

	Right.	Left.
Length of first arm,	30 mm.	25 mm.
Length of second arm,	36 „	30 „
Length of third arm,	36 „	31 „
Length of fourth arm,	30 „	32 „
Length of tentacle,	52 „	67 „

This interesting species is represented in the collection by only one female specimen, but exhibits such peculiarities as to render it worthy of great attention.

The form of the body is remarkable for its great dorso-ventral extent, and for the ridge which runs down the ventro-lateral aspect. This is not very prominent, but is similar to the ridge observed in many species of *Octopus* and *Eledone* (e.g., *Octopus australis*, p. 88 and Pl. III. fig. 5, and *Eledone cirrosa*), but I do not remember to have seen it before in any specimen of *Sepia*.

The tentacular club bears the greatest resemblance to that of *Sepia elegans*, d'Orbigny,¹ in respect of its shortness and rounded form, and in the presence of three suckers considerably exceeding the others in size. *Sepia tuberculata*, Quoy and Gaimard, has also three enlarged suckers, but judging by d'Orbigny's figure,² these would seem to be along the median line of the club and not nearer to one side than the other as in the present form. It may be remarked, however, that very few, if any, species of *Sepia* have the club so symmetrical as that figure would indicate, and hence the possibility of inaccuracy in this respect must be borne in mind. This is especially important because, as will be seen immediately, these two species present, in one respect, a close resemblance to each other.

The shell of the type under consideration is undoubtedly its most remarkable characteristic. In the first place it possesses no trace of a spine, a point in which it resembles *Sepia elegans*, d'Orbigny, above alluded to, and also the various species of *Sepiella*, which latter it further resembles in the depth of the siphono-pallial articulation; in all these, however, the chitinous layer of the shell is covered for the most part by a rough calcareous deposit, and only appears at the margin, and the genus *Sepiella* is clearly distinguished by its peculiar glandular apparatus.

The chitinous portion of the shell of *Sepia pfefferi* is visible over the whole of its dorsal surface, and this fact separates it clearly from all *Sepiæ* or related forms, with two exceptions, *Sepia tuberculata*, Lamarck,³ and *Hemisepius typicus*, Steenstrup.⁴ The former of these has an oval shell, the calcareous portion coming close up to the anterior margin, but narrowing so as to leave large projecting chitinous wings posteriorly, whilst in the form under discussion the chitinous plate is but little larger than the calcareous portion all round. In *Hemisepius* the chitinous plate is so large as to project far beyond the calcareous centre anteriorly as well as posteriorly.

¹ Céph. acét., Seiches, pl. xxvii. fig. 4.

² *Op. cit.*, pl. xvii. fig. 13.

³ Céph. acét., pl. vi. figs. a, b, c.

⁴ *Hemisepius*, Tab. i. figs. 3, 4, 5.