

entirely absent, the lower rays being whitish. Ventrals nearly uniformly white, or with the outer ray slightly tinged with grey. No black on the dorsal fin.

This is the first species of *Exocoetus* in which I have found the coloration of the pectoral fin varying. There can be no doubt as regards the specific identity of the specimens before me.

Ten specimens, from 10½ to 13 inches long, were obtained at Honolulu. The Sandwich Islands seem to be the only locality at which this species has been found hitherto.

*Astronesthes niger*, Rich.

This fish was included in the Report on Deep-Sea Fishes, as specimens were recorded from a depth of 2500 fathoms. However, as mentioned there (p. 203), it is one of the most common of pelagic forms in the Atlantic as well as in the Indian Ocean, and, therefore, is caught on almost every voyage during which the tow-net is used. Also, the Challenger obtained a surface specimen near the west coast of Africa on April 28, 1876. The habits of this fish are nocturnal.

*Halaphya*, n. gen.

I propose this generic name for three specimens, 26 mm. long., and 1.5 mm. deep, which were obtained at the surface, in the open sea, on the passage from Sydney to Wellington. They are evidently the young, and probably a very early stage of growth, of a fish which shows some affinities to *Microstoma*. Costa (Faun. Regn. Napol. Pesc.) figures on pl. xl. fig. 4, a small fish which must have been very similar to *Halaphya*; but neither description nor name seem to have been published by him in explanation of the figure.

There is, however, another fish from the Southern Indo-Pacific, which has to be considered in determining the origin of these young specimens, viz., *Gonorhynchus*. The fishes of this genus are rather scarce, but extend from the Cape of Good Hope to New Zealand, and Japan. The form of the body, the position and shape of the fins, and even the number of fin-rays of *Halaphya* are remarkably like those of *Gonorhynchus*, but the form of the snout is entirely different. We should be obliged to assume that with advancing growth the upper jaw is produced into a long proboscis, at the end of which a barbel is developed. A change like this is not without parallel in the development of fishes, but without knowing any of the intermediate stages we should not be justified in assuming it in this case. Of the development of *Gonorhynchus* nothing whatever is known.

With the materials at present available the genus may be characterised as follows:—