small. The anterior nostril much smaller than the posterior and about midway between the posterior and the extremity of the snout. Vertical fins confluent; ventrals close together, close to the humeral symphysis, each composed of two subequal filaments.

Gills four, with very short laminæ, but with long stiff gill-rakers on the first branchial arch. Pseudobranchiæ rudimentary.

Porogadus gracilis (Pl. XVI. fig. B).

Bathynectes gracilis, Günth., Ann. and Mag. Nat. Hist., 1878, vol. ii. p. 21.

Head and body low, rather compressed; tail produced into a long filament. The greatest depth of the body is on a level with the root of the pectoral, and is two-sevenths of the length of the trunk. The length of the head is nearly one-half of the same length. Eye of moderate size, its diameter five and a half times in the length of the head, and two-thirds of that of the snout and of the width of the interorbital space, which is somewhat convex. The posterior nostrils are very wide and separated from the eye by a small spinous projection of bone. The muciferous channel of the infraorbital ring shows in its course five or six wide sinuses, that of the præoperculum four or five. The integument of the head being very thin, underlying projections of the bone appear in preserved specimens as small prominent spines above the posterior portion of the eye; on the shoulder there is a single short spine. Præoperculum without spines. Mouth very wide, extending far behind the eye, the extremity of the maxillary much dilated. The teeth form narrow bands, that of the vomer is A-shaped, with the two arms straight. The dorsal fin commences above the root of the pectoral, its rays being of moderate length, but longer than those of the anal. Pectoral with feeble rays, tapering, as long as the head exclusive of the snout. Each ventral is composed of a bifid filament, the longer part of which extends backwards as far as the pectoral.

Scales very thin, cycloid, small, with the exception of some (about seven), which form a series running from the upper end of the gill-opening towards the dorsal fin; these are about three times the size of the others. About twenty-four may be counted in a transverse series running from the vent to the dorsal fin.

Outer branchial arch with sixteen long and slender gill-rakers, the longest of which are about five times as long as the laminæ. Of pseudobranchiæ only two minute lobules can be distinguished.

Colour light brownish, head and abdomen black.

Habitat.—A single specimen, 9 inches long, was obtained at Station 184, south of New Guinea, at a depth of 1400 fathoms.