# CONTRIBUTIONS TO THE CRANIAL OSTEOLOGY OF THE FISHES. No. VI.\*

By

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### SOME PERCOMORPH SKULLS.

### PAGROSOMUS AURATUS Gill.

#### (Figs. 1-3.)

My material comprises several well grown skulls and one from a young fish, together with two specimens in the flesh.

THE SKULL.

In the skull of an "Old Man" Snapper, as the larger fish are called, with its tremendous occipital knob and massive solid frontal bones, the cranial cavity appears disproportionately small. This, however, is not the fact; the cranium and its processes are of normal size, but are overshadowed by the structures mentioned. The general outlines will be gathered from the drawings.

The large occipital knob is developed entirely from the crest of the supraoccipital bone. The lateral boundary of the occipital fossa is indicated, rather than defined, by the inferior buttress of the epiotic process, whilst the forward continuation of the same process indicates the lateral boundary of the same fossa superiorly. The temporal fossa is a broad trough which lies between the lateral boundaries of the occipital fossa and the outer margin of that flange of the pterotic bone which is continued forward from the pterotic process to articulate with the frontal bone. The dilatator fossa is large; it lies below the flange of the pterotic and above the postorbital lamina of the sphenotic, and its apex is lodged between the two laminæ of the hinder end of the frontal bone. The saccular cavities are approximated to the midline, and there are, therefore, no saccular bullæ. The trigemino-facialis chamber lies immediately below the anterior hyomandibular facet at the angle between the anterior and lateral faces of the prootic bone. The sloping hinder margin of the facet is thrown like a thin "flying buttress" across the chamber; that which may be regarded as the

\* For Nos. III-VI and index of abbreviations used on the drawings, see "Records," Vol. XV, No. 3, 1926, p. 201.