

the distribution of fishes seems to me to corroborate the view that in a deep-sea vertical section there are two regions—one

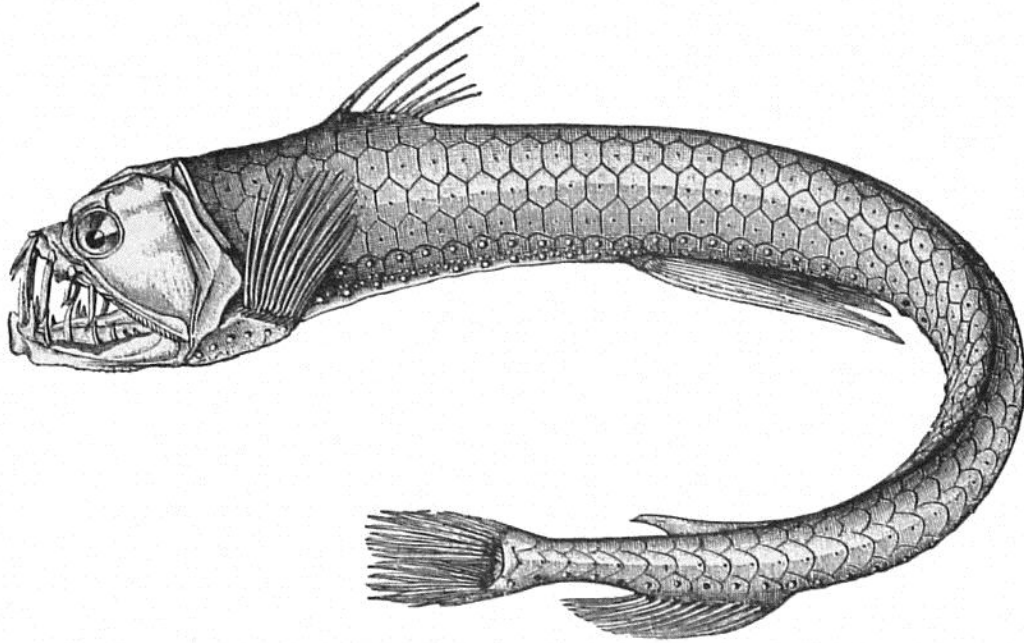


FIG. 62.—*Chauliodus Sloanii*. From the upper water. One third the natural size.

within a limited distance of the surface, and the other a little way above the bottom—which have their special faunæ; while the zone between is destitute of, at all events, the higher forms of animal life.

In some places, both in the Atlantic and the Pacific, especially at extreme depths in the red-clay area, the trawl brought up many teeth of sharks and ear-bones of whales, all in a semi-fossil state, and usually strongly impregnated with, or their substance to a great extent replaced by, the oxides of iron and manganese. These deposits of bones occur at great distances from land, and where from other causes the deposition of sediment is taking place with extreme slowness. The sharks' teeth belong principally to genera, and often to species, which we believe to be now extinct, and which are characteristic of the later Tertiary formations; and there seems little doubt that they have been lying there, becoming gradually buried in the slowly accumulating sediment, from Tertiary times. The fishes which were collected during the expedition are now undergoing examination by Dr. Günther, and the semi-fossil remains from the