

I note the following details for specific descriptions :—

Bregmaceros maclellandii, Thompson (Pl. III. figs. A, B).

Bregmaceros maclellandii, Thompson.

Calloptilum mirum, Richards.

Bregmaceros maclellandii (syn. *Calloptilum mirum*), Gthr.

Asthenurus atripinnis, Tickell.

Bregmaceros atripinnis, n. sp., Day.

Bregmaceros atripinnis (excl. synonym.), and *Bregmaceros maclellandii*, Day.

D. 1 | 16-19 + x + 15-21. A. 22-30 + x + 20-22. V. 5-6. L. lat. 64-70.

L. transv. 14-16.

In an adult specimen from the Indian Ocean (Pl. III. fig. A) $4\frac{1}{2}$ inches long, the greatest depth of the body is below the origin of the soft dorsal fin, and contained five and a half times in the total length, without caudal. The head is small, short and broad, its length being contained six and a half times in the total length. The eye is rather large, two-sevenths of the length of the head, and equal to the width of the interorbital space; its upper half is covered with a transparent membrane. Snout short, shorter than the eye, obtuse, rounded, the lower jaw being received within the upper. Mouth of moderate size, the maxillary not extending to the hind margin of the orbit. Teeth in the jaws very minute, and those on the head of the vomer scarcely perceptible. The isthmus is broad and muscular, forming a broad support to the powerful ventral rays. The distance of the vent from the root of the ventral fins exceeds considerably the length of the head. The anterior dorsal ray is inserted above the præoperculum, and considerably longer than the head; it can be received in a groove on the back. The second dorsal fin commences opposite to the vent; its anterior portion is triangular in shape, with the longest rays about as high as the body underneath; a space about as long as the base of the preceding portion follows, and is occupied by a variable number of short and rudimentary rays. These rays gradually increase in length again, and form the posterior portion of the dorsal fin, which, however, is scarcely half as high as the anterior portion, and terminates at a short distance from the caudal. The anal fin commences and terminates almost opposite to the dorsal, resembling this latter in form and structure, but with a greater number of rays composing the developed portions. The caudal fin is short, with the hind margin slightly excised.

The pectoral fin is inserted rather high up the sides, and strongly asymmetrical; it is many-rayed, the rays being inserted on a long and broad base.

The ventral fins (α) exhibit a very extraordinary structure, and seem to be as much organs of touch as of locomotion. Each fin is composed of five or six rays, of which the three outer ones are enlarged, much prolonged, bearing a dilatation along each edge (α' , enlarged), and terminating in fine points. The two outermost rays are quite free, the