

The new species of *Echiostoma* was uniformly black, the total length being $9\frac{1}{2}$ inches. It showed signs of life when taken out of the trawl, so that probably it had not come from any great depth. It had one club-shaped spot of a rose colour directly below the eye, and another, about half the size, directly in front of this, of the same colour; these spots turned yellow in spirit. The two rows of probably phosphorescent dots along the body were red, surrounded by a circle of pale violet; these dots turned white in spirit.

It several times happened during the cruise that the back bone of a fish and some of the bones of the head were taken out of the trawl. These probably belonged to delicate deep-sea fish, the flesh of which had been completely torn away by the rapid passage of the trawl through the water.

At 1400 fathoms, some distance to the east of the Barrier Reef, there was a very successful trawling, a large number of deep-sea genera and species being obtained, together with many pumice stones and several cocoanuts. There were two other new genera of Ophidiidæ, *Bathynectes gracilis*, Günth.,¹ and *Aphynonus gelatinosus*, Günth.,² of which latter there were three specimens. The latter were transparent, the head round and gibbous; immediately behind the nostrils was a small dark spot at a considerable distance beneath the skin, which probably was the rudimentary eye. A Scopelid (*Alepocephalus niger*, Günth.³), 12 inches in length, was also obtained; the whole animal was of a light blue colour, of a deeper tint about the fins and gill covers.

The surface and subsurface waters in this region were teeming with life, all the usual tropical forms being found in great abundance. The list of animals obtained was nearly identical with that observed in the tropical regions of the Atlantic (see pp. 221, 222), although considerable differences were noticed in the relative abundance of the species. *Leptocephali* and young Pleuronectids were very numerous; some specimens of the former were 9 inches in length.

Birds were seldom seen when far from land, but on approaching shore Boatswain Birds, Gannets, Terns, and Frigate Birds were observed, the two former occasionally alighting on the ship.

On the 30th August, at 5 A.M., the position was ascertained by observations of Aldebaran, Sirius, and Canopus, and a course steered for Raine Island, which, as well as the Great Detached Reef, was sighted at noon. Contrary to expectation, only a slight northerly set was experienced, less than half a mile per hour, from 5 A.M. to noon. Previously to 5 A.M., the current was N. 18° E. (true), three quarters of a mile per hour. From the time of leaving the New Hebrides to the 29th August, the amount of current experienced was very little, the total set being N. 74° W., 36 miles in ten days. The ship was steered northward of Raine Island, so as to round it and ascertain whether there was good landing. Passing at a distance of a quarter of a mile from the north and west

¹ *Ann. and Mag. Nat. Hist.*, ser. 5, vol. ii. p. 21, 1878.

² *Ibid.*, p. 22.

³ *Ibid.*, p. 248.