

surface is elevated, so that the shell is thick, with a shallow median groove becoming evanescent posteriorly, the *last loculus* has an index of 36·6 and is bounded by a slightly curved line with a cusp where the median groove meets it; the *inner cone* is formed by two limbs, which arise halfway along the shell and form a rounded fillet slightly more elevated posteriorly, where they bound a shallow depression; outside them the margin of the shell expands into a subcircular plate (the *outer cone*), from the centre of which the *spine* projects backwards; no information can be given as to its form or length, as it has been broken off close to the base.

Dimensions.

Length, total,	72 mm.
End of body to mantle-margin,	42 "
End of body to eye,	41 "
Breadth of body,	16 "
Breadth of head,	14 "
Eye to edge of umbrella,	6 "
Breadth of fin,	2 "
Length of shell (without spine),	41 "
Breadth of shell,	7 "
	Right. Left.
Length of first arm,	10 mm. 10·5 mm.
Length of second arm,	11 " 10 "
Length of third arm,	9·5 " 9 "
Length of fourth arm,	9 " ¹ 10·5 "
Length of tentacle,	25 " ...

This is nearly related to *Sepia kiensis*, but is longer and narrower in its proportions, notwithstanding that both specimens are females, and this difference is still more marked in the shell; in that species its breadth is about two-fifths of the length, while in the present form it is less than one-fifth; in the former case the locular index is 40·5, in the latter 36·6. The type specimens of both species are probably immature, and their validity can only be regarded as of a provisional nature.

Since the above description was drawn up I have been able to see Appellöf's description of the specimens of this form which he received from Japan; his account of them agrees so well with the type specimen that there can be little doubt that they are correctly referred to the same species. I notice a few differences, however, which it seems advisable to record. The arms are considerably larger, proportionately, than in the Challenger specimen, in which furthermore the diversity in the sizes of the suckers on the sessile arms is scarcely apparent. As stated above, many of these were absent, but a renewed investigation has led me to think that Appellöf's account of their arrangement is probably correct, though, like him, I regarded their disposition in two rows as merely

¹ Mutilated.