Dimensions.

Length, total,		•					•		113 1	nm.
End of body to	mantle-r	nargin,							84	"
End of body to							*		78	"
Breadth of body	, .						•		37	,,
Breadth of head,			•				•	•	40	"
Eye to edge of u	mbrella,							•	18	"
Breadth of fin,									8	"
Diameter of largest sucker on sessile arm									1	"
Diameter of large	est suck	er on te	ntacle,		•	•	•		0.6	ŝ ,,
Length of shell,								٠	90	,,
Breadth of shell,			•	•				•	29	"
								Right.		Left.
Length of first arm,1	1.0	•	9.0	(1. 1)	U•0			23 mm	o.	22 mm.
Length of second arm,	•			•		•		22 ,,		20 "
Length of third arm,		•		•				20 "	ê.	20 ,,
Length of fourth arm,	•			•		•		23 ,,		22 ,,
Length of tentacle,	•:			•			•	80 ,,	(•••

This species is of special interest because it has hitherto been known only from a shell in the Zoological Museum at Copenhagen, which was the only specimen then known to possess the peculiar ridged spine shown in fig. 11. Recently, however, I



Fig. 5.—Shell of Sepia mestus, Gray, from the type specimen in the British Museum labelled "Sep. mestus.

Australia, Presented by Dr. Sinclair, R.N." Drawn by Mr. P. J. Smit.

happened to notice that the type of Gray's Sepia mestus was similarly armed, but being then unable to make a thorough investigation of the matter, I sent the Challenger specimen to my friend Mr. Edgar Smith who was good enough to institute a comparison

¹ The lengths of the arms are measured from the oral margin.