

others being connected by membrane. The two or three innermost rays are quite short and much branched.

The ventral fins can be laid backwards in a groove running along the middle of the abdomen, and along each side of the anal fin backwards to its middle.

The whole fish is silvery, minutely dotted with brown, but these dots are visible in adult fish only after the scales have been removed. The vertical fins, the pectorals and the short ventral rays are black, which colour is only gradually assumed as the fish grows older. In very young specimens all the fins are pellucid. The pharynx is black.

A specimen obtained by the Challenger near Amboina, $12\frac{1}{2}$ lines or 27 mm. long, agrees in all points with the adult, especially in the structure and form of the fins; only the head is comparatively longer. But in a specimen of 7 lines or 15 mm., of which unfortunately only a drawing could be preserved, the sections of the dorsal and anal fins are not yet differentiated; these fins being subcontinuous with the caudal (see Pl. III. fig. B). In this drawing no pectoral fin is shown.

Auchenoceros punctatus, Hutton (Pl. III. fig. C).

Calloptilum punctatum, Hutton.

Bregmaceros punctatus, Gthr.

D. 1 | 18-22 + x + 32. A. 57-60. V. 2.

In a specimen $4\frac{1}{4}$ inches long the greatest depth of the body is below the origin of the soft dorsal fin, and contained five times and three-fourths in the total length without caudal; the head is compressed and nearly one-fifth of the total length. Eye of moderate size, as long as the snout, a little less than two-sevenths of the length of the head or than the width of the interorbital space. Snout as long as the eye, with the cleft of the mouth oblique, the lower jaw slightly projecting beyond the upper; mouth rather wide, the maxillary not extending to the hind margin of the orbit; teeth in the jaws villiform, vomer and palatine bones toothless. The isthmus is very narrow. The distance of the vent from the root of the ventral fins is not more than the length of the head without snout.

The anterior dorsal ray is inserted above the root of the pectoral and about as long as the head; there is no groove on the back for its reception. The second dorsal fin commences behind the vent; its anterior portion is lower than the body underneath; a space longer than the base of this portion follows, and is occupied by a variable number of very rudimentary rays. These rays gradually increase in length again, and form the posterior portion of the dorsal fin, which, however, is not half as high as the anterior portion, and terminates at a short distance from the caudal. The anal fin commences immediately behind the vent, that is, in advance of the dorsal, and terminates opposite to the last dorsal ray; its middle rays are but slightly shortened; the caudal fin is rounded,