seen in collections, as the small size of their slender cylindrical body renders their capture very difficult. The majority of the specimens come from the Mediterranean (*Microstoma rotundatum*, Risso), and a somewhat allied form has been observed in the Greenland sea (*Microstoma groenlandicum*, Rnhrdt.).

Bathylagus.

Bathylagus, Günth., Ann. and Mag. Nat. Hist., 1878, vol. ii. p. 248.

Body oblong, compressed, covered with thin deciduous scales of moderate size. No phosphorescent organs. Head short, rather compressed, with thin membranaceous bones. Mouth very narrow, transverse, anterior. The margin of the upper jaw is formed by the intermaxillary and maxillary, which is very short, dilated. Teeth in the intermaxillary rudimentary; those of the lower jaw extremely small, implanted on the edge of the bone, forming a minute serrature; a series of minute teeth across the vomer and along the palatine. Eye very large. Pectoral and ventral fins developed, the latter eight-rayed, and inserted opposite to the dorsal, at a considerable distance from the pectoral. Dorsal fin in the middle of the length of the body; adipose fin small, not very far from the caudal. Anal fin of moderate length or many-rayed. Gill-opening narrowed, commencing opposite to the root of the pectoral, and extending across the isthmus, the gill-membranes being united and not attached to the isthmus. Gill-rakers lanceolate, rather long; gillš small; pseudobranchiæ well developed.

The nearest ally to this genus is *Microstoma*. The thinness of the bones, the fragility of the fin-rays, the delicacy of the skin and scales, and the enormously large eyes, seem to be sufficient evidence that these fishes are actually inhabitants of very great depths, although there may be reasonable doubts as regards the exact depth at which *Bathylagus atlanticus* was obtained. These fishes must therefore be entirely dependent for vision on the phosphorescent light which is produced by other abyssal creatures. Not being fish of prey themselves, or only to a slight degree, they would be attracted by the light issuing from the Pediculates and Stomiatids of the deep, and thus fall an easy prey to these fishes.

Bathylagus atlanticus.

Bathylagus atlanticus, Günth., Ann. and Mag. Nat. Hist., 1878, vol. ii. p. 248.

B. 3. D. 9. A. 13. P 7. V. 8. L. lat. 40.

The height of the body is a little less than the length of the head, which is one-fourth of the total (without caudal); the eye one-half of the length of the head. The width of