

SCIENTIFIC RESULTS OF EXPLORATIONS BY THE U. S.
FISH COMMISSION STEAMER ALBATROSS.

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No. XXXIII.—DESCRIPTIONS OF TWO NEW FLOUNDERS, GASTROPSETTA.
FRONTALIS AND CYCLOPSETTA CHITTENDENI.

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THE U. S. Fish Commission steamer *Albatross* obtained on January 15, 1885, at station 2317, lat. $24^{\circ} 25' 45''$ N., long. $81^{\circ} 46' 45''$ W., being near Key West, Fla., in 45 fathoms of water, two specimens of a handsome flounder, which appears to be new. The larger example, the subject of the illustration (fig. 1), is eight inches long, while the smaller one slightly exceeds six inches. A still larger specimen was obtained near Apalachicola, at station 2373.

GASTROPSETTA, new genus.

This genus is closely allied to *Ancylopsetta*, from which it differs in form of body, and also in having entirely smooth scales, singularly branched and produced anterior dorsal rays, and very short and broad gill-rakers.

Diagnosis.—Body oblong-ovate, highly arched in front, covered with small, cycloid, imbedded scales; lateral line arched in front, deflected downward on caudal peduncle. Teeth small, in a single series in each jaw. Dorsal fin beginning in advance of eye, its anterior rays produced, not connected by the irregular and broadly fringed membrane. Gill rakers very short, almost as broad as long, few in number. Ventral of eyed side produced, ending in a long filamentous ray in the young.

GASTROPSETTA FRONTALIS, new species.

Diagnosis.—Length of specimen, 209 mm.; depth, 80 mm.; head, 44 mm.; middle caudal rays, 38 mm.; D. 60; A. 48; V. 6; P. I, 10. Eyes large, $3\frac{3}{4}$ in head; mouth of moderate size, maxilla $2\frac{1}{2}$ in head, the jaws curved; interorbital ridge prominent, very narrow. The dorsal begins in front of eye on snout, its anterior rays singularly branched, the third and fourth longest, almost equaling length of head. Anal fin beginning at

vent, which is situated on blind side, its anterior rays scarcely produced. Ventral of colored side much produced. Middle caudal rays long.

Color in spirits light brown; three black spots on body, two along back, and one near anal base; fins with dusky blotches; several vertical stripes across eyes.

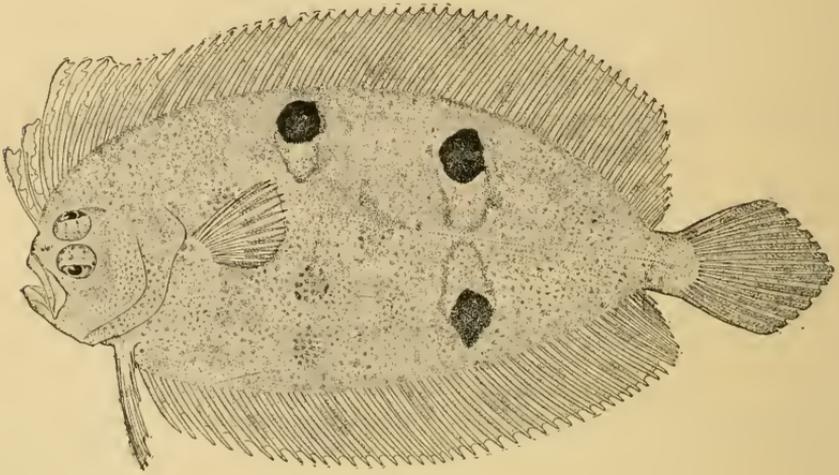


Fig. 1.

GASTROPSETTA FRONTALIS.

About one-half natural size.

The smaller specimen from station 2317 has D. 62; A. 52; V. 6; P. 1, 11. The gill-rakers short, broad laminae, 2+7. Teeth weak, uniserial. Anterior rays of dorsal greatly produced, the third being one and one-half times as long as the head. Ventral of eyed side very long, ending in a thread-like filament. Color as in the preceding.

The example from station 2373 is 224 mm. long; its depth, 90 mm. The ray formula is as follows: D. 60; A. 49; P. 1, 10; V. 6; C. 15. The vent is situated in a deep notch, which forms the front margin of the abdomen, and not on the side, as in the other specimens. The color is darker than that of the Key West examples, being dark reddish-brown. Body spotted and fins blotched as in the preceding.

Type.—No. 37668, U.S.N.M.

Genus CYCLOPSETTA, Gill.

In the eleventh volume of these Proceedings* Dr. Gill gives the following diagnosis of a new genus of flounders, which he names *Cyclopsetta*:

Psettines with the body oblong rhombo-ovate, covered with regularly imbricated moderate cycloid scales; lateral line nearly rectilinear on both sides; snout convex;

* Proc. U. S. Nat. Mus., XI, 1889, p. 601.

mouth very large; jaws squarely truncated behind; teeth uniserial, those of the upper jaws moderate, of lower jaws enlarged and largest at sides; dorsal and anal almost symmetrical, dorsal commences in front of eye on snout, scarcely deflected on blind side; caudal slightly pedunculate and convex; pectorals subequal and with a subtruncate free margin; ventral nearly equal, the left on the preanal ridge, the right lateral, both with the inner rays connected by membrane to the body; interbranchial membrane imperforate; gill-rakers tubercular and surmounted by blunt denticles.

Type *C. fimbriata* The scales on the eyed side are regularly cycloid with the nucleus some distance from the posterior margin and with numerous radiating striae. The gill rakers are quite characteristic.

The species about to be described is distinguished from the type of the genus by its shorter head, smaller and closely adhering scales, larger teeth, the little-produced anterior dorsal rays, and by the oblique posterior margin of the pectorals.

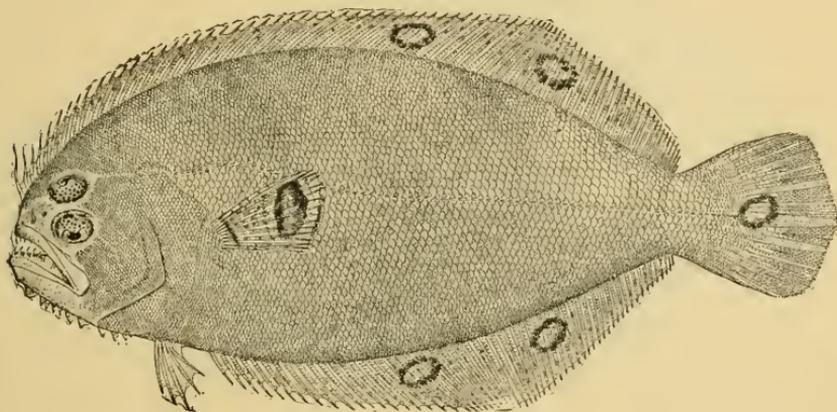


Fig. 2.

CYCLOPSETTA FIMBRIATA.

About two-fifths natural size.

In *C. fimbriata* the scales are rather large and deciduous, the teeth small, the anterior rays of the dorsal considerably produced, and the posterior margin of the pectoral is subtruncate. It has been thought well to publish a drawing of the type of the genus (see fig. 2) in this paper.

CYCLOPSETTA CHITTENDENI, new species.

On April 4, 1892, the Museum received from Dr. John F. Chittenden, of the Victoria Institute, Port of Spain, Trinidad Island, a single specimen of the species here described as new and named in his honor.

Diagnosis.—A single specimen. Extreme length, 197 mm. ($7\frac{3}{4}$ inches.) Greatest depth of body, not including vertical fins, 76 mm. (3 inches.) D. 82; A. 62. Scales ca., 90. Gill-rakers 8+3 to 4, very short, tubercular, almost as broad as long.

The length of the head is contained three and one-half times in that of the body, and the depth of the body two and one-fifth times in its length, without caudal. The diameter of the eye is contained five times in the head's length. The mouth is widely cleft, oblique, the jaws curved. The cleft of the mouth is contained less than twice in the length of head. The teeth of both jaws in a single series, those of the lower jaw are strong and sharp, curved inward and backward; those of the upper jaw are not so large, and are very irregular in size.

The ventral fins are well developed, that of the eyed side being on the abdominal ridge, and about three-fourths as long as the pectoral. The pectorals are half as long as the head, their length equalling a little more than one-third of the body depth; posterior margin oblique.

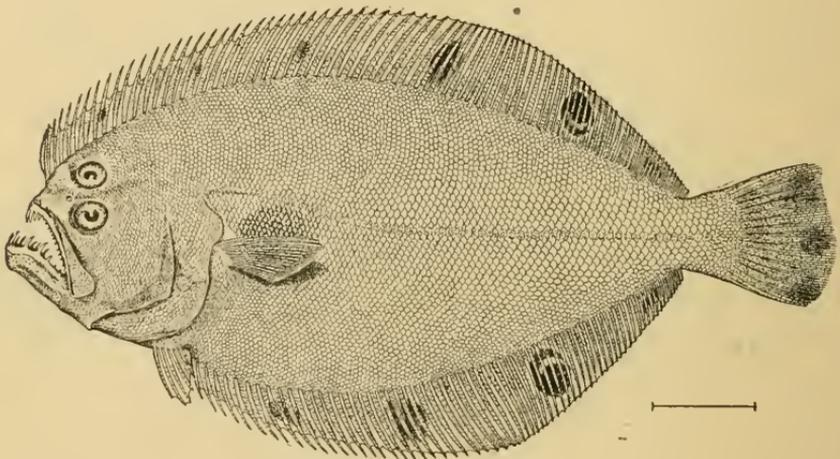


Fig. 3.

CYCLOPSETTA CHITTENDENI.

About one-half natural size.

Color brown; fins lighter, marked with blackish. Three small faint blotches of black on the first half of the dorsal fin, and three rather distinct blotches on the second half, the last blotch extending to the caudal peduncle. Anal fin with three black blotches situated as and similar to those of the dorsal fin. The ventral of the eyed side is blackish, that of the blind side pale. Caudal fin with three black spots at its extremity. Pectoral fin of colored side blackish; quite a large blotch of black on body under this fin.

Type.—No. 44100, U.S.N.M.