The eye-like phosphorescent organs are small and arranged very much in the same manner as in *Scopelus engraulis*, but owing to the condition of the specimen no exact description of their number can be given. A long, linear, glandular organ of white colour occupies the back and opposite side of the posterior half of the caudal peduncle.

Coloration uniform black.

Habitat.—South of Philippine Islands, Station 214; depth, 500 fathoms. One specimen, $4\frac{1}{2}$ inches long.

Odontostomus, Cocco.

Body oblong, compressed, naked; head compressed, snout short; cleft of the mouth very wide; intermaxillary and maxillary bones slender, the former with a series of small teeth of equal size which have their points directed backwards; the lower jaw, the vomer and the palatine bones armed with a few very large curved and lanceolate teeth, which are barbed at the tip, curved, and depressible backwards. Eye very large, with the orbital cavity expanded downwards, so that the eye can be turned either upwards or towards the side of the head. Pectoral and ventral fins well developed, the latter are inserted below the dorsal at some distance behind the pectoral. Dorsal fin in the middle of the length of the body; adipose fin small, placed far backwards; anal fin long; caudal forked. Branchiostegals eight; pseudobranchiæ well developed, gills four; the outer branchial arch with small gill-laminæ and without gill-rakers.

Odontostomus hyalinus, Cocco (Pl. LII. fig. A).

D. 12. A. 34. P. 12. V. 9.

The height of the body is contained six times and one-third in the total length, without caudal, the length of the head four times and a half. The wide cleft of the mouth, which is oblique, extends far beyond the eye, but does not reach the angle of the præoperculum. The mandible is broad, not attenuated in front, and projects beyond the mouth. The large fangs can be depressed backwards, and are always depressed when the mouth is closed; they are very much compressed and sharp-edged in front and behind. The longest of the palate have their extremities curiously bent forward.

The form and structure of the orbit is quite unique; it is, in fact, turned upwards, separated from its fellow by an extremely narrow interorbital space; its lateral wall is formed by a transparent membrane so that the fish by rotating the eye-ball behind this membrane outwards for 90°, can place the eye in the usual position on the side of the head, and thus see either sidewards or upwards. The infraorbital ring is very narrow, bent in a strong curve, within which the transparent orbital membrane is extended.