

more differentiated from the soft. The scales are small; abdominal scutes ten. The height of the body is less than one-half of the total length without caudal; the diameter of the eye two-ninths of the length of the head. No projecting suprascapulary spine. The third and fourth dorsal spines are the longest, and the seventh is shorter than the eighth.

Only one specimen, 19 inches long, was obtained off Madeira in the month of April. Mr. Johnson adds that from the protruded stomach and inflated membranes about the eyes it may be inferred that the fish came from a great depth. Like so many other Madeiran fishes, this species occurs also in Japan, where it was met with by Döderlein, who seems to have been unacquainted with Johnson's description.

Anoplogaster, Gthr.

Body compressed and deep, covered with minute asperities; abdomen without enlarged dermal scutes; head large, with thin bones deeply sculptured to receive wide muciferous cavities. Mouth very wide and oblique; jaws armed with bands of small teeth which are somewhat larger and of unequal size in the lower jaw; no teeth on the palate. Eight branchiostegals; gill-openings very wide. Suprascapulary and angle of the præoperculum armed with a spine. One dorsal fin, without spinous division; ventrals with six soft rays. Air-bladder small, pear-shaped.

Anoplogaster cornutus.

Hoplostethus cornutus, Cuv. Val., ix. p. 470.

Anoplogaster cornutus, Günth., Fish., i. p. 12.

„ „ Lütken, Oversigt K. D. Vid. Selsk. Forhandl., 1877, p. 181, tab. v. figs. 4-7 (fig. opt).

B. 8. D. 17. A. 9-10. V. (O) 7. C. pyl. 6. Vert. 26.

Of this singular fish only very few specimens are known, and, with the exception of one, all were taken from the stomachs of pelagic fish of prey, one in lat. 26°, three in lat. 31° N. and long. 40° W., and one in lat. 25° N. and long. 31° W.; all in the Atlantic. The largest of these specimens is only 77 mm. long. Lütken has made the interesting observation that in very young specimens (10 mm. long), no ventral fins are developed, and that the spines on the head are much elongate, forming a very effectual armature.

Caulolepis.

Caulolepis, Gill, Proc. U.S. Nat. Mus., 1884, vol. vi. p. 258.

Closely allied to *Anoplogaster*, which it also resembles in the form of the body. Body covered with pedunculated leaf-like scales. A pair of very long teeth in front of