portion of the head and equal to the width of the interorbital space. Maxillary not reaching to the front margin of the eye. The length of the head equals its distance from the root of the ventral, the origin of which is but slightly in advance of that of the dorsal. Nearly all the scales are lost, only some of the lateral line remain. They are much larger than the other scales; and on the tail, where the lateral line approaches the lower profile, these larger scales are separated from the anal fin by one series of small scales only. Otherwise, there is the greatest similarity between this species and *Halosaurus rostratus*.

Distance of the snout from the mouth, . .	...	5½ lines.
Distance of the snout from the eye, . .	1 inch.	...
Distance of the snout from the root of the pectoral fin,	2 „	4 „
Distance of the snout from the root of the ventral, .	4 „	6 „
Distance of the snout from the origin of the dorsal, .	4 „	9 „
Distance of the snout from the vent, . .	6 „	10 „
Total length, ...	16 „	6 „

Habitat.—South of Japan, Station 235; depth, 565 fathoms. Two specimens, 16½ inches long.

This species is so closely allied to the preceding that it would appear to be sufficient to refer to the following points only: the band of palatine teeth is not broader than that of the intermaxillary, only slightly separated from that of the other side, and somewhat distant from the pterygoid teeth. The scales of the lateral line are about three times the size of the others, and twenty-nine in number between the gill-opening and the vent. They seem to have been provided with a luminous organ, but it must have been very thin and much less developed than in the other species, as only traces of it remain on the few scales which have been preserved.

The body of the fish is light-coloured; the head, vent, and hind part of the tail black.

Family Notacanthi.

In placing the Notacanths in the present work between the Halosauridæ and Murænidæ I do not intend to convey the impression that I consider them to be specially allied to either of these Physostomous families. There is no other type of Acanthopterygians by which they would be connected with that order, whilst the truly abdominal position of their many-rayed ventral fins offers sufficient grounds for removing them to the Physostomi. On the other hand, there does not seem to be an open communication between the air-bladder and the œsophagus, at least in *Notacanthus sexspinis*. As I