

space of greater width and less concave than other specimens, the width being two-thirds of the diameter of the eye; the posterior limb of the præoperculum is much more oblique, whilst in the other specimens it is almost vertical. The scales of the Greenland specimens are much more smooth, and in one of them only a few of the scales show traces of the lateral keels. The scales are roughest in our specimens from Finmarken, and they scarcely possess a scale which does not show lateral keels or spines. The length of the pectoral fin is subject to great variation; in the Finmarken specimen it is short, contained twice and one-fourth in the length of the head; in the New England specimen long, and contained once and four-fifths in the length of the head, the Greenland specimens being intermediate in this respect.

*Macrurus rudis* (Pl. XXVII.).

*Coryphænoides rudis*, Günth., Ann. and Mag. Nat. Hist., 1878, vol. ii. p. 24.

D. 10 | 94. A. 96. P. 19. V. 10.

Snout obtusely conical, projecting beyond the mouth, which extends backwards to beyond the middle of the eye. The outer series contains stronger teeth in both jaws. Barbel about as long as the eye. The profile of the nape ascends very slightly towards the dorsal fin. Scales equally rough over the whole of their surface, the spinelets being subequal in size, densely packed, and not arranged in series. There are eight scales in a transverse series between the first dorsal and the lateral line. Anterior margin of the second dorsal spine armed with barbs placed at some distance from each other. The second dorsal fin commences at a distance behind the first scarcely inferior to the length of the base of the first. The outer ventral ray produced into a long filament.

*Habitat.*—Pacific, north of the Kermadec Islands, Station 171; depth, 600 fathoms. Three specimens, 3 inches, 11 inches, and 33 inches long.

Pacific, north of the Kermadec Islands, Station 170A; depth, 630 fathoms. Three specimens, 6 to 7 inches and 12 inches long.

Pacific, north of the Kermadec Islands, Station 170; depth, 520 fathoms. Two specimens, 3½ inches long.

As in other fishes, so in *Macrurus*, the eye is comparatively larger in young than in adult individuals. In our large example the head is 175 mm., the eye 25 mm., the snout 43 mm., and the width of the interorbital space 50 mm. These dimensions being in the smaller respectively 50, 16, 15, and 13 mm.

Also the serrature of the dorsal spine changes with age, the barbs being widely set and few in number (seven) in very young specimens 6 inches long (fig. c), much more numerous (twenty) in older examples 11 inches long (fig. b), and becoming rather obsolete in adult ones.