

The question arises whether the fish was really captured at this great depth, or whether it entered the dredge during its passage through the surface strata; and I am very much inclined to think that the latter took place. We have very little positive information as to the habits of these fishes, but we know that they are commonly obtained near the surface in mid-ocean; and from their structure we may infer that, like all deep, compressed fishes, they are slow swimmers, and that they can with ease maintain a free position in the water, without the necessity of a support, remaining as it were suspended at a certain distance from the surface. This may be observed in a fish of our own seas with a similarly elevated body, viz., the John Dory, in which, however, a rapid undulatory movement of the soft dorsal fin is almost unceasing. The great development of the luminous organs, combined with the large eyes, indicates the nocturnal habits of the fish, which would induce it to descend to a greater depth during daytime. Also the firm structure of the bones disproves the bathybial habits of *Argyropelecus*.

*Sternoptyx* (Herm.).

Body much elevated and compressed, passing abruptly into a short and compressed tail; the angle made by the hind margin of the trunk and the lower edge of the tail being filled up by a broad fold of the integument, of peculiar transparent appearance, resembling thin cartilage. This fold bears the anal fin and is supported by interhæmal rays. The greater portion of the body is scaleless, and covered with a silvery pigment. A series of luminous spots runs along the lower edge of the abdomen, and is separated from that of the other side by a cartilaginous fold occupying the median line of the abdomen; another series runs on each side of the isthmus; a row of three above and behind the root of the ventrals, and another row of three above the vent. The luminous organs on the lower part of the tail consist anteriorly of a row of four, of which the first is prolonged towards the back as a narrow band, terminating about the middle of the depth of the body in a globular black spot with a white centre; posteriorly in front of the caudal rays there is another row of four small spots.

Head short, compressed, deep, with extremely short snout and a wide subvertical mouth. Bones of the head firm, some of them terminating in short spines, namely, the angle of the præoperculum, the postero-inferior angle of the mandible, and the symphysis of the humeral bones. The margin of the upper jaw is formed by the maxillary and intermaxillary, the latter being very short; both these bones have a sharp edge which is armed with a series of very small teeth, somewhat unequal in size; lower jaw with a similar dentition; vomer and palatine bones toothless. Eyes large, lateral.