line. The second dorsal spine is feeble, somewhat produced, obscurely denticulated in front. The second dorsal fin commences immediately behind the first. Pectoral much prolonged, as long as the head. The outer ventral ray produced into an exceedingly long stiff filament. The distance between vent and isthmus rather less than the length of the head. Brownish-black.

Habitat.—South of Yedo, Japan, Station 235; depth, 565 fathoms. One specimen, 28 inches long.

This species in the structure of its head and in its physiognomy approaches to the ordinary Gadoid type.

## Trachyrhynchus.

## Trachyrhynchus, Giorna.

Snout produced into a long depressed process, sharply pointed in front, and with a rather sharp lateral edge, which is continued in a straight line across the infraorbital region. Mouth horse-shoe-shaped, situated at the lower side of the head. Teeth in both jaws in villiform bands. A barbel. A scaleless fossa on each side of the nape. The second dorsal fin well developed from its beginning. Scales of moderate size, more or less spinigerous; a series of larger scales, each armed with a projecting ridge along each side of the base of the anterior portions of the dorsal and anal fins. Of the gill-covers the operculum is particularly small. Gill membranes scarcely united in front. Four gills with well-developed gill-laminæ. The first branchial arch is free and provided with short styliform gill-rakers.

Trachyrhynchus trachyrhynchus (Pl. XLI. fig. C).

Lepidoleprus trachyrhynchus, Risso, Ichth. Nice, p. 197, pl. vii. fig. 21.

, Canestr., Arch. per la Zool., 1864, p. 371, pl. xii. fig. 2.

", Vinciguerra, Ann. Mus. Genov., vol. xiv. p. 617; vol. xviii. p. 564.

## D. 10-11. P. 20-21. V. 7.

Snout not quite twice as long as the eye, the horizontal diameter of which is much greater than the vertical, about one-fourth of the length of the head, and equal to the width of the interorbital space above the centre of the orbit. Scales very rough, each with three or four acute and prominent spines; four series between the first dorsal fin and the lateral line; the crests of many of the enlarged dorsal scales are coarsely denticulated. The entire abdomen covered with scales. Distance of vent from the isthmus equal to that of the hind margin of the eye from the extremity of the snout. Barbel very small. Ventrals small, inserted in front of the pectoral fin, with the outer ray produced into a short filament. Anterior branchial arch with twenty-two very short, styliform gill-rakers.