

at night or by accident only. The peculiar organ below the eyes is without doubt of the same nature and has the same function as similar structures on the side of the head of other deep-sea fishes; as in *Pachystomias*, it is partly free, as if it could be made to protrude out of the pit in which it lies.

Kner places this fish in the Berycidæ, from which family it is removed by the different structure of its fins. I have not been able to examine specimens.

Family CYTTIDÆ.

Cyttus, Gthr.

The two species of this genus which were previously known—one from Madeira, the other from the coast of South Australia—are large-eyed fishes which probably inhabit the same depth as our John Dory (*Zeus*), and which on the evidence extant cannot be included in the deep-sea fauna. The small fish, of which we here give a description, is reported to have been taken at 400 fathoms, and differs in some particulars from the diagnosis given for the genus, which differences, however, do not seem to me to call for a generic separation. There is nothing in its organisation which would lead one to suppose *a priori* that it comes from a greater depth than its congeners.

Cyttus abbreviatus (Pl. X. fig. B).

Platystethus abbreviatus, Hector, Trans. New Zeal. Inst., vol. vii., 1875, p. 247, tab. xi.

Cyttus abbreviatus, Hector, *loc. cit.*, vol. ix., 1876, p. 465.

Antigonia mülleri, Klunzinger, Sitzungsab. Akad. Wien, lxxx., 1880, p. 380, taf. v. fig. 3.

B. 6. D. 7/26. A. 2/26. P. 16. V. $\frac{1}{6}$.

Resembling the boar-fish in general appearance, the body being much compressed and elevated. The highest point of its upper profile is the root of the first dorsal spine, the greatest depth of the body being more than one-half of the total length, without caudal. The lower profile is also convex, but less so than the upper. The head participates in the general form of the body, and its length is more than two-fifths of the total, without caudal. Peduncle of the tail very slender, much longer than deep.

The eye lies immediately below the upper profile and is large, at least as long as the snout, and two-fifths of the length of the head. Snout pointed, with the lower jaw projecting and the mouth obliquely directed upwards. The distal portion of the maxillary is dilated, and terminates on its antero-inferior corner in a narrow process, which, when the mouth is half open, projects downwards like a moustache. The cleft of the mouth does not extend to below the eye; the mouth is very protractile, long posterior intermaxillary processes sliding in the deeply excavated interorbital space, which is much