

being readily distinguishable by the following characters:—*Loligo reynaudii* has sharp-pointed teeth in the suckers of the sessile arms, while in *Loligo kubiensis* they are blunt and closely set. The papillate character of the margins of the tentacular suckers in the latter species is a very remarkable character; it recalls the meridional grooves already described in the suckers of certain species of *Sepia* (see p. 124); and may be a parallel phenomenon with the fringes which are seen in *Loligo vulgaris* from the Mediterranean.

The left ventral arm has a number of spermatophores attached to it (fig. 4a), but there are none on the spermatid pad.

Loligo indica, Pfeffer (Pl. XXVI).

1884. *Loligo indica*, Pfr., Ceph. Hamb. Mus., p. 4, fig. 3, 3a.

Habitat.—Station 188, Arafura Sea, south of Papua, September 10, 1874; lat. $9^{\circ} 59' S.$, long. $139^{\circ} 42' E.$; 28 fathoms; green mud. One specimen, ♀.

Station 190, also in the Arafura Sea, south of Papua, September 12, 1874; lat. $8^{\circ} 56' S.$, long. $136^{\circ} 5' E.$; 49 fathoms; green mud. Twelve specimens, 8 ♂, 4 ♀.

Java (Pfeffer).

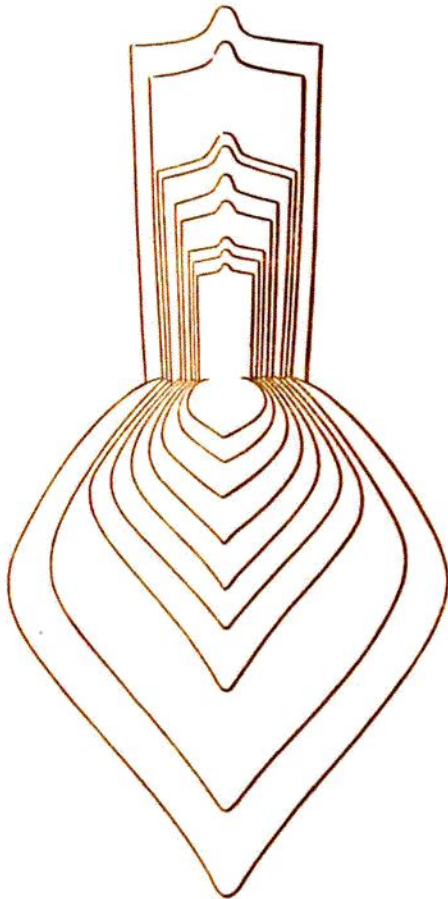


FIG. 8.—*Loligo indica*: outlines of nine specimens showing the proportional growth of the fin, and posterior portion of the body.

I had little doubt that the Challenger specimens were to be referred to the same species as the one which Dr. Pfeffer has obtained from Java, but to place the matter beyond question, I sent him a copy of the drawings which are here published with the request that he would compare it with his types. His reply was that both certainly belonged to the same species, the sole difference being that the fins are a little shorter in the Hamburg specimens.

This species is certainly very near to *Loligo duvaucelii*, d'Orbigny, differing in the number of teeth in the suckers and in the greater slenderness of the pen. Dr. Pfeffer having given merely an outline of the body and pen, I have devoted a plate to the full illustration of the species.

There being a large number of specimens in the collection of very varying sizes, the mode in which the outline of the body varies with increasing growth was brought forcibly before me. The accompanying cut, which shows the outlines of nine individuals, proves conclusively that the growth is most rapid at the posterior end of the