

Mr. Murray<sup>1</sup> observes:—"The new species of *Echiostoma* 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."

*Photonectes.*

*Lucifer*,<sup>2</sup> Döderlein, Wieg. Archiv f. Naturgesch, 1882, p. 26.

Body compressed, rather long, scaleless; vent far behind the middle of the length. Head compressed, with short snout and exceedingly wide mouth. Teeth in the jaws small, unequal in size, in single series; vomer and palatine with a small group of teeth on each side. Eye small. Opercular portion of the head very narrow. A long hyoid barbel. The dorsal fin opposite to the anal, which commences behind the vent. Pectorals none. Ventrals inserted behind the middle of the length. A small suborbital phosphorescent organ, and two series of luminous dots along the lower part of the sides, with numerous rudimentary similar organs scattered over the skin of the body.

*Photonectes albipinnis.*

*Lucifer albipennis*, Döderlein, *loc. cit.*, pl. iii.

D. 13. A. 15. P. 0. V. 7.

Black, with white fins.

Known from a single example from Inosima, 9 inches long.

*Malacosteus*, Ayres.

This form is one of the most extraordinary types of deep-sea fishes, reminding us in certain respects of the Bathybial Pediculates and Gadoids (*Chiasmodus*). Resembling a Stomiid in its principal characters and general appearance of the body, *Malacosteus* possesses an osseous framework of a very soft, semicartilaginous or membranous structure; its integuments and fins are extremely fragile and loosely connected. The whole of its cranial bones are remarkably reduced in size and development, with the exception of those required for seizing and holding its prey. The snout is so short as to remind us of those monstrosities of carps or trout, in which the anterior facial portion of the cranium is missing; whilst the jaw-bones and the præoperculum are greatly prolonged, forming

<sup>1</sup> Narr. Chall. Exp., vol. i. p. 521.

<sup>2</sup> Preoccupied for a genus of Crustacea.