

Here described from eight specimens, 220 to 330 mm. in total length, including the type of the species and co-types of *G. gilberti* and *G. eigenmanni*.

## 12. *Galeichthys longicephalus*.

*Galeichthys dasycephalus* (non Günth.), Jord. & Everm. Bull. U.S. Nat. Mus. xlvii. 1900, p. 2780<sup>1</sup>;

Gilb. & Starks, Mem. Calif. Ac. Sci. iv. 1904, p. 25<sup>2</sup>.

*Galeichthys longicephalus* (Eigenm. & Eigenm.), Jord. & Everm. t. c. p. 2781<sup>3</sup>; Gilb. & Starks, l. c.<sup>4</sup>.

Depth of body  $5\frac{1}{2}$  in the length, length of head 4. Breadth of head  $1\frac{1}{2}$  in its length, diameter of eye  $6\frac{1}{2}$ . Fontanel produced into a groove which reaches the parieto-occipital; occipital process strongly keeled, as long as broad, with truncated apex and slightly concave sides. Width of mouth  $\frac{1}{2}$  the width of head; premaxillary band of teeth 4 times as long as broad; vomerine patches of teeth small, well separated, continuous with the rather small oblong or oval palatine patches. Maxillary barbel extending to the basal part of the pectoral. 6 gill-rakers on the lower part of the anterior arch. Dorsal I 7; spine  $\frac{1}{2}$  the length of head; adipose fin a little longer than the dorsal. Anal 19. Pectoral spine  $\frac{2}{3}$  the length of head, with the inner edge weakly serrated.

*Hab.* PANAMA (*Jordan* <sup>1 2 3 4</sup>).

Here described from a specimen of 250 mm.

## 13. *Galeichthys peruvianus*.

*Galeichthys peruvianus*, Lütke. Vid. Medd. 1874, p. 205<sup>1</sup>; Steind. Sitzungs. Ak. Wien, lxxii.

1876, p. 584<sup>2</sup>; Eigenm. & Eigenm. Occ. Papers Calif. Ac. Sci. i. 1890, p. 51<sup>3</sup>; Jord. &

Everm. Bull. U.S. Nat. Mus. xlvii. 1896, p. 122<sup>4</sup>.

Apparently allied to the preceding species, which it resembles in the arrangement of the teeth on the palate, but well distinguished by the longer occipital process, the narrower premaxillary band of teeth (8 times as long as broad), and the shorter anal fin, with 14 to 16 rays.

*Hab.* Pacific Coast from Mexico to Peru:

Altata in Sinaloa<sup>2</sup>; Panama<sup>2</sup>; Callao<sup>1 2 3</sup>.

## 3. ARIUS, Cuv. & Val., 1840.

*Arius* (part.), Cuv. & Val. Hist. Nat. Poiss. xv. p. 52 (1840); Günth. Cat. Fish. v. p. 174 (1864).

*Tachysurus*\*, Eigenm. & Eigenm. Occ. Papers Calif. Ac. Sci. i. 1890, p. 42; Jord. & Everm. Bull.

U.S. Nat. Mus. xlvii. 1900, p. 2782.

*Cathorops* (Jord. & Gilb.), Jord. & Everm. t. c. 1896, p. 133.

Like *Galeichthys*, from which it differs only in having the teeth on the palate granular or obtusely conical instead of villiform, this genus comprises a considerable number of species from the coasts of tropical and subtropical countries, most of which enter fresh water.

\* Lacepède (Hist. Nat. Poiss. v. p. 151, 1803) founded the genus *Tachysurus* on a Chinese painting of a fresh-water fish which may have belonged to *Galeichthys* or *Arius* or may not have been at all closely related to them. The generic diagnosis consists of (1) characters which are common to *Arius*, *Pimelodus*, and other genera, and of (2) others which might certainly be held to define the genus *Tachysurus* if they could be relied