

of moderate length, embracing a considerable part of the tail, the rudimentary rays advancing far forward on the upper and lower sides of the tail.

The pectoral fin is inserted in the middle of the side, asymmetrical, many-rayed, as long as the head. The ventral fins (c) are inserted at some distance from each other; their base is very small, and each is composed of two very slender rays, the longer of which reaches beyond the vent.

The scales are lost but to judge from the folds of the skin they must have been extremely thin and very small.

The entire fish is uniformly silvery.

A young specimen (Pl. III. fig. D), 19 mm. long, obtained on the 15th of September 1873, indicates the presence of another species in the Pacific, but as the specific characters in this genus evidently change with age, I hesitate to introduce it with a distinct specific name. It seems to have a smaller eye than the other species; the ventral fins are two-rayed but much stronger than in *Auchenoceros punctatus*; the anterior dorsal ray is placed opposite to the operculum; the long dorsal and anal fins commence opposite to each other; they are not divided into separate portions and continuous with the caudal fin; but this is probably only a sign of young age.

Fierasfer acus, Brünn., young (Pl. IV. fig. F).

In the year 1860, Kaup¹ described a small fish in the British Museum as the type of a new genus, *Porobronchus*. T. Gill² alludes to it in these words:—"As to *Porobronchus*, Kaup, it is, perhaps, related to *Fierasfer*; but the character of the first elongated dorsal ray requires to be known before a decision can be arrived at;" whilst I³ stated it to be the young of *Fierasfer acus*. It is 2½ inches long and not in a good state of preservation. A very similar fish, probably of the same species, was examined by Gasco⁴ who published almost simultaneously with my observation a description and figure of it, considering it to be the type of a new genus, *Vexillifer*. His specimen was 20 mm. long and re-examined by Costa⁵ who adopted Gasco's nomenclature. However, some years later, Emery⁶ confirmed my view as to the nature of this fish, from an examination of very young examples which are undoubtedly *Fierasfer acus*.

The most conspicuous characteristic of these young *Fierasfer* is the presence of an extremely long anterior dorsal ray which bears a variable number of small skinny lobes. As the fish grows, this ray is lost or shortened by absorption. The specimens observed by the Italian naturalists showed this ray more or less completely developed, whilst in Kaup's specimen the greater part of the ray and every trace of the lobes had dis-

¹ *Ann. and Mag. Nat. Hist.*, 1860, ser. 3, vol. vi. p. 272, pl. iii. fig. D.

² *Ann. and Mag. Nat. Hist.*, 1865, ser. 3, vol. xv. p. 48.

³ *Catal. Fish.*, vol. viii. p. 145, 1870.

⁴ *Bull. Assoc. Natur. e Med. Napoli*, 1870, April, p. 59, c. tab.

⁵ *Ann. Mus. Zool. Napoli*, vi., 1871, p. 88, tav. 2, fig. 1.

⁶ *Atti Soc. Ital. Sci. Nat.*, xxi. 1878, p. 37, figs. 1-3; and *Atti R. Accad. d. Lincei*, 1879-80, vol. vii. tav. 1, a.