Body elongate, rather compressed, naked, with black (phosphorescent) spots. Cleft of the mouth very small. Eye of moderate size. Dorsal fin short, opposite to the space between ventrals and anal; adipose fin none; anal short; caudal emarginate. Gill-openings wide.

An affinis Microstomati?

Halaphya elongata, n. sp. (Pl. VI. fig. C).

The general form of the body and the position of the fins will be seen from the figure. The specimens are perfectly transparent and of the same white colour which the Leptocephali assume after immersion in spirits. No scales can be discovered on any part of the body. A series of minute specks of black pigment runs along the intermuscular line of the side of the body, and similar specks occupy the upper and lower margins of the free portion of the tail. These pigment spots remind us of similar organs in the Leptocephali, and many young Scopelids. The snout is obtuse, with a narrow transverse anterior mouth. The gill-openings are wide, the gill-membrane being grown to the isthmus anteriorly for a short distance only. Pectorals well developed; ventrals shorter. A very distinct fold of the skin runs from the pectoral along the median line of the abdomen to the vent. Dorsal and anal fins of moderate height, with the rays well developed. D. 12. A. 9. Caudal emarginate behind.

Prymnothonus (Pl. V.).

In the Ichthyology of the Voyage of the "Erebus" and "Terror," Richardson figured a small fish which he named Prymnothonus hookeri, and which was known to him from a sketch only, drawn by Dr. Hooker from the fresh specimen. He could not add any further information, the notes made at the time by Dr. Hooker having been mislaid, but he says that the specimen measured 1½ inches in length. It had perished before the collection reached Sir John Richardson's hands. Although I applied again after the return of the Challenger for further information to Sir Joseph Hooker, he was unable to recollect any particulars as regards the capture of the specimen, or the circumstances under which it was obtained.

The Challenger collection contains three specimens which evidently belong to the same kind of larval form, for such *Prymnothonus* proves to be. These specimens are not in a good state of preservation, and as they are unique, only a portion of their structure can be ascertained.

The smallest of the specimens (Pl. V. fig. A), was obtained in the North Pacific, on