with coarse rugosities disposed in curved lines parallel to the anterior margin; a distinct but low rib runs down the centre. The ventral surface is elevated on either side of a deep median groove; the last loculus has an index of 22 in the male and 17 in the female specimen, and is bounded posteriorly by two slightly wavy lines, meeting at an acute angle; the striated area is long, and the angle between the striæ widens posteriorly. The inner cone is very well developed; the limbs arise one-fifth the length of the shell from the posterior end, and gradually become more elevated until they enclose a deep conical cavity. The spine is strong and pointed (Pl. XVIII. figs. 1, 2), somewhat curved laterally in the female example.

Dimensions.1

## Length, total, 240 mm. 160 End of body to mantle-margin, dorsally, . End of body to mantle-margin, ventrally, 140 End of body to eye, 155 Breadth of body, . Breadth of head, . 55 Eye to edge of umbrella, . 40 Breadth of fin, . . Diameter of largest sucker on sessile arm, . Length of shell, . 163 Breadth of shell, . 52

Right.

Left.

Length of first arm,	•	•	•		•			65 mm.	68 mm.
Length of second arm,	•		<b>.</b> •			•		65 ,,	60 ,,
Length of third arm,	•	•	•	•	•	•		63 ,,	58 "
Length of fourth arm,	•	•	•	•	•	•	•	70 "	63 "

This fine species approaches Sepia aculeata, van Hasselt, but lacks the suckers on the buccal membrane,<sup>2</sup> and also the callosity of the inner cone at the posterior extremity of the shell. This cannot be due to immaturity, for the two specimens in the Challenger collection are larger than undoubted specimens of Sepia aculeata, in which this peculiarity is well marked.

It has moreover some resemblance to Sepia brevimana, Steenstrup, but the shell is not so broad in proportion nor so regularly elliptical, being rather more dilated in its posterior half.

Perhaps, however, its closest relationship is with an unpublished form in the Copenhagen Museum, labelled "Sepiæ rostratæ affinis," but that the posterior extremity of its shell is more rounded (both being females). The thickened spermatic pad is more fully developed in the Challenger than in the Copenhagen specimen, which may,

<sup>&</sup>lt;sup>1</sup> The dimensions above are from the male specimen; in the female the length of the body is 143 mm. dorsally and 123 mm. ventrally and the breadth 70 mm., length of shell 143 mm., breadth 54 mm.

<sup>2</sup> Steenstrup, Hemisepius, pl. ii. fig. 4.