Lirus porosus, Richards (Pl. II. fig. F).

Diagramma porosa, Richards, Ereb. and Terr. Fish., p. 26, figs. 5, 6.
Hyperoglyphe porosa, Günth., *loc. cit.*

Since the first discovery of this species during the voyage of the "Erebus" and "Terror," no other specimen seems to have fallen into the hands of a naturalist. During the present voyage seven young examples, 25 to 30 mm. long, were obtained from a patch of floating sea-weed near the Kermadec Islands, Station 170. The hind margin of the præoperculum is finely and evenly serrated, the angle and lower margin of the bone being armed with coarser and longer teeth. Pale olive; fins blackish, with the exception of the caudal fin which is whitish.

Lirus paucidens, n. sp. (Pl. II. fig. E).

D. $\frac{7}{2}\frac{}{3}$. A. $\frac{3}{1}\frac{}{9}$.

This species, of which I have only three very young specimens, is closely allied to *Lirus porosus*, but the armature of the præoperculum is very different; some of the characters here mentioned may apply to the young stage only.

The height of the body is contained $2\frac{1}{3}$ times in the total length (without caudal), the length of the head $2\frac{1}{2}$ times. Eye about one-third of the length of the head, the maxillary not extending to below the middle of the eye. The entire margin of the præoperculum armed with distant and comparatively strong dentations. The soft dorsal and anal fins rather high, higher than the spinous dorsal, which is continuous with the soft; pectoral fins extending beyond, ventrals to, the anal. Dark-brown, pectoral and caudal fins white.

Three specimens, the largest of which is 35 mm. long, were obtained in the surface-net on the passage from New Guinea to Japan.

Cubiceps gracilis, Lowe (Pl. II. figs. A, B, C).

A single specimen, 3 inches long, was obtained in the surface-net on the passage between Tenerife and St. Thomas, West Indies. It proves that this species does not undergo great changes during growth, and that the fish described and figured by Lütken (*op. cit.*) under the name of *Psenes maculatus* is not the young of the present species.

Adult *Cubiceps* must be extremely rare; no other specimen has occurred, beside the one obtained by Sir A. Smith, so that the question of the specific distinctness of *Cubiceps capensis* and *Cubiceps gracilis* is still a matter of uncertainty.