical, elongated, and comparatively very large, presenting in this respect a marked contrast to Loligo, Sepia, and other forms whose young stages are well known. The fins are small and terminal, and so folded that their true shape is difficult to determine, but they appear each to have been transversely oval. The mantle-cavity is as large as in Cranchia, Taonius or Tracheloteuthis, and in the mounted specimens in which it has become apparently wider, owing to compression, the head at the end of a kind of stem projects from it like a clapper from a bell. The siphon