The following is a description of the only species of *Pterotrachea* in the Challenger collection :—

Pterotrachea sp.

Body rather long and slender, smooth, with the exception of a few flat circular spinebearing scales which are most numerous on each side of the fin. They vary somewhat in size, the largest being about a millimetre in diameter. They are more or less regularly circular, sometimes feebly tinted with red towards the middle and pale at the margin, and the soft spine or tentacle is colourless. The margin is free all round and only the central part is attached to the integument. The proboscis is rather slender, and is marked with a thread-like line or groove, which, starting from a point a short distance from the mouth, passes between two small conical denticles in front of the eyes and terminates a little beyond. The muscular skin on the ventral side of the proboscis is clearly defined, appearing thicker and more opaque than the sides. This construction of the proboscis is the same as in other species which I have examined. The fin is situated a little nearer the nucleus than to the eyes, and has a small opaque sucker at The caudal portion of the body, which terminates in two small transverse the vertex. fins, is rather short, and is strengthened along the sides by two narrow muscular bands,

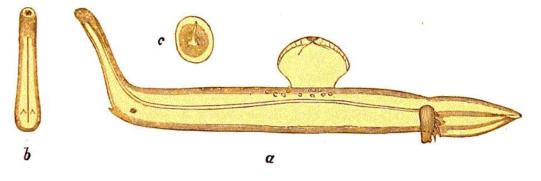


FIG. 1.—a, Pterotrochea sp.; b, front of rostrum ; c, dorsal scale (magnified).

of which the upper is the largest. The nucleus is elongate, pyriform, and supports a branchial plume of about a dozen branchlets.

Habitat.-Off Banda Island, September 29, 1874.

Besides the specimen from Banda there are three other examples in the collection, all from different parts of the Atlantic, which apparently belong to this or some closely allied species. They are, however, so mutilated that it is impossible to pronounce them the same with absolute certainty.

I have hesitated to name this species, as it presents so great a resemblance to several others which are only known to me by their figures and descriptions. It is peculiar in having only two denticles in front of the eyes, but what the specific value of this character may be I have no means of testing.